

COMMISSION
OF THE
EUROPEAN COMMUNITIES

SANCO/10079/2005

Directorate General for
Health and Consumer Protection

SANCO/E.2

REPORT ON THE
TASK FORCE MEETING
OF THE
“BOVINE BRUCELLOSIS”
SUB-GROUP

SANTANDER, Spain
15-16 November 2004

REPORT OF THE
“BOVINE BRUCELLOSIS” TASK FORCE SUBGROUP
MEETING HELD IN SANTANDER, SPAIN, ON 15-16 NOVEMBER 2004

1. Agenda

See Annex 1

2. Participants

See Annex 2

3. Introduction

The meeting was held in Santander, Autonomous Region of Cantabria, Spain. A Spanish–English sequential translation service was provided by the Spanish Central Competent Authorities. On the first day the National brucellosis programme and the regional brucellosis eradication programmes of the Autonomous Communities (ACs) of Cantabria, Castilla y León and Castilla-La Mancha were presented and discussed.

On the second day after a morning visit to a typical local bovine herd the vaccination strategies for controlling bovine brucellosis in Spain were discussed.

4. First day

The meeting was opened by the chairman of the subgroup. M. Quintanal, Director General of the Livestock of Cantabria welcomed the subgroup, followed by the greetings of A. Caballo, Chief Veterinary Officer (Subdirección General de Sanidad Animal, SGSA) of the of the Ministry of Agriculture Fisheries and Food (MAPA). F. Reviriego from the Commission gave a short overview on the situation of bovine brucellosis and relevant information from the Community viewpoint. The chairman explained the background and purpose of the Task Force and its subgroups.

4.1 Presentation on the national eradication programme for bovine brucellosis in Spain. Evolution, current situation and perspectives. Actions for the reinforcement of the programme

Antonia Aquayo - Subdirección general de Sanidad Animal SGSA

Spain is composed of 17 ACs, with two of them being the islands of Canaries and Balears. The ACs implement directly the eradication programme, perform epidemiological surveys and manage the compensation. The Central Veterinary Services of the Ministry of Agriculture (SGSV) are responsible for coordination and planning, and in defining a consistent strategy. This is done through a National

Committee (Comité Nacional del Sistema de Alerta Sanitaria Veterinaria), in which all the ACs and the Ministry of Agriculture are represented.

The bovine brucellosis eradication programme started in Northern Spain in the 60's. At the start, the programme was mainly applied to dairy herds but was later extended to the whole country and also to beef herds. In the 80's and early 90's, the progress in disease eradication was slow.

The percentage of bovine brucellosis free herds has progressively increased from 1990 (96%) to 1997 (97.47%). In 1998, for the first time, the percentage of free herds exceeded 98%, while the animal prevalence dropped to 0.41%. From 1999 till 2002 no significant progress was made in bovine brucellosis eradication. The percentage of free herds during this period remained around 98.50%. No significant reduction in animal prevalence was achieved during this time (0.30% - 0.40%). By the end of 2003, for the first time, more than 99% of herds (99.86%) were qualified as free or officially free while animal prevalence was 0.45%.

Bovine brucellosis eradication in Spain is regulated by the Royal Decree 2611/1996 and in line with Council Directive 64/432/EEC. In order to adapt legislation in force to new measures like strict movement control, vaccination, and new diagnostic technics, the Royal Decree 2611/1996 was modified by the Royal Decree 1047/2003 and Royal Decree 51/2004.

The bovine census for 2003 included 167,264 bovine herds, of which 159,314 under the bovine brucellosis eradication programme. Of the total 5,148,492 bovines, 4,123,067 are included in the programme.

Official diagnostic tests used in Spain:

- Rose Bengal Test (RBT)
- ELISA Test
- Complement Fixation Test (CFT)
- Milk Ring Test (MRT)

In 2004 the coverage of the programme increased, and in the majority of the ACs it has reached 100%. Best results in coverage and disease eradication were obtained on the islands and in the ACs with a higher proportion of dairy herds (north of Spain).

Autonomous Community (AC) - percentage of free herds (prevalence %):

- AC with 100% of free herds: Canarias, Baleares, Murcia y La Rioja (all 0%)
- AC between 99 % and 100% of free herds: Galicia (0.26%), Asturias (0.22%) , Basque Country (0.13%), Navarra (0.04%), Valencia (0.67%)
- AC between 95% and 99% of free herds: Castilla y León (3.52%), Castilla La Mancha (3.45%), Madrid (1.68%), Extremadura (2.94%), Aragón (2.66%), Andalucía (2.70%), Cataluña (1.34%)
- AC with less than 95% of free herds: Cantabria (5.49%)

Few data on incidence were shown during the presentation, tables reporting incidence were submitted to the members of the subgroup before the meeting.

Difficulties encountered in the correct implementation of the programme are related to the structure of agriculture (extensive pastures, mountain areas), the traditional movements of bovines (common pasture, transhumance, etc.), and to the farmers resistance to vaccination.

Reinforcement actions foresee a stricter coordination on the control of animal movements. Transhumance will only be permitted between farms with free status. Vaccination will be implemented in high prevalence areas.

The main objectives of the 2005 bovine brucellosis eradication programme are:

Dairy herds - eradication in 1 year

Beef herds - reduction of the prevalence depending on the epidemiological situation. ACs are classified in three categories depending on herd prevalence (< 1%, between 1% and 5 %, between 5% and 10%). Based on the level of prevalence, specific measures, such as test-and-slaughter, stamping out or vaccination would be taken. Vaccination would be carried out in areas with high prevalence, in enzootic areas and when acute outbreaks occur.

4.2 AC of Cantabria. Evolution, current situation and perspectives of bovine brucellosis. Evolution of the main epidemiological indicators. Special actions in zones of high prevalence

Francisco Fernandez Martinez, head of the Regional Veterinary Services.

Cantabria, situated on the north coast of Spain comprises an area of 5,321km and consists of 12 “comarcas” or local veterinary units. There are 297,388 cattle, which are distributed among 10,776 herds, mainly extensive beef herds (7,031) in the AC. The majority of the herds (67%) have less than 30 animals.

The Cantabria Veterinary Services include a General Directorate of Livestock with an Animal Health Service and a Veterinary Coordination Section composed by the veterinarians of the 12 Veterinary Units, experts of the Animal Health Services and the field teams coordinators. It also has a Zoonosis Section. Implementation is done by a private company (with private field teams), which has a contract with the Administration.

All cattle older than 12 months are subject to an annual serological test with the RBT; the positives are confirmed with the CFT (threshold of positivity: 20 IU). Animals tested CFT positive are slaughtered. Although in some particular cases, where an extra diagnostic pressure is needed, RBT and CFT are used in parallel as criteria for slaughtering sero-positive animals. An infected herd is retested after 30 days and then at intervals of 2 months for 10 months before the sanitary qualification is restored. Depending on the epidemiological situation the herd may be depopulated. Serological testing is also carried out on all herds related to the outbreak. The qualification of a herd on suspended status is restored after 2 negative results at 30 and 90 days.

Additionally testing includes milk Elisa on dairy herds at regular intervals, pre movement controls and serological and bacteriological surveillance in slaughterhouses.

In 2004 to mid October, 47% of the disease outbreaks were detected during routine monitoring and 31% by the tracking of positive herds. Culture results are available for 60% of restricted herds, 56% of which gave negative results. 26% of herds were depopulated in 2004 compared to 8% for all of 2003.

The herd prevalence peaked at 7.68% in 2001 from a low of 5.05% in 1998, but has decreased for the past 2 years with a prevalence of 5.49% in 2003. Similarly, the animal prevalence peaked at 2.70% in 2001, from a low of 1.50% 1998, but also has decreased for the past 2 years with a prevalence of 0.89% in 2003. The latest figures for 2004 indicate continuation of this downward trend in the level of the disease. The highest prevalence is in areas where there is an extensive production system and communal grazing, where it is very difficult to control the spread of the disease.

4.3 AC of Castilla y Leon. Evolution, current situation and perspectives of bovine brucellosis. Evolution of the main epidemiological indicators. Special actions in zones of high prevalence

Lucio Carabaco, head of the animal health Service.

Castilla y Leon, situated in the center- north of Spain comprises an area of 94,224 km². The AC of Castilla y Leon is the largest Region of Spain and is composed of nine provinces (Avila, Burgos, Leon, Palencia, Salamanca, Segovia, Soria, Valladolid and Zamora).

The bovine census of Castilla y Leon for 2003 includes 1,479,148 bovines, which are distributed among 21,060, mainly extensive beef herds. The number of farms is decreasing in both the beef and dairy sectors.

The Castilla y Leon Veterinary Services includes an Animal Health Service, nine Province Veterinary Coordination Sections and 102 Veterinary Units. 107 veterinary field teams are implementing surveillance and control of bovine brucellosis. Analysis are carried out in nine local laboratories (one in each province) and in the regional laboratory at Leon.

In 2003, the prevalence in the region of Castilla y Leon was around 3.5%, with no improvement since 1998. Of particular concern is the province of Salamanca, with a herd prevalence of 6.37% (cattle population 600,000). High prevalence was also noted in the Provinces of Soria (4.83%), Segovia (3.27%), Avila (3.17%) and Palencia (2.47%). Low prevalence was reported in the provinces of Burgos (1.83%), Leon (1.30%), Zamora (1.14%) and Valladolid (0.27%).

The measures in place for improving the current situation are based on better data management, increase of testing activity, better management of pastures and control of movements. Three special plans were presented. Brucellosis seems to be linked to extensive beef farms on communal grazing areas and transhumance.

Measures recently implemented include: systematic bacteriological analysis, slaughtering of reactors within 15 days after diagnosis, increased frequency of testing, guidelines for dealing with singleton reactors and increase of the number of stamping out.

As foreseen in the national rules (Royal Decree 2611/1996), vaccination was generally abandoned at the end of nineties, except in some very limited areas where the use of B19 vaccine in calves continued. More recently, the RB51 vaccine was used in the context of a mass vaccination field trial with good results in reduction of the herd prevalence rate in the area.

4.4 AC of Castilla - La Mancha. Evolution, current situation and perspectives of bovine brucellosis. Evolution of the main epidemiological indicators. Special actions in zones of high prevalence

Agapito Portillo Sanchez, head of the Animal Health Section service.

This is a large region occupying the centre of Spain to the south of Castilla y Leon and includes five provinces.

It is the most sparsely populated region in Spain with a population density of 22 people per square kilometre. The number of farms is decreasing in both the beef and dairy sectors.

Of the five regions, Ciudad Real and Toledo are large whilst Albacete, Cuenca and Guadalajara are considerably smaller.

Regional legislation is drafted to be consistent with national and European law.

Locally, 154 farmers associations for animal health (ADSG) implement surveillance and control under the regional agriculture ministry (under 52 local offices supervision). Campaigns are operated locally by the ADSG, operating out of the local offices, but are developed at provincial and regional level based on the national framework. In particular, the authorisation of stamping out and compensation payments is dealt with services with regionally whilst diagnosis and control of surveillance activities are handled at the provincial level and animal movement control by local offices. The number of farms under investigation has decreased each year since 1999. The proportion of positive herds has decreased overall over the last eight years but there is considerable variation between provinces. Notably, the prevalence of disease in Guadalajara seems to have decreased significantly to the current very low level. The prevalence in Toledo and Ciudad Real appears to have risen over the last two years. Since these two provinces have the largest cattle populations, this represents a worrying finding.

Some inconsistencies in the presentation of figure were noted by the sub-group, regarding the number of serological tests and the number of the investigated farms carried out in 2003 and it's desirable a better management of the source of data.

According to the data presented, apparently only one check is conducted every year on free herds to monitor the disease, that could mean a serious deviation from the requirements of the Directive.

The areas of highest prevalence tend to occur somewhat in the eastern most municipalities of Toledo and Ciudad Real. These areas have been declared areas of special sensitivity and increased surveillance, particularly in dairy herds has been implemented. Mapping and photographing of positive animals has been introduced to prevent their sale.

5. Second day

5.1 Visit to a typical local bovine farm in a mountain area of the AC of Cantabria

On the second day, the Spanish Authority organised a visit to a typical extensive farm near the city of Santander. In the holding, visited, Tudanca bovines are bred for meat production. Tudanca is a typical breed of Cantabria; it is rugged and capable of moving with agility on mountain pastures, and is perfectly adapted to the habitat where it lives. During the visit, the breeder explained that, from the beginning of May to October the herd is moved to the common pastures (private area without fencing). The cattle usually spend the whole winter outside and are stabled only in the coldest months (from January to March). The routine controls for diseases are carried out on the farm premises in May and October, i.e. before the animals leave the holding and when they return home again.

The farmer reported that two pregnant cows were positive to the brucellosis screening test at the beginning of the current year. The result was confirmed by a second diagnostic test. The animals were slaughtered within 24 hours from the notification, and *Brucella abortus* was isolated from one of them. The farm is currently not yet qualified.

In a group of farms located in proximity (about 5 km) to the one visited, an outbreak of bovine brucellosis was discovered in February 2004. This outbreak was probably caused by cattle sharing the pasture with this group of farms, during Summer 2003. In this case, the strategy for brucellosis control consisted in applying stamping out in the holdings positive to the tests. The farm that was visited, was geographically isolated from the area where the outbreak occurred and was therefore not considered to be a risk of spread of the disease. As a result, stamping out was not applied, but the herd was checked an additional five times from April to October 2004. No further positive animals were discovered.

5.2 Vaccination as a strategy for controlling bovine brucellosis – A possible means for progress in eradication

Jose Luis Paramio - Subdirección General de Sanidad Animal, Madrid

In 2003, vaccination against bovine brucellosis was carried out in five Autonomous Communities in Spain: Aragón, Cantabria, Castilla y León, Extremadura and Basque Country. In total, 5,955 herds were included in the vaccination programme, but only 1,282 herds (13,743 bovines) were actually vaccinated. In 1,170 herds, 10,191 young animals were vaccinated while in 112 herds, 2,878 adult animals and 674 young animals were vaccinated. In 2002, vaccination was carried out in 956 herds and in total 14,536 bovines were vaccinated against bovine brucellosis. No clear information on the vaccine used was provided.

In 2003 vaccination against bovine brucellosis was undertaken:

- In the AC of Aragón: 571 herds (4,561 young bovines vaccinated once)
- In the AC of Cantabria: 3 herds (48 bovines vaccinated once)
- In the AC of Castilla y León: (82 herds: 374 young bovines vaccinated; 111 herds: 2,844 adult and 674 young bovines vaccinated)

- In the AC of Extremadura: 420 herds (3,502 bovines vaccinated, some of them twice)
- In the Basque Country: 420 herds (1,742 young bovines vaccinated once)

Spanish authorities reported that, without significant pressure, progress in eradication is difficult. Lack of herd immunity through lack of vaccination coverage makes bovines especially sensitive to infection.

Therefore, for 2005, it's foreseen that AC will be classified by the level of herd prevalence. Based on the level of prevalence in an area, and on the particular local conditions (kind of breeding, common pastures, transhumance, etc.), specific measures such as test-and-slaughter, stamping out or vaccination will be reinforced. The qualification of pastures would help in preventing infection spread. Vaccination is regarded as a tool needed in areas with high prevalence, in enzootic areas and for the management of acute breakdowns.

In areas where herd prevalence in 2003 was below 1%, the objective will be to achieve disease eradication (rate of positive herds lower than 0.02%). The tool to achieve this will be test-and-slaughter or depopulation.

The objective in areas with a prevalence between 1% and 5% in 2003 is to decrease prevalence below 1%. It's recommended to reinforce stamping out policy. In areas or herds with prevalence higher than 3%, young animals (aged 3-6 months) should be vaccinated (with B19 or RB51 vaccine) and a strict movement control and a ban of movement of animals from and to positive herds will be implemented.

In the provinces or comarcas where prevalence is higher than 5% the objective is to reduce prevalence below 2% by the end of 2005. In these provinces, in areas or herds with high incidence, special programmes will be implemented with compulsory vaccination of all females. If spread of infection cannot be stopped, vaccination of all animals will be implemented. There are two procedures: vaccination of young females (3-6 months old) with B19 vaccine, and adult females with RB51 vaccine, or vaccination of all animals (young & adult) with RB51 vaccine.

It is the responsibility of the AC to define sufficiently large areas where vaccination will be carried out. Clear and comprehensive information on vaccination areas should be submitted to the Commission.

6. Conclusions

- There has been a reduction in the national prevalence of bovine brucellosis during 2003, following a 4-year period where there was little change. The decrease is consistent with the significant efforts undertaken by the veterinary authorities to eradicate the disease, particularly in increased testing and management of the programme.
- Since the last meeting of the Task force Subgroup in Cordoba (9-11 July 2001), there has been significant improvement in data analysis, both at national and regional level. This was seen in presentations to the Subgroup, which were generally very clear and reflected a good understanding of the issues involved.

- Little progress is evident in a limited number of regions, where disease prevalence remains at a high level. Of particular concern are certain provinces in the AC of Castilla y Leon and parts of the AC of Cantabria, characterised by extensive beef farming, transhumance and communal pasture.

The current test-and-slaughter policy is having little impact in the high-prevalence areas and vaccination coverage is insufficient at present to confer sufficient protection.

7. Recommendations

1. The role of the national committee should be increased to define a strategy for brucellosis eradication that is consistent across all ACs. Direction should include clear, realistic targets, based on epidemiological information and comprehensive analysis.
2. To facilitate strategic coordination of the programme at the national level, data should be provided to, and analysed at the central level (National Committee).
3. Epidemiological information should be collected at local level and used to identify the source of infection and risk factors for the spread of disease, as the basis for deciding on appropriate measures. A standardised investigation report should be completed for each outbreak.
4. Progeny of infected animals should be identified and slaughtered.
5. Vaccination should be used as a tool to reduce the prevalence in well-defined areas. Clearly defined criteria should be used for designation of sufficiently large areas or epidemiological units. Consequently a list of the “comarcas” or epidemiological units for vaccination should be included in the programme each year.

At the end of the meeting, as conclusion, the Commission made the following statement:

“The Commission evaluated and approved the Spanish bovine brucellosis programme for 2005, as it was submitted by Spain and amended appropriately on request by the Commission. The EU Member States voted in favour to co-finance this Spanish bovine brucellosis programme for 2005. The Commission will adopt this Decision soon. As a consequence, all measures laid down in the programme are binding and by Law have to be in force from 1 January 2005 on. This implies that these measures are to be implemented by all competent authorities involved.”

LUNES, 15 DE NOVIEMBRE.

MONDAY, 15 NOVEMBER.

9:30 - 9:45	Bienvenida e introducción. <i>Welcome and introduction</i>
9:45- 10:15	El programa nacional de erradicación de brucelosis bovina en España. Evolución, situación actual y perspectivas. Actuaciones de refuerzo del programa. <i>The National Eradication Programme for bovine brucellosis in Spain. Evolution, current situation and perspectives. Actions for the re-enforcement of the programme.</i>
10:15 – 11:00	Coloquio. <i>Discussion.</i>
11:00 – 11:15	Pausa y café <i>Coffee break.</i>
11:15 – 11:45	C.A. de Cantabria. Evolución, situación actual y perspectivas de la brucelosis bovina. Evolución de los principales indicadores epidemiológicos. Medidas especiales de actuación en zonas de elevada prevalencia. <i>AR of Cantabria. Evolution, current situation and perspective of bovine brucellosis. Evolution of the main epidemiological indicators. Special actions in zones of high prevalence.</i>
11:45 – 12:30	Coloquio. <i>Discussion.</i>
12:30 – 13:00	C.A. de Castilla y Leon. Evolución, situación actual y perspectivas de la brucelosis bovina. Evolución de los principales indicadores epidemiológicos. Medidas especiales de actuación en zonas de elevada prevalencia. <i>AR of Castilla y Leon. Evolution, current situation and perspective of bovine brucellosis. Evolution of the main epidemiological indicators. Special actions in zones of high prevalence.</i>
13:00 – 14:00	Coloquio. <i>Discussion.</i>
14:00 – 15:30	Almuerzo. <i>Lunch.</i>
15:30– 16:00	C.A. de Castilla – La Mancha. Evolución, situación actual y perspectivas de la brucelosis bovina. Evolución de los principales indicadores epidemiológicos. Medidas especiales de actuación en zonas de elevada prevalencia. <i>AR of Castilla-La Mancha. Evolution, current situation and perspective of bovine brucellosis. Evolution of the main epidemiological indicators. Special actions in zones of high prevalence.</i>
16:00 – 16:45	Coloquio. <i>Discussion.</i>
16:45 – 18:30	Coloquio general (todos los participantes) <i>General Discussion (all participants).</i>
18:30-19:00	Reunión del subgrupo. <i>Meeting of the subgroup.</i>
21: 00	Cena de bienvenida <i>Wellcome Dinner.</i>

MARTES, 16 DE NOVIEMBRE.

TUESDAY, 16 NOVEMBER.

8:30– 11: 30	Visita a una explotación. <i>Visit to a local herd.</i>
11:30 – 12:00	La vacunación como estrategia de control de la brucelosis bovina. <i>Vaccination as strategy for controlling bovine brucellosis.</i>
12:00 –12:45	Coloquio. <i>Discussion.</i>
12:45 – 14:00	Coloquio general (todos los participantes) <i>General Discussion (all participants).</i>
14:00 - 15:30	Almuerzo. <i>Lunch.</i>
15:30 – 17:00	Reunión del subgrupo. <i>Meeting of the subgroup.</i>
17:00 – 17:15	Pausa y café <i>Coffee break</i>
17:15 – 19:00	Conclusiones finales (todos los participantes). <i>Final conclusions and closing of the meeting (all participants).</i>