

COMMISSION
OF THE
EUROPEAN COMMUNITIES

Directorate General for
Health and Consumer Protection

SANCO/E.2

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

BELFAST, Northern Ireland (UK)

15-16 MAY 2002

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

HELD IN BELFAST AND ARMAGH, NORTHERN IRELAND, U.K., ON 14-15 MAY 2002

Participants: see Annex 1.

Agenda: see Annex 2.

Part 1: Presentations

Day 1

**1.1. Brucellosis eradication in Northern Ireland, Introduction and Overview -
Owen Denny**

O. Denny, Head of the Enzootic Diseases Department gave an overview on situation on Bovine Brucellosis and the current eradication programme.

It was presented the organisation of the Department of Agriculture and Rural Development (DARD) includes the Veterinary Services which has 2 Departments, the Policy and the Implementation respectively with 3 Divisions (Enzootics, Epizootics and Veterinary Public Health) and 2 Divisions (Northern and Southern).

He also presented an overview on the history of Bovine Brucellosis in Northern Ireland (NI) and the evolution of the herd and animal incidence and prevalence during the period of the last 5-7 years.

The key elements of the NI scheme for BB eradication and the factors contributing to the current BB epidemic and the response of the Official authorities to it were discussed.

The targets of the current program are to reduce the number of outbreaks to less than 150 within 3 years and achieve eradication in less than 7 years, i.e. less than 5 outbreaks per year. To achieve that purpose the key areas are under consideration of the Official Services, were thoroughly discussed during the meeting and are presented on the conclusions and recommendations of this report.

1.2. Descriptive Epidemiology of Brucellosis in NI – Dr. Darrell Abernethy

Approximately 80% of the land area in NI is farmed and over 90% of farms are used for cattle or sheep. There are 1.7 million cattle and 2.7 million sheep, distributed among 25 000 and 11 000 farms respectively. During the period 1990 to 2001, the average herd size, increased from 32 to 45 and the increase was consistent across all divisions.

For administrative purposes, the country is divided into 10 divisions, each with a divisional office and overseen by a divisional veterinary officer. Each division is further divided into “patches”, managed by a veterinary officer with a team of animal health inspectors.

Only *B. abortus* occurs in NI; the Serum Agglutination Test (SAT) is used for screening with the Complement Fixation Test (CFT) used for confirmation. In 7 divisions, herds are screened biennially while in the 3 worst affected divisions annual testing is used. Monthly testing of all dairy herds is undertaken using an ELISA on bulk milk tank samples, and all female cattle over 30 months are tested at slaughter. The annual mean number of on-farm SAT tests is 580 000, although this has increased from 1996 due to increased incidence. The monthly mean number of tests is 45000 although a strong seasonal bias results in 50% of tests each year being conducted from January to April.

Outbreaks of brucellosis were sporadic until 1997 with most incidents due to false positives. However, 3 outbreaks occurred in 1997, linked to cross-border activity, and one resulted in significant spread in the southern part of the province. The annual (seropositive) herd incidence in 1996 was 0.02% but this increased to 0.48% in 2000 and 0.47% in 2001. Testing was significantly interrupted in 2001 due to the foot and mouth disease epidemic with a marked decrease in testing during the months of March to June. The effects of this will only be determined once the testing round is complete, but it is envisaged that the epidemic resulted in increased within- and between-herd spread. The animal incidence in 1997 was 0.03%, increasing to 0.13% by 2001. Most brucellosis is clustered in the divisions of Armagh, Enniskillen and Newry.

36% of breakdowns occur in herds with some dairy activity, while 56% are in “suckler” herds. 77% of infected farms used more than 1 farm premise with 13% of outbreaks having reactors identified on multiple premises. All cattle movements between herds require a movement licence and this movement is captured on a central database. However, movements between premises within the same holding do not require

licensing and the significance of this kind of movements in the disease incidence is still to be determined.

In an analysis of 200 breakdowns from 1998 to 2000, 40% were attributed to spread from an infected neighbouring herd, 12% to spread from herds in the area, 13% to purchase of infected cattle, 20% to contact through shared equipment or facilities and 5% to suspected illegal movement of cattle. In 10% a source could not be determined with any confidence. The findings are consistent with the strong clustering of disease within certain areas and the role of “contiguous” testing as a major control measure.

Within-herd spread is relatively limited: the median number of sero-positive reactors per herd was 3 and this is not affected by the size and risk status of the herd. The reactor rates for routine testing was 0.1 per 1000 tests, compared to 1.11 in contiguous tests and 20.13 in herds where infection was already suspected or confirmed due to abortions or previous reactors.

The number of human cases of brucellosis was 0 in 1986-1987, however it increased to 14 in 2000 and 20 in 2001. In an analysis of 89 breakdowns, 9 herds were associated with human seropositivity; in 7 herds only the herd-keeper was affected while there were 2 and 3 cases in the other 2 incidents.

The following factors have been identified as potentially significant during the current increase in disease incidence: the nature of farming in NI (small, fragmented farms with substantial cattle movement), illegal movement of cattle (difficult to quantify or confirm), current compensation procedures, failure to report abortions, screening tests sensitivity and specificity (contradictory results were obtained in two studies), resource constraints and the recent foot and mouth epidemic.

1.3. NI Brucellosis control scheme: Operation of a Field Divisional Veterinary Office, Organisation of testing and Brucellosis Office Procedures – Roy Watt, John Gillespie, Robert Bain and Aidan Mc Veigh

The Veterinary Service of DARD is the designated Competent Authority in NI under Council Directive 64/432/EC and The Brucellosis Control Order (1972) with responsibility for the implementation of the National Bovine Brucellosis eradication Program. The program is based on a test and slaughter Policy.

Testing Strategy

1. Routine testing includes annual blood testing of all breeding animals over 12 months in the three Divisions namely Armagh, Newry, and Enniskillen with a high incidence of the disease and biennial testing in the other seven Divisions.
2. Special testing includes:
 - Post abortion testing.
 - Testing of herds contiguous (inner and outer rings) to a disease outbreak.
 - Forward and backward traced animals/ herds tested.
 - Special check testing in high-risk areas.
 - Bulk milk ELISA carried out monthly on all dairy herds.
 - Testing of all cattle over 30 months old (OTMS) at slaughter.
3. The official tests are the Serum Agglutination test (SAT) EDTA (EDTA with SAT), the Complement fixation test (CFT) and the Milk ELISA. The serology and milk tests are carried in the laboratory of the Veterinary Sciences Division, which is located in Belfast. A SAT is performed on all blood samples (screening) and the CFT on samples with an SAT $> 1/20$ or $>1/10$ in increased-risk tests. Test results are electronically transmitted from the Laboratory to the Division Veterinary Offices (DVOs).

DVO Operational Procedures

Animal Health and Welfare Inspectors, who also map out contiguous herds, carry out the blood sampling. Test results are interpreted by Veterinary Officers (VOs). A standards or severe interpretation is used depending on the epidemiological situation.

It is a legal requirement to report an abortion to the DVO. Animals that abort are blood tested immediately and 21 days post-abortion if first test is negative.

The Brucellosis Free Status of a herd is withdrawn and movement restrictions imposed following confirmation of infection in a herd. The affected cattle are slaughtered and some of their lymph glands forwarded to the laboratory for bacteriological examination. Premises are cleansed and disinfected within 48 hours of removal of the reactors. The epidemiological investigation and the laboratory results are used by the VO to assess the disease status of the herd. Herds with confirmed infection or considered infected are usually depopulated and not allowed to restock for six months.

Herd depopulation criteria are number of reactors, number of abortions, isolation of *Brucella* and the possible source of infection.

Herds contiguous to a disease outbreak are restricted for one or two herd tests. These herds continue to be tested at 3/4 monthly intervals depending on the epidemiological circumstances. A computerised mapping system is used in the identification of the farms.

Forward traced animals from infected herds are subject to various testing regimes depending on the disease risk. Progeny born in the 2 years prior to the reactor dam is traced and removed to slaughter.

Reactors from an infected herd are back traced. The herd of origin is restricted for one or more herd tests. When the reactor has moved out of the herd for more than 9 months, no restrictions are imposed but the herd is blood tested.

Non-depopulated herds are de-restricted in accordance with Council Directive 64/432/EC. All animals must have clear 21-day post-calving tests.

Department officials carry out valuation. Reactors are valued at 75% of the market price (with ceiling value applied). Negative-in-contacts are valued at 100% of the market price (no ceiling). Herd owners have the right of appeal.

Co-operation with Republic of Ireland.

As the three Divisions with the highest incidence of the disease are along the border there is regular exchange of information with the veterinary counterparts on the other side of the border.

1.4. Responses to rise in Brucellosis disease levels - David Irwin

The maintenance of Bovine Brucellosis in NI is a great matter of concern for the Competent Authorities, and a number of strategies/actions have been introduced for improvement. Namely:

Methods of identifying disease

Improvement of tests regimes and testing intervals, particularly the reintroduction of annual testing for surveillance in the whole territory, and the use of indirect ELISA in bulk samples (Brucellosis bulk milk ELISA: BrBME) that allow the redeployment of scarce resources.

Furthermore, it is planned to study the benefit of introduction new/improved tests both for screening or confirmation of the disease.

Two specific topics are considered relevant for arising undetectable breakdowns: the blood sampling of cows more than 30 months before slaughtering at abattoir and the improvements in reporting abortions.

Regarding the BrBME, this test was introduced a year ago, and at the time, most of dairies are supplying milk samples to the Veterinary Science Division (Laboratory). Experience is limited for estimating the proportion of false positive results and on the other hand 3 active breakdowns were detected by this mean. The OTMS sampling also detects additional positive herds.

New scopes in training personnel

Training of personnel is done under regular basis and applied on the whole staff structure: Divisional Veterinary Officers (DVOs), Veterinary Officers (VOs), Senior Animal Health and Welfare Inspectors (SAHWIs), Animal Health and Welfare Inspectors (AHWIs), Administrative staff and others.

Brucellosis policy review.

The whole Brucellosis policy have been reviewed recently, and summarised in a document that foresee a number of changes for improvement the join of targets and consequently, a new action plan could be drawn up.

Publicity

In NI there is a lack of farmers associations with the aim of sanitary defence. Actions on publicity are intended for looking after the co-operation with the livestock sector and the co-ordination with Private Veterinary Practitioners (PVP). This actions include: issuing leaflets and posters, press releases, articles and adverts, mailing letters, meetings with PVP and/or with herd keeper', etc.

1.5. Movement Control using APHIS – Richard O' Flaherthy

The movement control of herds in Northern Ireland is carried out by using the “Animal & Public Health Information System” (APHIS).

APHIS is a relational database based on Windows 95® operating system with approximately 500 computers on line.

Data objects of the APHIS are named Enterprise, Herd, Animal, Movement and Test.

Enterprise is the central point of the system and links to many Herd levels (respectively for cattle, sheep and pigs) and to another level that contains geographical information (GIS) and information on government premia.

Each herd is considered as a distinct epidemiological unit but the presence of associated out farms implies that animals can move between distant locations of the same farm.

The system includes information about the keeper, the animals, the health status, movements, test performed on herd, private veterinary practitioners and the list of contiguous herds and associated out farms.

1.6. Brucellosis Fraud – Mike Steel

Fraudulent activities are identified and can be divided in 2 broad groups: introducing the disease (through the trading of reactor cattle, use of the S19 vaccine and/or sale of aborted material) and grossly inflated valuations (by stocking up and/or possible agreements between independent valuers and breeders).

These activities increased rapidly in the year 2000, with consequences on unnecessary expenditures and other collateral damages (credibility of the Veterinary Service, decrease of the staff morale...).

Suspicion reports can come from a number of sources (from DVOs, epidemiology, titre differences, valuers, or the General Public, via hotline to Fraud Investigation Unit). The investigations should be remitted to the Fraud Investigation Unit, with support from Veterinary Services, with the intent to advice the AHWD on payment.

As detection and investigation of fraud is a very costly and time-consuming process, emphasis should be made in implementing prevention methods, whether by removing profitability and/or tightening buy-out, valuation and compensation procedures. Political measures should be implemented to discourage this kind of activities.

1.7. Veterinary Sciences Division

The Veterinary Science Division is a DARD division and is the central veterinary laboratory for NI. All analyses regarding brucellosis are performed either in the serology or the bacteriology laboratories belonging to the VSD.

The *Brucella* serology laboratory - Sam McCullough

All serology for the NI brucellosis eradication scheme is performed in this laboratory. The blood screening test used for the routine surveillance is the sero-agglutination test (SAT) performed in microplate (MSAT) since 1997. The MSAT antigen is coloured with Safranin O, and up to recently it was produced and controlled by the VSD. It is planned in the next future to be purchased from VLA (the national UK brucellosis reference laboratory in Weybridge, Surrey, England).

The monthly bulk milk ELISA has been introduced in 2001 as well as the OTMS testing. MSAT with EDTA (MSAT-EDTA) is also used for assisting in distinguishing cross-reactions and the CFT used as a confirmatory test is carried out where screening SAT is $\geq 1/20$ (25 IU/ml).

Due to the increase of activity linked to the eradication programme, additional staff was recruited, new accommodation was fitted out, and testing and information handling automated.

The samples submission rates rise through the winter, with a peak in spring and fall off again in summer. This is dealt by (i) ensuring lab and equipment capacity for peak demand, (ii) imposing complementary seasonality on other work programmes and (iii) transfer of staff.

The breakdown of samples types is as follows:

- Field eradication programme: 843,000
- OTMS sampling: 106,000
- Bulk milk samples 66,000

In addition to the tests mentioned above (MSAT, EDTA-MSAT, CF, ELISA) the serology lab has also the expertise in performing the rose-bengal plate test (RBT).

The MSAT is performed at 3 dilutions (1:10, 1:20, 1:40). The selection of non-negatives for further testing depends on the identified level of risk. The threshold of positivity is $\geq 1/20$ (25 IU/ml) in low risk biennial test herds and $\geq 4/10$ (20 IU/ml) annual test herds' zones. In at risk field samples, the threshold has been established at 1/10 (12.5 IU/ml). If there are titres present in low risk herds, which are \geq the cut-off in a low risk test, then "at risk criteria" are applied to the whole herd test. Finally, for

OTMS samples, the cut-off is 4/10 (20 IU/ml). It should be noticed that the official European (Directive 64/432/EC) cut-off point for SAT is 30 IU/ml (2/20).

If the results are non-negative at screening, a titration is carried out to end-point by MSAT, EDTA-MSAT and CFT.

All tests are carried out according to the requirements laid out in the technical annex C of Directive 64/432 (except for the cut-off points). The milk ELISA kit used is imported from France (where it is certified as fulfilling the EC requirements). The lab is participating regularly in UK and Republic of Ireland ring trials with results within acceptable ranges and participated in 2000 in the EU *Brucella* NRL ring trial. For quality assurance purpose, at least 5% of samples chosen at random are re-tested. The test plate reading skills are regularly cross-checked and all technicians are trained and their skills are assessed prior to carrying out tests. Finally, there is a validation of all results prior to reporting and a monitoring for errors, with action taken and monitored.

The *Brucella* bacteriology laboratory - S.W.J. McDowell and C. Watson

This laboratory is a biosafety level 3 laboratory equipped with bio-safety cabinets type I. The cultures have been limited to the least dangerous samples, as are the lymph nodes (retro-pharyngeal, parotid, sub-mandibular and supra-mammary) and vaginal swabs. The culture of fetuses and abortion material is not currently performed. Two plates of Farrell's medium are inoculated per organ and plates are incubated for 6 days. Identification of *Brucella* is performed according to the standards (except the H₂S production and the lysis by phages). If necessary, a confirmation is asked to VLA. Most strains isolated in NI are *B. abortus* biovar 1. A retrospective study performed in the VSD was presented and the high percentages of confirmation of outbreaks and high rates of isolation underline the importance of the information provided by the bacteriological analysis.

1.8. Introduction to field structure and overview – Michael Geddis

It was presented an overview on the roles and responsibilities, human resources and internal and external interfaces for communication regarding the situation of the Southern Region.

1.9. Brucellosis in Armagh Division (Paddy Kelly), in Enniskillen (David Brown) and in Newry (Rolly Harwood and Kieran Devlin)

The situation of these most heavily infected divisions was presented. In these divisions the vast majority of bovine herds was beef cattle. Due to the type of husbandry there is a high level of contact between farms, as well as a high level of animal movements. These factors contribute to the spreading of the disease to the neighbouring herds and make difficult the implementation of the eradication program.

In these divisions the disease prevalence was very low till 1997. Since then there is an increasing trend of the disease.

The disease is not widespread within the divisions, but there are small pockets of disease all over the divisions. .

The factors that make the management of outbreaks difficult and have been presented by the field veterinarians are:

- Small farms
- High level of animal movements
- Failure to report abortions
- Failure to segregate animals at risk
- Illegal activities
- Common boundaries which are not disease proof
- Suspicions of insufficient sensitivity of SAT

Although the difficulties in the implementation of some measures foreseen in the program especially those that intend to limit the spread of disease in neighbouring herds the management of outbreaks is very effective.

- The infected herds are depopulated without delay
- Serological survey in neighbouring herds and herds associated with the outbreak
- Risk assessment in the region and modification of the testing frequency according to the risk.

All actions taken are coordinated with the aid of very efficient software (APHIS) which is connected with GIS system.

Due to effective management of the outbreaks it is evident that during the year 2002 the spread of brucellosis is limited and soon the disease will be under control.

Part 2. Conclusions and recommendations

Overall conclusions

- Although the NI sanitary authorities have taken the implementation of technical measures for Brucellosis control, the drop in incidence of herd outbreaks has not been significant in the last years.
- In 2001 most of the veterinary resources were allocated to the fight against the FMD epidemic and this impaired the progress on the eradication campaign for Bovine Brucellosis.
- DARD decided to review their policy and a set of recommendations were presented and discussed (Annex 3). This critical approach is considered very positive and the evaluation of the changes and implementation of the strategies should be periodically made.
- There is a need for increased epidemiological studies to better define the risk factors for disease spread and the increasing trend. This, in conjunction with the improvement of APHIS should facilitate the prioritisation of the activities for disease control.
- It is necessary to increase DARD powers to enforce housing and movement restrictions as well as depopulation, re-stocking and slurry treatment in infected farms.

2.1. Epidemiological Investigation

Conclusions

- It is noted the good quality of the epidemiological information regarding the evaluation of the risk factors and the follow up of the implementation of the programme.
- Nevertheless some risk factors have not clearly been identified, so far. In this perspective, hypothesis like the role of foxes and/or crows are often mentioned as potential sources of contamination but they are not further documented and have never been validated.

- The forward and back tracing are carried out with variable outputs: the backward tracing does not allow (in almost all cases) further detection of infected herds; the reasons for this seem unfortunately not further analysed.

Recommendation

- Continue with the analysis of the data generated but attempting to focus on prioritising the most relevant factors for Brucellosis control and eradication in NI.

2.2. APHIS improvement

Conclusion

- The extensive use of retrospective data kept especially on APHIS and also in other databases in DARD has been done with benefit by the official services to monitor the progress, define policies and evaluate strategies used for the Brucellosis eradication scheme.

Recommendation

- The continuous adaptation and development of the system to the changes in the eradication schemes and to make it more comprehensive and useful to all the interested parts are necessary.

2.3. Prioritisation

Conclusion

- The increasing incidence of Brucellosis in NI and the consequent human and animal health risks imposed to the Official Authorities a review of the policy and several changes in the measures applied. Co-ordination among the different entities involved in the eradication programme should be improved and the delay in supplying data can difficult the monitoring of the programme and the decision taking.

Recommendation

- The Official services should establish a prioritisation for the implementation of the different measures and accompanying it by a constant evaluation of the benefits and allocation of resources.
- The collaboration between the laboratory and the DVO should be strengthened.

2.4. Housing and Movement restrictions

Conclusions

- Intra-herd movement of animals, sometimes into distant parcels, is not controlled and it can be assumed that, due to the fragmentation of the parcels of the farms, this happens frequently and this is considered as one of the most important factors in the spread of disease
- Presently DARD does not have powers to impose restrictions to these movements

Recommendations

- As it is considered impractical to impose pre-movement testing for intra-herd movement, segregating at risk bovines by in-housing and keeping them in isolated pastures should be implemented based on the epidemiological evaluation of the risk area.
- The inner ring herds should only be allowed to move animals under a license and to an established premise within this area.
- DARD should have powers to implement restrictions of cattle to specific farm locations and to areas within the premises.

2.5. Depopulation, Re-stocking and slurry treatment

Conclusion

- The current programme does not define a period for the re-stocking of a breakdown herd after depopulation and the slurry treatment is also not compulsory.

Recommendations

- Establish a 6 months depopulation period for the breakdown herds and to adjust this period according to the results of the epidemiological investigations.
- DARD should also enforce the use of the Thick Lime milk treatment of slurry.

2.6. Testing regime

Conclusion

- On a routine basis the 3 DVOs with Brucellosis infected herds (out of the inner and outer rings of the outbreaks) are tested annually and in the 7 other free DVOs the testing regime applied is biennial serological testing. To comply with the EU

Directive 64/432/EC for intra-community animal movement it would be necessary to implement annual testing of all the herds.

Recommendations

- In the 7 DVOs biennial serological testing would be complemented with bulk milk testing of dairy herds and the non-dairy herds would be tested annually.
- A cost-benefit evaluation of the implementation of a 6-month testing regime should be done for the 3 infected DVOs.

2.7. Laboratory results

Conclusion

- Serological testing uses as a screening test the MSAT and as the confirmatory test the CFT. The results are presented as positive dilutions.

Recommendation

- According to Directive 64/432/EC, results of the SAT should be expressed in units and the CFT results in EEC Units.

2.8. Pre-movement testing

Conclusion

- Animal movement is very frequent (e.g. in 1999, the mean number of lifetime movements between herds was 5) and is currently not subjected to pre-movement testing. The authorization is issued on the basis of the herd history regarding Brucellosis using the information system APHIS. This is not according to the Directive 64/432.

Recommendation

- A 30 days pre-movement serological testing for inter-herd movement would comply with Directive 64/432/EC.

2.9. Testing of Animals in contact

Conclusion

- The small ruminants and possibly the role of dogs have not been evaluated in the brucellosis breakdowns in mixed herds. Non-confirmed suspicions also exist about the role of crows and foxes in the spread of the disease.

Recommendation

- Sero-surveillance of all the contact animals of sensitive species should be done in the herds of the risk area and sanitary measures envisaged.

2.10. Serological methods

Conclusion

- SAT is currently the screening test and the confirmation of results is made by CFT. The organisation, the accommodation and the equipment of the lab are fully adapted to the present number of samples tested and the number and kind of tests performed.
- Despite the fact that the cut-off points used for SAT in NI are lower than that recommended in Directive 64/432/EC, questions remain as to the overall herd sensitivity of the SAT. With this system field preliminary studies, not confirmed in later analysis of 15,000 samples that failed to detect any significant differences between the SAT and CFT, showed that more than 30% of the infected herds were not detected during a first test.

Recommendations

- The NI authorities are greatly encouraged to assess other tests (as RBT for instance) comparatively to the MSAT currently in use in order to check whether MSAT (SAT + EDTA) could not be at least partially responsible of this low sensitivity of the surveillance system.
- Parallel screening of cattle in the higher risk areas, would be done using what would be considered as the most adequate test and CFT could be used for confirmation of outbreaks.
- Brucellin Skin Testing could be used for evaluation of false positive reactors.
- The laboratories adaptation should be considered if the number and especially the kind of tests carried out are due to change.

2.11. Isolation of Brucella

Conclusion

- Due to Laboratory constraints isolation of *Brucella* is only performed on lymph nodes and vaginal swabs. The culture of fetuses, abortion material and milk, is not currently performed. The standard incubation period is 6 days.

Recommendations

- The culturing of other more heavily infected samples (especially the stomach content or lung of the aborted foetus) could help in a more rapid confirmation of outbreaks.
- Extension of the lab and improvement of the equipment.
- Incubation for 10 days at least (21 days is the optimal according to one expert) or using enrichment procedures (broth subcultures).

2.12. Valuation

Conclusion

- The present valuation system for compensation, particularly the subjective nature of valuation, the appointment of independent valuers and the absence of a ceiling price for some cattle, could be speculative in some cases and consequently financially attractive for fraud, and this increases the sanitary risk as to prosecute with success is very difficult.

Recommendations

- Define compensation values, as not to motivate the producers to have infected herds and this should be done according to the market prices.

2.13. Awareness

Conclusion

- The official veterinary services and not the bovine producers associations have promoted the awareness campaigns for bovine producers on Brucellosis control and eradication.

Recommendation

- A greater involvement of the technical and producers associations is necessary into the awareness campaigns for producers that should be made initially for the 3 Districts with infected herds and then extended to the whole Province.

Annex 1 – List of participants

Task Force Brucellosis Sub-group visit to Northern Ireland. 14th and 15th May 2002

Member State / Position	Name
UK-NI / Vet Services	O. Denny
UK-NI / Vet Services / Member subgroup	D. Abernethy
UK-NI / Vet Services	R. Watt
UK-NI / Vet Services	D. Irwin
UK-NI / Vet Services	R. O’Flaherty
UK-NI / Vet Services	M. Steel
UK-NI / Vet Services	S. McCullough
UK-NI / Vet Services	M. Geddis
UK-NI / Vet Services	J. Gillespie
UK-NI / Vet Services	R. Bain
UK-NI / Vet Services	A. McVeigh
UK-NI / Vet Services	P. Kelly
UK-NI / Vet Services	D. Brown
UK-NI / Vet Services	R. Harwood
UK-NI / Vet Services	K. Devlin
UK-NI / Vet Services	C. McGarryle
BE / Expert	J. Godfroid
FR / Subgroup Member	B. Garin-Bastuji
PT / Subgroup Chairman	F. Boinas
IE / Subgroup Member	G. O’Hagan
IT / Subgroup Member	A. Petrini
IT / Expert	F. de Massis
EL / Subgroup Member	A. Minas
PT / Subgroup Member	C. Agrela. Pinheiro
ES / Subgroup Member	M. Duran Ferrer
COM	E Stifter
COM	F. Reviriego

Annex 2 – Agenda

Task Force Brucellosis Sub-group visit to Northern Ireland. 14th and 15th May 2002

Time	Item	Presenters
Day 1		
9.30	Introduction and overview (with coffee)	O. Denny
10.00	Epidemiology	D. Abernethy
11.00	NI brucellosis scheme	R. Watt
12.00	Bulk milk testing. Abattoir surveillance. Training. Publicity.	D. Irwin
12.40	LUNCH in canteen	
1.40	Movement Control / APHIS, including data-projector demonstration	R. O'Flaherty
2.30	Enforcement	M. Steel
3.00	Coffee and questions	All speakers
3.40	Laboratory procedures	S. McCullough
4.10	Visit to testing lab	VSD staff
4.30	End of Day 1	
8.00	Visit Dinner	
Day 2		
9.30	Introduction to Field structure and overview	M. Geddis
9.40	Operation of a Field DVO and intro to Br procedures	J. Gillespie
10.10	Organisation of testing	R. Bain
10.25	Office admin procedures for Br	A. McVeigh
10.40	Coffee	
11.00	Br in Armagh DVO and breakdown reports	P. Kelly
11.20	Br in Enniskillen DVO and breakdown management	D. Brown
11.40	Br in Newry DVO and Br database	R. Harwood and K. Devlin
12.00	General discussion	All speakers
12.30	LUNCH	
2.00	Visit to local farm	
3.30	EU Task Force Br subgroup meeting (with coffee)	
4.30	Final opportunity for questions	All speakers incl. Any HQ staff.
5.00	End of Day 2	

Annex 3

Measures to be implemented in the NI eradication programme according to the Policy Review – DARD April, 2002

- EC Directive 64/432 compliance testing
- Use of market prices for valuation and introduction of compensation ceilings
- Introduce a targeted programme of testing under 30 months cattle at abattoirs
- EC Directive 64/432 compliant pre-movement testing
- Enhance / implement powers to enforce housing and movement restriction
- Enhance / implement powers relating to depopulation, restocking and slurry treatment
- Evaluation / implementation of biometric identification of cattle
- Augmentation of DARD's Animal Public Health Information System (APHIS)
- Implementation of "parallel testing".