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Health and Consumer Protection

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

EVORA, Portugal
23-24 June 2003

REPORT OF THE
“BOVINE TUBERCULOSIS” TASK FORCE SUBGROUP
MEETING HELD IN EVORA, PORTUGAL, ON 23-24 JUNE 2003

Participants: J. Ferris (Chairman),
Members of the tuberculosis Sub-group,
F. Reviriego, J.P Vermeersch for the Commission,
Representatives of the Portuguese Ministry of Agriculture, Veterinary
Laboratories in Evora and University of Lisbon
Veterinary personnel from the Alentejo and Entre Douro e Minho and
other regions
Representatives from the OPP (Organizaçao de Produtores Pecuarios)

Agenda: see Annex 1

Location: Evora, Portugal

DAY 1

1. The Portuguese CVO C. Agrela Pinheiro welcomed the sub-group to Portugal to share experiences and discuss difficulties in regard to bovine tuberculosis.

The chairman, J. Ferris, thanked the CVO and Portuguese delegation for the time and effort expended in making the meeting possible. He outlined the purpose of the sub-group over the last few years and confirmed that Portugal was the last country in the present. He stressed that the members of the sub-group do not conduct an inspection mission rather that the function of the sub-group is to assist Member States with eradication programmes. He explained that it is vitally important to have a full and open discussion as to why perhaps things are not progressing in the field, as Portugal would like them to. He explained how as chairman he reports back to the Task-Force in Brussels with the observations and comments of the sub-group, having first discussed and agreed the outcome of the meeting with the Portuguese member of the Task-Force. The Portuguese authorities get the final report and the Task-Force can encourage provision of whatever is necessary to address the areas where shortcomings are evident.

2. The Portuguese CVO reiterated that this would be a working joint meeting and not just a series of presentations and that open discussion and questions were required. He then went on to give a presentation outlining the structure and organisation of the veterinary services in Portugal.

The General Veterinary Directorate is part of the Ministry of Agriculture, Rural Affairs and Fisheries. It is responsible for matters concerning Animal production, Health and Welfare as well as the Veterinary Public Health inspectorate.

The controls are applied at central and at local level for actions in relation to animal health operated by the veterinary services. Regarding mainland, the portuguese administrative organization is based on 7 Regional Directorates,

which one with a Veterinary Service Department. Each Regional Directorate is subdivided in several Local veterinary services in a total number of 24, for the hole country.

Organisations of cattle breeders are responsible for carrying out the controls and monitoring. There are 117 such organisations throughout Portugal known as the OPP.

In total there are 1.1 million bovines and 3.5M small ruminants. Control/Eradication programmes are in operation for Bovine Tb, Bovine Brucellosis, Contagious Bovine PleuroPneumonia, BSE, Leucosis and Brucellosis in small ruminants. In the Bovine TB eradication programme the results have stagnated in the last three years.

An advisory Commissioner supports the National Co-ordinator in the details of the progression towards the aim of final eradication of bovine tuberculosis.

3. A. Pina Fonseca presented the objectives and implementation details of the 2003 eradication plan for Bovine Tuberculosis in Portugal, the underlying authorities and veterinary organisation, together with the Epidemiological profile.

Most bovines are located in the northern half of the country. Different methods of farming dominate in different regions and the real problem is that the number of infected animals remains the same. Of late there has been more awareness that there is a problem. The number of herds has decreased over the last 7 years and the prevalence and incidence has remained static. Portugal had reduced the level of testing to the minimal as required by Directive 64/432/EEC, in accordance with alinea c), point 2 of Annex A, of Annex I of Directive 98/46/CE from the 24th of June, which change annexes A, D (capitul I) and F, from Directive 64/432/CEE (50% of animals each year). This procedure revealed some problems, so that Portugal altered this method in order to test this year, all the bovine in all the holdings.

The important decision for 2003 was that all animals in Portugal be tested during the course of the year; that there be a higher frequency of tests in infected herds and in epidemiologically linked farms and that the use of supplementary tests be increased in herds with continued problems in order to prevent full depopulation. The Interferon- γ assay should be a useful tool in this respect if the labs are equipped.

He confirmed that only TB free animals from TB free farms can move routinely and only the health authorities can permit movement of animals not from officially free farms.

He outlined the current thinking behind drawing up the Portuguese programme under the following headings:

- TB is a disease causing much concern.
- Programming and monitoring must be continuously assessed.
- Need for full time commitment.

- Proper training.
- Adequate staffing required.
- Assessment of disease in other species.

4. A presentation on the Laboratory diagnostic service by A. Amado followed.

One laboratory in Portugal deals with Mycobacteria doing routine laboratory diagnostics and identification. At present this laboratory is harmonising and standardising the Interferon- γ assay prior to transfer of the technology to the regional laboratories. On farms with a total slaughter of animals this laboratory has had the opportunity to collect tissues for full examination as the basis for the development of the assay. It is accepted that this assay will not solve all problems. One of the difficulties is that typically in the north of the country cattle, pigs, chickens and dogs co-habitat in small farms with no efforts made to keep the different species apart and at the same time hygiene measures are poor on such farms. This results in diagnostic difficulties due to various other Mycobacteria.

5. F. Reviriego outlined the function of the Commission in this subgroup

He insisted that the sub-group are not an inspection team looking for faults but a team of experts in their own countries drawn together to look at areas of difficulty. He then provided a resume of the TB position in Europe, the accession states Lithuania, Poland and Slovenia that have submitted programmes, data from officially free Member States on the submissions of suspect Tb lesions from slaughter plants and the situation in UK-GB. Those present expressed the observation that it did not seem that surveillance for Tb was fully adequate neither harmonised in the Officially Tb Free Member States.

He then went on to present data on coverage: herd prevalence and disease trend from those Member States with Tb eradication programmes being supported by the EU.

In summary:

- High and rising herd prevalence in Northern Ireland.
- High and maintained prevalence in Ireland
- Slight improvement and moderate prevalence in Spain
- Low herd prevalence and slight improvement in Italy and Portugal
- Programme to be thoroughly modified in Greece

The Chairman passed the comment that final eradication is very difficult and as confirmed by the data that Tb is still with us

In response to a question from the Portuguese each of the members of the sub-group outlined the use of the IFN- γ assay in each of the countries.

D. Collins outlined that IFN- γ assay performs differently in different situations, that it is a useful test as a complementary test to the tuberculin test, which is the best test available. The specificity is not higher than 97% but that this is not important where its use is confined to herds already diagnosed as infected. The sensitivity of the assay in Ireland is about 87%, which is about the same as tuberculin test. Both tests used in parallel increases sensitivity. IFN- γ detects 2 out of 3 infected animals otherwise missed by the tuberculin test alone. IFN identifies animals in early stages of infection before they become tuberculin reactors and before they become infectious. Each of the members of the sub-group confirmed that their experience with the IFN- γ assay would largely parallel that of Professor Collins. O. Denny (UK-Northern Ireland) indicated that his experience with the IFN- γ assay would indicate a lower sensitivity/specificity than that stated by D. Collins.

The CVO expressed the opinion that information on the IFN- γ may not have been conveyed correctly to staff and the impression may have been that the IFN- γ assay would replace tuberculin test so this clarification is useful. He went on to stress the importance that the tuberculin test is conducted properly with IFN- γ used as a complementary test to accelerate the fight within the infected herd.

6. L. Duante made a presentation on the Implementation of Programme in Entre-Douro e Minho region.

In this region Dairy farms are mostly concentrated along the coast, with the average herd size being 40 cows. In the inland mountainous area the animals spend all the summer grazing season on the mountain pasture, small ruminants graze the high mountain areas also. In total 45% of farms or 52,000 are located in this region. They experience difficulty in reaching all the small cattle farms.

He also outlined the organisation of the regional veterinary service. Veterinary surgeons in the OPP are accredited by the Official service and carry out the actual testing/sampling on the farms. If a reactor animal is detected then all movement from the herd is under control. All reactors are removed for slaughter to one premises and material is collected for the laboratory. An epidemiological survey is done. Three official veterinarians work in the local office where there is also technical and administrative staff. The number of herds, are diminishing but the number of cattle is remaining constant - dairy farms are increasing in size. The number of animals reacting to the test remains relatively constant and additional animals may be slaughtered particularly when the herd is depopulated.

In response to a question on the possible source of the infection detected a discussion ensued: in one area the lack of rigour in conducting the test is suspected to be the main contributing cause in the second two areas production systems are primitive and there is also a degree of violations of health checks. In the only case where a human also reacted to the skin test no determination was made as to whether the human and bovine incidences were linked.

The Commission asked questions in regard to the availability and distribution of tuberculin.

The chairman asked if the wildlife in the area were suspected of playing a significant role in TB – L. Duarte responded that the topic would be covered in a forthcoming presentation.

7. M. C. Caetano presented details of the eradication programme and epidemiological situation in the Alentejo region.

This region has 32% (~346,000) of the total bovine population of Portugal in 6% (5,256) of the holdings with an average of 65 breeding animals per herd. Farming is predominantly extensive with both imported, Charolais/Limousin, and native, including Bravo, breeds reared and with an increasing herd size.

The region is divided into 5 Official Veterinary/Administrative divisions (DIV) with a total of 24 official veterinarians each spending approximately 20-30% of their time on the eradication programmes and 11 OPP areas, which do not necessarily overlap on the ground with the Official Divisions. The DIV are responsible for the sanitary decisions, official movement controls and accompanying documentation, conducting investigations, epidemiological analysis, liaison with and supervision of the OPP. The OPP are responsible for the organisation and execution of the actual testing together with co-ordination of the application of the sanitary decisions and collaboration with the DIV in investigations.

The eradication programme in Alentejo aims to test each herd during the year, to investigate findings of tuberculosis from routine abattoir postmortem, to conduct and analyse inquiries on all positive holdings, to concentrate attention on holdings geographically adjacent to positive holdings and to liaise with and supervise the OPP. In 2002 almost 318,000 animals were tested on 5,374 holdings and 335 animals were detected reactor on 33 holdings from which a total of 618 animals were sent to slaughter. Within Alentejo infection seems to be clustered with some areas having no active foci of infection. In the 2 years between June 2001 and June 2003 98 herds were controlled for suspect tuberculosis; 19 of these were cleared of infection and 6 were totally depopulated of all bovines.

Problems experienced with the eradication programme include the lack of expertise in conducting the tuberculin test with the majority of veterinary graduates having no specific training in test technique; livestock production characteristics are problematical; it would be hoped that the availability of a serological test might provide a more rigorous scientific procedure in infected herds. It is of concern that in the hunting areas in Alentejo deer production has increased and these are sharing terrain with cattle in areas where foci of bovine Tb remain. On the positive side there has been increased awareness that there is a Tb problem in some areas, the breeders and OPPs are co-operating and the improved funding from the EU has helped.

8. V Almeida and A. Ferreira delivered presentations on different aspects of a research project (Agro n°125/01).

Four institutions/laboratories are participating in this project to look at the causes of persistence of false negative animals, the occurrence of false positive animals with therefore lack of confirmation of tuberculosis in reactors

slaughtered, new and hopefully more sensitive and specific methods of diagnosis and the zoonotic potential impact particularly on those who have had contact with positive animals. The project commenced in 2002 and to-date has concentrated on: a survey on population data, development of an epidemiological study and various questionnaires, compilation of information from abattoirs, development of common computer platforms and Geographic Information systems, selection of herds for a case/control study, development of training courses, trial work on the Interferon- γ assay, histological, bacteriological and DNA analysis and sampling from feral species. Work will continue on this project through 2005.

9. At this point the formal presentations were completed and the Chairman summarised the difficulties that had become apparent in the course of the day:
 1. Lack of staffing resources – affecting the ability to locally monitor delivery, audit test procedure and quality control the programme.
 2. Training requirement for both OPP and official services.
 3. Wildlife – a need to clarify their role, if any.
 4. More availability of blood tests etc.

He went on to question whether some of the areas of concern that had been evident in missions to other countries and specifically asked whether:

- The laboratory services are meeting the demands?
- Co-operation with farmers is a problem – any difficulties e.g. with payments for infected animals, frequency of testing?
- Reporting information from slaughterhouses – accurate and timely?
- Forward and backward tracing - is there an efficient system in place?
- Comments on movement controls are they adequate?
- Are resources available to conduct full epidemiological investigations?
- Are there any compensation difficulties?

The Chairman then asked those present and involved in the programme to highlight the 3 main areas that would help them deliver better programmes. The following comments were made from the floor:

It is very rare to have chronic cases or large numbers of reactors in breakdowns, usually just 1 or 2 reactors and then a clear test and maybe another infected animal later. Thus this is frustrating for all involved.

Veterinary services from regions with high TB are also dealing with BR and also TB in small ruminants. It would be easier to deal effectively with one problem at a time.

Laboratory confirmation of infection is essential – even if lesions consistent with tuberculosis are present.

Data originates from four different sources and this can be different – herds/farms not being checked is quite a concern.

Sometimes the exact number of farms is difficult to determine and this does present a difficulty in terms of statistical analysis particularly with herds that cease to exist or are floating farms with stock one year and none the next.

Budget allocation is decreasing each year and the producers therefore are co-financing the programme.

In reply from a laboratory perspective it was stated that a reactor animal, which has lesions consistent with tuberculosis, or is histologically positive is infected with TB irrespective of culture result; bacteriology takes a long time and it is appreciated that for decision makers this can seem an eternity.

Logistically it is difficult to take, deliver and assay 200 IFN γ samples from one herd.

Information from the slaughterhouse is frequently incomplete – perhaps detail not recorded or not delivered.

Compensation to breeders is not the subject of complaint at present as full value paid in timely fashion;- except perhaps in 1 region.

Sometimes animals do move without the correct documentation for health status. This is not a major problem as the passport is lifted when testing and only returned to farmer when the result of the test is clear.

Illegal animal movements are police matters but the general police have no training in this regard.

The meeting then adjourned.

DAY 2

1. Day 2 commenced with a visit to the local Evora livestock market and bovine identification office operated by the OPP and which is a sub-office of the OPP headquarters in Montemor.

In total in this area the OPP provides a service to 1005 herds and thus are responsible for the logistics of arranging TB/Blood tests, at approx. €4/head, for 82,000 cattle to 73 Executive Veterinary surgeons. On average about 800 cattle/week are sold in the Evora Market with 90% of these being for slaughter/fattening.

2. Following a visit to a large commercial farm having both beef and Bravo breeds of cattle and to an Official Research Farm the sub-group adjourned to draw-up recommendations for consideration by the Portuguese authorities.
3. When the full meeting re-assembled the Chairman, on behalf of the sub-group thanked the Portuguese authorities and participants for all work in making the mission possible, acknowledging that it has taken everyone's time not just for the

meeting but also in the preparation of presentations etc. He also thanked the Interpretation services.

The Chairman explained that ordinarily at this stage of the meeting he summarises the observations of the sub-group; the suggestions are presented and comments noted and taken into consideration in drawing up the final recommendations for the formal report which will then be sent to the Commission and the Portuguese CVO. The chairman then reports back to the full Task-Force in Brussels. It is to be hoped and anticipated that both the Portuguese government and the Commission will take the report into consideration when approving future programmes.

Conclusions and Recommendations of TB Sub-Group

1. Central Government should appraise the resources allotted to TB programmes centrally and at a regional level.
2. At regional level a dedicated person(s) should be appointed to the eradication programme as appropriate.
3. Training is important at all levels therefore resources should be made available to train all staff involved in TB eradication – particularly in the area of data collection and analysis. Training in epidemiological formats and test performance should be provided as appropriate. Training should ensure that substitute staff is available in each region to provide relief cover if necessary.
4. The necessity to monitor control of eradication programmes such that systems are put in place to audit the delivery of the programme and in particular the control and supervision (including supervision of testing procedures) of the OPP must be recognised.
5. . Portugal is so close to eradicating TB compared to other MS's that it would be very regrettable if a lack of communication and attention to details at this stage prolonged the fight against the disease. It is essential to address information feedback from slaughter plant level and the volumes and efficacy of submission of samples for analysis from routine slaughter animals should be kept under constant review.
6. The occurrence of single reactor animals at a test in an otherwise clear herd may be an early warning to a problem therefore investigation of the history of animal, knowledge of herd history profile and trading patterns and also then information from the laboratory, which may post-date the 1st follow-up test in the herd, should all be considered when drawing conclusions as to the actual infection status of such an animal.
7. To keep the identification and movement controls, procedures and the policing of same under constant review and ensure that appropriate follow-up actions are taken as required.

The meeting then concluded.

Annex I

REUNIÃO DO SUBGRUPO DE TUBERCULOSE BOVINA DA TASK FORCE PARA O SEGUIMENTO DOS PROGRAMAS DE ERRADICAÇÃO

*MEETING OF THE TASK FORCE FOR MONITORING NATIONAL ERADICATION
PROGRAMMES, SUBGROUP BOVINE TUBERCULOSIS*

Évora, 23 e 24 de Junho

(23rd and 24th June), 2003

Programa

Agenda

**9,30 H - Boas vindas e introdução - Dr. Carlos Agrela Pinheiro. Director
Geral de Veterinária**

*Welcome and introduction - Dr. Carlos Agrela Pinheiro. General
Director of Veterinary*

**9.40 H – Boas vindas e Introdução - Dr. John Ferris - Presidente do
Subgrupo**

*Welcome and introduction - Dr. John Ferris - Chairman of the
subgroup*

**9.50 H – Estrutura e organização dos Serviços Veterinários em Portugal -
Dr. Carlos Agrela Pinheiro - Director Geral de Veterinária**

*Structure and organization of the Veterinary Services in Portugal - Dr.
Carlos Agrela Pinheiro - General Director of Veterinary*

**10.20 H – Plano de erradicação da Tuberculose Bovina em Portugal:
situação epidemiológica e medidas em implementação – Dr.
António Pina Fonseca - DGV**

*The eradication Programme for Bovine Tuberculosis in Portugal:
epidemiological situation and measures in place - Dr. António Pina
Fonseca - DGV*

11.00 H – Pausa para café

Coffee break

**11.20 H - Diagnóstico laboratorial da Tuberculose – Dra. Alice Amado -
L.N.I.V.**

The laboratory diagnosis of Tuberculosis - Dra Alice Amado – L.N.I.V.

12.00 H -Panorama da Tuberculose na Europa - Francisco Reviriego Gordejo - Comissão Europeia
Overview of Tuberculosis in EU - Francisco Reviriego Gordejo - European Commission

12.30 H - Almoço
Lunch

14.00 H – Plano de erradicação da Tuberculose Bovina na região de Entre-Douro e Minho: situação epidemiológica e medidas em implementação – Dr. Eduardo Tavares e Dr. Luciano Duarte - DSV - DRAEDM
The eradication programme for Bovine Tuberculosis in Entre-Douro e Minho region: epidemiological situation and measures in place – Dr. Eduardo Tavares e Dr. Luciano Duarte - DSV – DRAEDM

15.00 H – Plano de erradicação da Tuberculose Bovina na região do Alentejo: situação epidemiológica e medidas em implementação – Dra. Maria do Carmo Caetano - DSV – DRAAL
The eradication programme for Bovine Tuberculosis in Alentejo region: epidemiological situation and measures in place – Dra. Maria do Carmo Caetano - DSV – DRAAL

16.00 H – Pausa para café
Coffee break

16.20 H – Tuberculose bovina no Alentejo: zoonose emergente – Dra. Amália Ferreira – Laboratório de Évora – DRAAL
Bovine Tuberculosis in Alentejo: epidemiological survey of a persistente zoonosis - Dra. Amália Ferreira – Laboratório de Évora – DRAAL

17.20 H – Colóquio geral: todos os participantes
General discussion: all participants

18.00 H – Encerramento do colóquio
End of the first day meeting

24 de Junho / 24th June

8.00 H - Visita a duas explorações bovinas e a uma OPP (Organização de Produtores Pecuários)
Visit to two bovine flocks and the corresponding Association of Farmers (OPP)

13.00 H – Almoço
Lunch

15.00 H – Reunião do subgrupo TF-TB
Meeting of TF – TB subgroup

15.30 H – Reunião de encerramento: conclusões e recomendações
Closing meeting: conclusions and recommendations

16 H – Fim
End of the meeting