



# exercise SILVER BIRCH

Exercise Silver Birch 2010

National Foot and Mouth Disease Exercise  
Evaluation and Lessons Identified Report

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## **Security Classification**

This evaluation report is unclassified. It contains information relating to the tier two Foot and Mouth exercise, Exercise Silver Birch. Details published in this report and the subject matter itself is of a non sensitive nature and can be shared with members of the public.

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## 1. Executive Summary

- 1 This report contains the details of Exercise Silver Birch, the United Kingdom's national Foot and Mouth Disease exercise, organised by Animal Health's Contingency Planning Division on behalf of the Department for Environment, Food and Rural Affairs, the Scottish Government and the Welsh Assembly Government. The Department for Agriculture and Rural Development, Northern Ireland were also players in the exercise although the simulated outbreak was restricted to the GB mainland. The report evaluates the exercise and records the lessons identified for further action.
- 2 The primary purpose of Exercise Silver Birch was to test Government's contingency plans for an outbreak of Foot and Mouth Disease and how Defra and the UK Administrations plan and interact in the event of a medium to large scale outbreak that involves all four Administrations. It also involved the operational response of Animal Health and operational partners and there was engagement with stakeholder groups.
- 3 A field element, tabletop exercise, and multiple strategic response meetings (focussing on particular stages of disease progression between day -1 and day 6) were held prior to a two-day live national exercise. The live exercise rehearsed the Government's response at days 7 and 8 of the simulated outbreak.
- 4 Over 600 participants took part in Exercise Silver birch, included Ministers, Defra Management Board, CVOs and senior officials from the UK Administrations, the Animal Health Agency and key operational partners.
- 5 Exercise Silver Birch enabled the UK administrations to effectively test their contingency plans in the event of an outbreak of Foot and Mouth Disease and identify valuable lessons. Feedback from participants and observers of the exercise has been very encouraging. There is a consensus that it was a well-planned exercise and very successful in meeting its objectives.
- 6 Although the outcome of the exercise has been positive, Government still needs to ensure that the lessons identified in this report are learned and preparedness is further improved. These lessons include improving internal communications processes, IT connectivity and data sharing, working with stakeholders to refine vaccination policies and formalising the plans for resourcing a large scale outbreak.
- 7 As a dynamic framework the contingency plans and control strategies for each administration will continue to be refined as knowledge of the disease increases, technology improves and the corresponding contingency structures evolve. Lessons and issues identified by Exercise Silver Birch will help Government prepare for future outbreaks of exotic disease, and contribute to the ongoing process of testing our emergency preparedness and capability; ensuring robust and effective plans are in place.

## 2. Background and Introduction

- 8 Exercise Silver Birch was the United Kingdom's national Foot and Mouth Disease (FMD) exercise involving the Department for Rural Development (Defra), the Scottish Government (SG), the Welsh Assembly Government (WAG), Department for Agriculture and Rural Affairs Northern Ireland (DARD NI), Animal Health and their Operational Partners and Stakeholders.
- 9 The EU FMD Directive 2003/85/EC requires Member States to undertake real-time exercises to assess their Foot and Mouth Disease contingency plans twice within a five year period or "two times during the five years period after an outbreak of a major epizootic disease has been effectively controlled and eradicated". However regardless of the EU requirement, the UK is committed to regularly rehearsing and testing its response to major outbreaks of exotic disease through such national exercises.
- 10 The exercise included a field operational element, a table top exercise, simulated strategic meetings and exercise briefings. It concluded with a two day live exercise involving participants from across the United Kingdom.
- 11 The dates of each element of the exercise were as follows:
  - The field operational elements took place on the 27<sup>th</sup> May 2010.
  - The table top exercise took place on the 10<sup>th</sup> June 2010 in London.
  - Facilitated Expert Groups, stakeholder groups and Animal Disease Policy Groups took place between June and October 2010.
  - The Exercise briefings took place between the 5<sup>th</sup> and 29<sup>th</sup> October 2010 in all exercise locations.
  - The live exercise took place on the 9<sup>th</sup> & 10<sup>th</sup> November 2010.
  - Exercise debriefing sessions took place locally and nationally from 17<sup>th</sup> November to 17<sup>th</sup> December 2010.
- 12 The exercise scenario was designed to be challenging and aimed to test the Governments' plans for a medium to large scale FMD outbreak (with the two day live exercise being played out at day 7 and 8 of the simulated outbreak). The scenario was based on disease spread through a market in the North East of England to Wales and Scotland and spread within England to the North West and South East of the country. There was no spread to Northern Ireland.
- 13 A National Disease Control Centre (NDCC) and multiple Local Disease Control Centres (LDCCs) were setup and Animal Health's new operational structure was tested.
- 14 The three command and control levels, as outlined in Defra's Contingency Plan for Exotic Diseases Animals (strategic, tactical and operational) were all exercised, as were the response plans of the other UK Administrations. Scottish Government and Welsh

Assembly Government officials were fully involved in the exercise from Edinburgh and Cardiff. Northern Ireland Officials participated in the NDCC.

- 15 At the tactical level the Joint Co-ordination Centre (JCC) and key policy elements of the NDCC were established in Defra's Nobel House in London, WAG's Emergency Coordination Centre Wales (ECC(W)) in Cardiff and the Scottish Government response structure was in Saughton House, Edinburgh.
- 16 LDCCs were established in four Animal Health Regional/ Divisional Offices. These were at, Yorkshire & Humberside, Inverurie, South Wales and the South East which also exercised one Forward Operational Base (FOB) in Itchen Abbas.
- 17 The exercise provided the opportunity for key operational partners and stakeholders at strategic, tactical and operational levels to test their emergency response plans. They were kept informed throughout the project and their expertise and advice sought on the scenario as it developed. Industry stakeholders attended the exercise both as observers and participants.
- 18 The exercise programme created considerable interest from stakeholders and organisations responsible for the control of disease outbreaks in other countries and a number of representatives attended the live exercise. The European Commission (EC) and The World Organisation for Animal Health (OIE) were both formally notified of the exercise, with the EU sending a delegation to observe.

### **3. Evaluation and Lessons Identified Process**

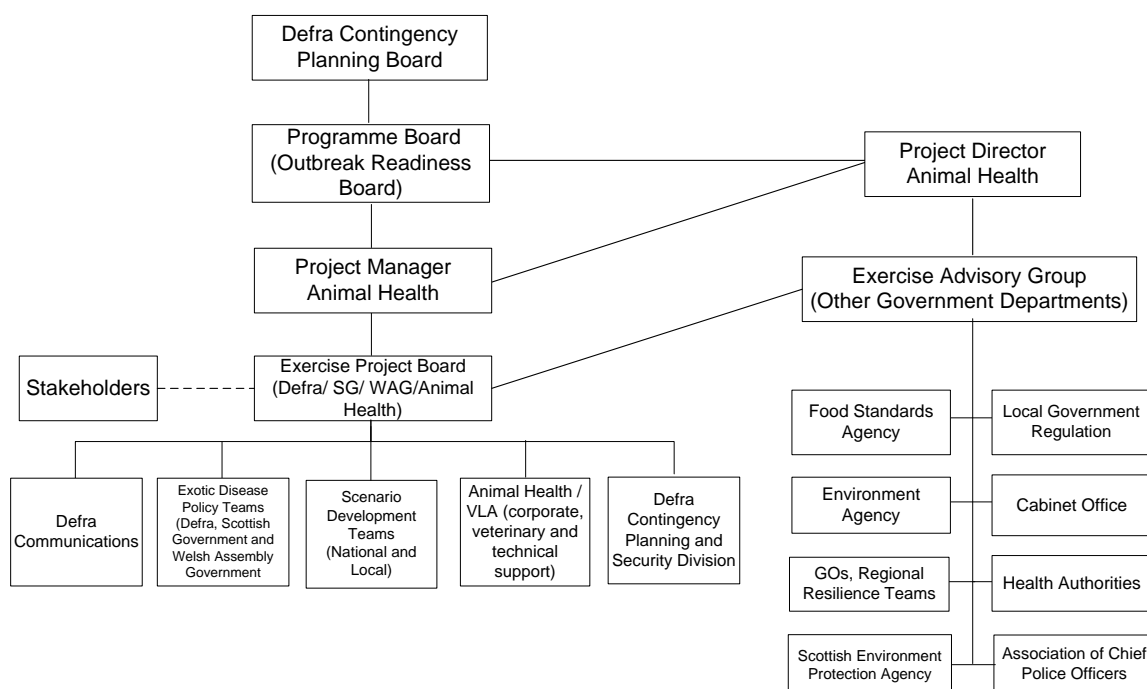
- 19 This evaluation and lessons identified report follows Animal Health's exercise evaluation process and is produced by collating inputs from the following:
  - Post Exercise Wash-Up at NDCC and LDCC – a structured post exercise wash-up was held at the end of the exercise in London, Edinburgh and Cardiff and all LDCC locations, to gauge and record initial reactions to the exercise;
  - Individual Evaluation – individual electronic evaluation forms were sent to all participants and the feedback collated. The analysis included statistical information against each exercise objective;
  - Local/Regional Cold Wash-Up – a structured debriefing session took place at locations where LDCCs were established. From this a Local/Regional evaluation report was produced and submitted for discussion at the National Cold Wash-up;
  - National Cold Wash-Up – a structured debriefing session took place with key NDCC participants, LDCC representatives, Operational Partners and Stakeholders.
  - Input was also received from the Cabinet Office and Exercise Consultants, who completed their own independent evaluation.

#### 4. Exercise Governance

- 20 The exercise was the product of a project spanning a period of 11 months in planning and delivery. The project was managed by Animal Health’s Contingency Planning Division, who established a project board comprising of representatives from Defra, SG, WAG and Animal Health (Corporate and Regional/Local structures). The project board managed and controlled the planning of the exercise and met on a monthly basis.
- 21 An Executive Advisory Group comprising representatives from Operational Partners was setup. These included the Environment Agency, Association of Chief Police Officers, Government Office (Regional Resilience Teams), Cabinet Office, Health Authorities and the Devolved Administrations. The Group was chaired by Animal Health and met on a regular basis providing guidance to the Project Director and Project Board on the role and involvement of the key exercise partners from other government departments.
- 22 For the final six months of the project running up to the live exercise, the project team was supported by specialist exercise consultants Steelhenge Consulting Limited. Their expertise was used to plan and deliver the live exercise. It involved critiquing the exercise scenario, producing exercise materials and providing exercise media enhancements.

Fig 1 – Governance Map

#### Exercise Silver Birch – Governance Map



Note: The Project Board will be comprised of representatives from within the Defra, Welsh Assembly Government, Scottish Government and Animal Health and will directly control the project, whilst the Advisory Group will give guidance to the Project Director and Project Board on the role and involvement of the key exercise partners from other government departments.

#### 5. Exercise Aim

- 23 **Exercise Silver Birch Aim:** *‘To review and check the Governments’ contingency plans and policies for the control and eradication of an outbreak of foot and mouth disease and*



*thereby establish the current state of readiness and resilience for such an outbreak whilst identifying improvements in the plans, instructions, structures and procedures employed in managing an outbreak’.*

## **6. Exercise Objectives**

24 The objectives of Exercise Silver Birch were:

- To exercise the integration and interaction between the strategic and tactical levels within and between Defra, the Devolved Administration’s and Animal Health, to demonstrate the joined up response to an outbreak of FMD;
- To exercise the multi agency response to an outbreak of FMD in conjunction with our operational partners (including Local Resilience Forums (LRFs) and Strategic Co-ordination Groups (SCGs), and stakeholders both nationally and locally;
- To exercise Animal Health’s new operational model in reaction to a confirmed outbreak of FMD regionally/divisionally and to demonstrate increased readiness and resilience within the structures.

## **7. Exercise Strategic Themes**

25 The project team used a mixture of traditional Master Events List (MEL) directed activity (Injects) supported by thematic developmental play. A series of key strategic themes were identified for development and testing in order to meet the exercise objectives. These themes also provided the basis for the scenario detail and the supporting injects to create the conditions for the thematic play to develop. The themes used in the tabletop, strategic meetings and throughout the live play exercise were as follows:

- Carcase disposal
- Deployment of vaccination
- Animals at risk (Breeds at Risk)
- Laboratory capacity, mobile testing equipment (including on farm diagnostic testing)
- Export and movement of livestock and their products
- Movement standstills
- Animal welfare
- Financial considerations
- Meat and food chain issues
- Animal Health resourcing issues
- Rural community issues
- Communications and policy between UK Administrations

26 Although these were the key themes, other elements were also tested and rehearsed throughout the exercise.

## 8. Exercise Approach and Methodology

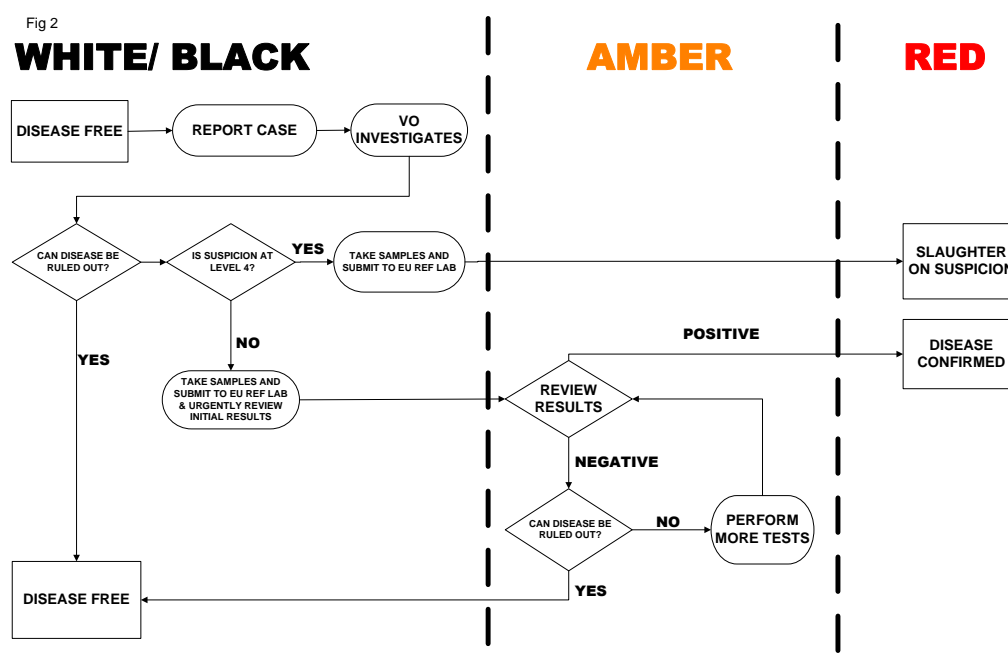
27 The exercise was conducted in a series of phases to ensure that planning and development maximised the input from participants while aiming to minimise the effect on business areas. They involved a field element, tabletop exercise, facilitated exercise meetings, briefing workshops and a two day live exercise.

## 9. Field Element

28 The exercise field element took place on a premises in North Yorkshire on the 27<sup>th</sup> May 2010. This premises was used as the first Infected Premises (IP) in the simulated scenario. The field element exercised Animal Health's response to a report case of notifiable disease. It also tested on farm plans and procedures for dealing with a confirmed case of Foot and Mouth Disease including, on farm bio-security, culling, disposal, cleansing and disinfection and health and safety guidance. Although a review of on farm culling took place there was no actual culling of animal during any part of the exercise. 30 field staff from Animal Health's Yorkshire and Humber Regional Office took part in the exercise and outputs from the field element were used in future phases.

## 10. Table Top Exercise

29 A tabletop exercise took place on 10<sup>th</sup> June 2010. This tabletop included specific strategic meetings as outlined in the Defra Contingency Plan, with all required participants exercising their roles. The tabletop took the participants through several stages of the disease alert system (see fig 2 below).



30 The tabletop exercise started at day -1 (report case highly suspicious) and ended on day 0 (disease confirmed). The meetings that took place included:

#### **Day -1 of Scenario**

- **Case Conference:** to discuss emerging issues and on farm developments of the suspect Foot and Mouth Report Case.

#### **Day 0 of Scenario**

- **Amber Teleconference:** to appraise participants of the situation, samples results (if available), risk assessments and to plan future actions and communications accordingly.
- **National Expert Group (NEG):** to provide tactical advice and recommendations on the disease and its control to the Animal Disease Policy Group.
- **England Core Stakeholder Group:** to provide a forum for informing stakeholders and for discussing and influencing policy developments and to help steer the strategic direction.
- **Animal Disease Policy Group (ADPG):** to provide disease control policy advice and strategy recommendations to Ministers and the Civil Contingencies Committee and challenge strategic assumptions.

31 The tabletop commenced with a case conference. The report case scenario presented to the conference was the veterinary investigation from the field exercise. This was then followed by the meetings as above, as outlined in the NDCC battle rhythm. Scenario information at each meeting was delivered by exercise control staff or controlled players, who facilitated the running of the meeting in real time and to the agenda as defined in the contingency plan. Information, actions and decisions from these meeting were then taken forward by the scenario development team and informed further scenario development.

## **11. Facilitated Exercise Meetings**

32 After the tabletop a number of additional strategic meetings were scheduled before the live exercise. National Expert Groups, Stakeholder Groups, Disease Emergency Response Committees, and the Animal Disease Policy Groups simulated meetings that would have taken place between days 1 and 6. This retained an element of realism for key participants and enabled policy decisions to be discussed and agreed in line with the scenario timeframe which further informed the scenario development.

## 12. Exercise Briefing Workshops

33 Once the scenario was finalised, a series of briefing sessions were arranged. These sessions took place at all exercise locations throughout October 2010. Their aim was to ensure that all participants were aware of the scenario from day -1 to day 6. This was supported by exercise documentation which included;

- **Exercise Administration Document:** containing general guidance relating to the exercise key timings and procedures;
- **Player Scenario Booklet:** outlining the full exercise scenario from day -1 to day 6;
- **Communications Guide:** containing names of all participants and contacts details;
- **Glossary;** glossary of Terms;
- **Exercise intranet page:** displaying scenario information, maps and documented minutes and papers;
- **Exercise Media Site:** instructions for how to access the exercise media site.

## 13. Live Exercise

34 The Live Exercise took place on the 9<sup>th</sup> and 10<sup>th</sup> November 2010 and exercised days 7 & 8 of the simulated outbreak. In the live element of the exercise, players had no visibility of the developing scenario and had to respond as they received or gathered information in real time. The live play was driven from a Master Events List by exercise control (EXCON) and controlled players, who ensured that relevant information was input at the appropriate time and location to maintain exercise pace and feeling of reality for the participants.

35 The information and data used during the exercise was generated by using animal holding datasets for England, Scotland and Wales. The livestock market and animal movement data was obtained from a real market that took place during 2009. This data was used to undertake epidemiological research and modelling before and during the exercise.

## 14. Participating Organisations and Locations

36 Over 600 participants took part in Exercise Silver Birch and included Ministers, CVOs and senior officials from the four UK Administrations, the Defra Management Board, Animal Health and Operational Partners. The exercise involved participants located throughout the country in the following locations:

- London Nobel House – NDCC (the NDCC included participants from DARD Northern Ireland)
- Edinburgh – Scottish Government
- Cardiff – Welsh Assembly Government

- Worcester – Animal Health Corporate Office
- Carmarthen – South Wales LDCC
- Leeds – Yorkshire and Humber LDCC
- Reigate – South East LDCC
- Itchen Abbas – South East FOB
- Inverurie LDCC

37 Other participants included NDCC cells, LDCC cells, crisis teams and response cells/policy teams from Defra, Scottish Government, Welsh Assembly Government, The Department for Agriculture and Rural Development Northern Ireland, Animal Health, Operational Partners and key industry stakeholders (such as the National Farmers Union (NFU)) and other bodies with interests in the management of a Foot and Mouth Disease outbreak.

38 A full list of participating organisations is at Appendix B.

## **15. Exercise Scenario**

39 The exercise scenario was split into two parts. The pre-live scenario (day -1 to day 6) was developed by the project team and released to participants before the live exercise. The second part comprised the live exercise scenario which was outlined in the Master Events List, of which participants had no prior knowledge and had to take appropriate actions to the information received during the live exercise.

### **15.1 Pre-Live Exercise Scenario days -1 to 6**

40 The exercise scenario started with a report case in North Yorkshire on the 31<sup>st</sup> October 2010. Following a veterinary inquiry, Foot and Mouth Disease could not be ruled out and samples were submitted. A Temporary Control Zone (TCZ) of 10km around the premises was declared. The following day (Day 0) disease was confirmed by the Chief Veterinary Officer (CVO UK) when initial laboratory results were received and a Protection Zone (PZ) and Surveillance Zone (SZ) were declared. National movement bans were also declared in England, Scotland and Wales.

41 Subsequently, an additional Infected Premises (IP) was confirmed within the surrounding area. Disease then emerged on the Cheshire Plains on a dairy unit and local spread led to a total of five IPs in four days. As the scenario developed, there were a number of report cases around the country and further IPs were confirmed in by the CVO (Wales) in Mid Wales and the CVO (UK) in the South East. There was also a suspect case reported close to Inverurie in Scotland.

### **15.2 Live Exercise Scenario – Day 7**

42 Live play began on 9<sup>th</sup> November. On the receipt of sample results (early morning) for the Inverurie suspect case, the CVO (Scotland) confirmed disease, the first case in Scotland. Disease was now confirmed in several regions of England, Wales and Scotland. Later that day a report case on the Isle of Wight was investigated, which led to the CVO

(UK) authorising Slaughter on Suspicion (SOS). There were several other report cases negated on clinical grounds. The National Expert Group (NEG) and Animal Disease Policy Group (ADPG) discussed and prepared options for:

- vaccination
- movements to slaughter
- meat and meat products
- the use of on farm diagnostic testing.

### **15.3 Live Exercise Scenario – Day 8**

43 Further cases of Foot and Mouth Disease were reported throughout the UK. The CVO (UK) authorised SOS on 2 premises in Yorkshire and Humberside close to the first two Infected Premises. Both cases showing classical signs of FMD. There were further highly suspicious reports of disease investigated in the North West. The NEG and ADPG discussed and agreed disease control options and priorities.

44 The full scenario outline (day by day) can be found in Appendix C

## **16. Lessons Identified**

45 In line with the current Animal Health lessons identified process, the lessons identified were grouped together to aid analysis and identification of owners for each lesson. They cover the lessons identified from the field, tabletop and live exercises. A summary of these lessons identified is included in the recommendations log at Appendix D.

### **16.1 Veterinary Inquiry, Field Activity, Culling & Disposal and Contract Management**

#### **16.1.1 Veterinary Inquiry and Field Operations**

46 Animal Health exercised the implementation of plans and procedures during the field element including; completing a veterinary inquiry, debriefing field staff, obtaining tracing information, completing the field operations log and completing risk assessments for implementing culling and disposal arrangements. Cleansing and disinfection and on farm bio-security arrangements were also exercised.

47 The importance of regular training in on-farm activities was recognised by the 30 veterinary and technical staff that took part. They were also able to provide feedback relating to on farm guidance and the effectiveness of current operational instructions. Although no issues were identified, it is recommended that all staff continue to undergo regular practical on-farm training and exercising.

<p><b>Lesson Identified 1</b> – The exercise demonstrated the benefit of regular on farm training. Animal Health to continue to ensure that veterinary and technical staff</p>
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undergo regular training and assessment in field based activities for report case procedures and case officer activities.

### 16.1.2 Culling and Disposal

48 The scenario involved an IP in Scotland early on the first day of the live exercise and preparations were made for culling and disposal. A disposal location in Dumfries and Galloway was identified as being the nearest appropriate disposal site. Scottish stakeholders expressed concern over the distance the carcasses would have to be transported and were concerned about the risk of disease spread from transporting carcasses. Feedback from both the Scottish Government and Stakeholders indicated that the current strategy for transportation and disposal of carcasses needs to be better communicated to stakeholders. Future communication should explain the disposal hierarchy and the steps taken to mitigate the risks.

**Lesson Identified 2** – UK Administrations to ensure that industry stakeholders fully understand the disposal hierarchy and carcass disposal strategy and ensure that stakeholders and operational partners are aware of plans and procedures that are implemented in order to minimise the risks involved in transporting carcasses for disposal.

49 The NDCC Field Operations cell and the Scottish Government encountered an issue with procedures for authorising on-farm culling. The relevant paperwork was not seen by the CVO (Scotland) for several hours and although this was eventually resolved, it highlights the importance of clear procedures and the use of shared mailboxes. The culling authorisation process will be reviewed and updated accordingly. No issues were encountered with the process in England or Wales.

**Lesson Identified 3** – Animal Health and Scottish Government to review the culling authorisation process to ensure a robust process is in place.

### 16.1.3 Contract Management

50 Defra's Procurement and Commercial Function (PCF) worked well alongside the NDCC Field Operations team. Feedback received demonstrated they were effective in providing support and guidance to NDCC and LDCC field teams on contract management and procurement activities. During Silver Birch PCF did not have the opportunity to embed a team within an LDCC as outlined in their operational instructions. Therefore, to ensure all stages of preparedness are tested, at least one of the exercises in the 2011/12 local and regional exercise programme should involve PCF.

**Lesson Identified 4** – The Defra Procurement Commercial Function liaison role to be incorporated into NDCC setup plans. An LDCC exercise should also be undertaken to test the end to end procurement process.

- 51 With the scale of the simulated outbreak, Defra's vaccination contractor Genus raised concerns that there might be competition for veterinary resource if they were asked to mobilise more than one team. During a medium to large scale outbreak where vaccination is to be undertaken, there will be significant veterinary resource required by both Animal Health and Genus which could lead to competition for that resource.

**Lesson Identified 5** – In a large scale outbreak it is recognised that there will be competition for veterinary resource. Animal Health to work with the FMD vaccination contractor to consider the impacts on how the provision of veterinary resource should be managed and prioritised without impacting on either's ability to respond.

## 16.2 LDCC Operations

### 16.2.1 Yorkshire and Humber LDCC

- 52 Yorkshire and Humber feedback highlighted issues with connectivity for Operational Partners and Stakeholders. Wi-Fi access would have proved useful and would have enabled operational partners to access their own systems whilst working from the LDCC. This feedback is captured in **Lesson Identified 28**.
- 53 Some staff commented that the Animal Health Operational Manual was difficult to navigate and would have benefited from a prioritisation of tasks list, to immediately direct users to specific areas of importance. This feedback is captured in **Lesson Identified 7**.
- 54 The LDCC senior management team also found the battle rhythm demanding and limited their ability to brief and engage directly with team leaders. There is evidence that staff within the region found the new outbreak management structures useful in directing the disease response.
- 55 The IT system used to manage a disease outbreak is the Disease Control System (DCS), it is a legacy system and is only used during outbreaks. As a result staff are often not familiar with its use and although Silver Birch demonstrated that local teams were able to quickly learn and use the DCS effectively, data entry was inconsistent and prone to data entry errors. More guidance on how data should be captured, what forms should be added, what visits should be incorporated and how comments should be captured since data inputting was not consistent.

**Lesson Identified 6** – Although the DCS is due to be decommissioned in 12-18 months time, Animal Health should consider the development of Standard Operating Procedures for the Disease Control system, to limit the number of data entry errors and thus assisting reporting procedures.

- 56 In conclusion, the exercise provided a challenging and interesting scenario with full engagement of the regional staff, operational partners and stakeholders. There were



plenty of learning opportunities and outcomes identified. The pace of the exercise provided a positive learning environment allowing staff to understand their roles without becoming overloaded or unnecessarily stressed.

### 16.2.2 LDCC Operations – Inverurie

57 Several LDCC response cells in Inverurie found it difficult to find Foot and Mouth Disease essential documentation on the Operations Manual and felt the chapter structures could be improved. They also felt that standard operating spreadsheets (for allocations and surveillance) could be uploaded to the chapter to increase consistency across LDCCs. Operational partners' IT connectivity was again highlighted as an issue. As well as within England, a new LDCC management structures was also being exercised in Scotland. Individual LDCC feedback shows that participants at Inverurie found the new structures effective at adding resilience to the LDCC.

**Lesson Identified 7** – Local offices to review the training needs of local teams so they are more familiar with the Operations Manual. Animal Health should also consider whether standard spreadsheets for allocations and surveillance should be incorporated into operational instructions.

58 Inverurie feedback indicated that they found the exercise instructive, progressive and challenging and provided field teams with an understanding of the requirements of their roles. Operating under realistic constraints (accommodation, limited availability of staff and IT), the local teams were able to effectively manage the situation.

### 16.2.3 South East LDCC & FOB

59 The South East LDCC had similar issues to the other LDCCs. These included lack of IT connectivity for operational partners and too many scheduled meetings. The South East Region was the only LDCC operating a Forward Operations Base (FOB), which was based in Itchen Abbas. Further work is needed to ensure that pre-identified FOB locations are suitably equipped and resourced to operate successfully as a FOB. The South East found IT issues, telecommunications and accommodation challenging at the Itchen Abbas site. General feedback on the management response in the region was positive, although participants felt that a separate management structure was required at the FOB, in particular creating a FOB manager role, who would directly manage the teams based in the FOB.

**Lesson Identified 8** – Animal Health to review the logistics for setting up a FOB and investigate whether a separate FOB manager role is required.

60 The South East reported that the exercise was informative and a useful insight for staff on the role they would be required to complete in the event of an outbreak. Testing the FOB principles at Itchen Abbas ensured that new roles were exercised and constructive

feedback escalated. The exercise also gave them the opportunity to work collaboratively with their Operational Partners and Stakeholders.

#### 16.2.4 South Wales LDCC

- 61 The LDCC South Wales found the communications procedures between LDCC and Welsh Assembly Government Emergency Coordination Centre (ECC(W)) difficult on occasions. Ad hoc communications requests from the ECC(W) led to increased demand on the LDCC ROD and reduced the time available to direct operations. These ad hoc requests may in part have been caused by key operational issues at the LDCC not being escalated to the ECC(W) in a timely manner when they had potential for significant impact on the strategic response. **Lesson Identified 12** outlines this issue.
- 62 IT issues arose in the LDCC in Carmarthen with a number of Operational Partners and Stakeholders being unable to access their systems through wireless broadband. In some instances this reduced their ability to respond at a regional level. A national review of operational partners IT connectivity needs to be undertaken and partners advised of what connectivity will be available in the future.
- 63 The local Business Objects management reporting suite which enables staff to report on the operational response was not used to full effect. Additional training and detailed instructions would assist the effective use of Business Objects reports since they are not routinely used within the Region. Animal Health need to review the Business Objects outbreak management reports, including training and guidance to enable them to be used effectively during an outbreak. **Lessons Identified 6 and 30** capture this issue.
- 64 In conclusion, the exercise enabled the South Wales Region to exercise current contingency plans within a controlled environment and allowed the region to identify local and national considerations which will be used to inform future training. The scenario gave staff with various skills and experiences an opportunity to work within an outbreak environment and assess the office's suitability as an LDCC and tested the new management structure. There was also a general feeling that the new Welsh Management structure increased resilience within the region. The exercise fulfilled its Regional objectives and provided a realistic environment.

### 16.3 NDCC / LDCC Communications

#### 16.3.1 Defra

- 65 Communication channels between Defra policy teams based in the Nobel House NDCC, The Joint Co-Ordination Centre (JCC) and the England LDCCs worked effectively. One particular role that Defra exercised was the Regional Policy Liaison Function (RPLF) [formerly known as a Regional Policy Adviser]. The role was underutilised during the exercise and LDCCs were largely unaware of its presence, as a result very few requests

were dealt with, which could not have been taken forward through the outbreak communication channels. The policy officials undertaking the RPLF role did however find that attending the LDCC daily telecoms was useful from a Defra policy perspective.

**Lesson Identified 9** – Defra Policy and Animal Health to review the Regional Policy Liaison Function.

### 16.3.2 Scottish Government

66 The Scottish Government found communications difficult between Saughton House, the NDCC, JCC and the LDCC. Even though the SG followed instructions and did not directly contact the LDCC, on occasions they were unable to retrieve or obtain all the required information from the Inverurie LDCC, specifically, updates on operational progress at the Infected Premises. They recommend that a shortened more streamlined communication channel should be created for obtaining key management information from LDCCs. **Lesson Identified 12** refers in detail.

67 There is general feedback from the SG and other members of the NDCC who state they need more clarity on the NDCC Liaison Officer role. The role was underutilised by the SG, Animal Health and others within the NDCC. There is also similar feedback from the WAG relating to their NDCC Liaison Officer. This role needs to be reviewed and specific responsibilities outlined in the relevant contingency plans, there is also a need to ensure the NDCC are aware of its role and responsibility.

**Lesson Identified 10** – The SG and WAG to review and clarify the NDCC Liaison Officers role and remit. Relevant contingency plans should be updated and staff who undertake NDCC roles need to be made aware of the role and its responsibilities.

### 16.3.3 Welsh Assembly Government

68 An Air Exclusion Zone (AEZ) was put in place over the Welsh Infected Premises while on farm operations were taking place. The ECC(W) were not informed of this request and were therefore unaware that an AEZ had been implemented. There is a need to ensure that a clear procedure is established that ensures communications are sent to all interested parties.

**Lesson Identified 11** – Animal Health to ensure that processes are amended to ensure that all interested parties are advised that an AEZ has been requested and once the AEZ is in place.

### 16.3.4 Animal Health

69 The Communications tested a new model based on a remote support function from Animal Health's Corporate Communications Centre in Worcester. The model worked well when supporting both the NDCC and LDCCs. This scalable remote working model

should now be implemented in all outbreaks as it can support a number of LDCCs simultaneously.

**Lesson Identified 12** – Animal Health Corporate Communications to further refine a scalable remote working model, which supports all the LDCCs when dealing with multiple LDCCs.

70 The exercise tested Animal Health’s new procedures for engaging with the Administrations in Scotland and Wales at a tactical level. On day two of the exercise it was apparent that not all the structures for engagement with Scotland and Wales were effectively setup and communicated to policy officials in WAG and SG. This led to communications all being directed to the Animal Health representatives working at Saughton House and the ECC(W) rather than to the JCC teams in London, as a result they became overloaded on occasions.

**Lesson Identified 13** – The Scottish and Welsh Assembly Governments and Animal Health, to review the communication interfaces between the NDCC, JCC and LDCCs and address any issues.

#### 16.4 Communications – Internal

71 Policy teams at both the ECC(W) in Cardiff and the Disease Strategy Unit in Saughton House in Edinburgh felt they did not receive sufficient regular updates from team leaders on how the simulated outbreak was progressing. On occasion this led to staff being unable to answer questions or direct queries. There is a need for team leaders in all areas of the outbreak response structures to ensure that all staff are regularly briefed. Policy teams within Defra felt that they were updated on a regular basis by their team leaders and received enough information to complete their roles. They were also updated regularly on the emerging situation as it progressed throughout the exercise.

#### 16.5 Communications - Media

72 To provide an element of realism, a team of external journalists was used during the live exercise. They conducted simulated interviews with the CVOs (UK, Scotland & Wales), Deputy CVO UK and RODs. They also ensured that the Press Offices in Defra, Welsh Assembly and Scottish Government were exercised by providing media injects. In Defra the press office saw this exercise an excellent opportunity to train new press officers.

73 While the media team spoke to all the communications teams playing in the exercise, their primary focus was with Defra Communications. Defra Communications had increased activity due to a number of calls made to the offices in Wales, Scotland and Animal Health being diverted to them, this tested their resilience significantly.

74 Throughout the exercise the Press Offices remained reactive, responding to the journalists questioning and the stories that were placed on the exercise's simulated news site. A more structured proactive stance would have reduced the number of queries, for example issuing a daily information note about how the UK Administrations were managing the situation with some limited operational statistics. On one occasion, the Scottish Press Office proactively engaged with the journalists, which resulted in a positive story being written. It also needs to be accepted that press office staff were being trained during this exercise and there is limited ability to test the full communication response in a two day exercise.

**Lesson Identified 14** – Defra, the Welsh Assembly Government and Scottish Government to review the media communications strategy and outline a proactive response model including the use of daily information notes.

75 The Central Office of Information (COI) were unable to play at the LDCCs in England. Defra and Animal Health will need to review the media relations role within an LDCC and on the infected premises, to determine if the COI press officer is the most appropriate means of providing support for the ROD. In Scotland and Wales this function is provided by out-stationed members of their Press Office.

**Lesson Identified 15** – Communications teams in Defra and Animal Health to review the media relations role for supporting the England RODs.

76 The Scottish Government Communications Officer embedded in the LDCC found that there was a general misunderstanding of the role by LDCC staff. On several occasions the officer was asked to complete tasks or resolve issues that were outside the remit of the role and related to stakeholder engagement rather than media relations. There is a need for Animal Health staff in Scotland to understand the role and remit of the Scottish Government Communications Officer and how this role relates to the communication functions within the LDCC.

**Lesson Identified 16** – The role of the Scottish Government Communications Officer in the LDCC needs to be effectively communicated to staff within Animal Health, specifically management teams within Scotland.

## 16.6 Epidemiology, Sampling and Laboratory Issues

77 The new National Emergency Epidemiology Group (NEEG) management model was tested for the first time in a significant sized outbreak. Although some additional clarity on roles and responsibilities were highlighted, the structure worked well and is now more robust and sustainable. The Devolved Administrations commented that a standard template for epidemiological information received from the NEEG would have assisted in analysing information quickly, especially any which may have been updated or amended.

**Lesson Identified 17** – NEEG Executive to investigate the creation of templates for presenting information to specific policy and scientific customers.

78 Roles and responsibilities of the NEEG in relation to how they integrate and liaise with the National Experts Group (NEG), need to be clearer. These roles should be clarified within plans and illustrate where they integrate.

**Lesson Identified 18** – UK Administrations to review NEEG and NEG roles and responsibilities and confirm the process for policy engagement.

79 An important part of the exercise was obtaining accurate animal movement information quickly and in a format that could be rapidly interrogated. Exercise planners used information from a real market when the scenario was created. They initially used information from the Animal Movement Licensing System (AMLS) and latterly from the actual market records. The exercise demonstrated that there are some inaccuracies in the AMLS data, which resulted in the physical market records having to be manually interrogated and cross referenced with the AMLS2 database. This would have led to a delay in obtaining a complete record of animal movements for an outbreak where a market is involved. This was a specific cause for concern for the Devolved Administrations during the live exercise as they were unable to obtain a complete picture of potential movements into their administrations.

**Lesson Identified 19** - Defra, Scottish Government and Welsh Assembly Government together with key stakeholders and Animal Health to review whether there are better and quicker ways of identifying, verifying and tracing animal movements during an outbreak, particularly where a market is involved.

80 Before and during the exercise the 'Disease Emergency Response Committee' (DERC) met on more than one occasion to discuss the scenario and how lab capacity could be increased to meet the requirements as outlined in the scenario. During the exercise it became apparent that due to the extensive geographic distribution of the simulated outbreak, there would be a shortage of vacutainer tubes to complete all the required surveillance sampling during the latter stages of the simulated outbreak, if current procurement methods are implemented. A plan needs to be prepared to ensure Animal Health and VLA stocks can quickly be increased to meet the demands of the sampling regime.

**Lesson Identified 20** – VLA and Animal Health to review the procurement contract for vacutainer tubes, the numbers stored and available for immediate use and ensure a robust plan is in place for emergency replacements.

## 16.7 Plans, Policy and Procedure

### 16.7.1 Vaccination

- 81 One of the strategic policy themes was vaccination. The scenario enabled wide ranging and detailed discussions on the use of vaccination at the NEEG, Core Group and ADPG. The scenario also enabled Defra's Exodis™ Model to be run by the VLA and used to generate outputs and predictions which helped modelling of the outbreak and allowed some cost benefit analysis work to be done on different control strategies (e.g. vaccinating in some areas rather than the whole country).
- 82 This enabled policy teams in the GB administrations to examine and test their respective policies on vaccination. By the end of the exercise, the ADPG was requesting detailed information on the role of the market in the spread of the disease, more information on the modelling from the NEG and the costs benefits of vaccinating or not. The deployment of vaccination teams by the contractor and the speed with which they can vaccinate within a defined geographical area (Vaccination Zone) was also questioned.
- 83 The attitude of retailers and food processors to the marketing of meat from vaccinated animals and effect of vaccination on the meat and milk industries needs to be examined in more detail with the livestock, dairy and meat industries.

**Lesson Identified 21** – Defra, Scottish Government and Welsh Assembly Government Animal Health, VLA, stakeholder groups and the vaccination contractor to review and refine current policies on use of vaccination, to consider the practicalities of its operational implementation and to fully understand the implications of vaccination. This work to confirm the position of food retailers and processors on the marketing of meat and livestock products from vaccinated animals and the effects vaccination would have on UK livestock, meat and milk industries (including cost benefit analysis).

### 16.7.2 Breeds at Risk

- 84 Government also used the exercise to review and develop its policy relating to sparing categories of animals from the culling policy including breeds at risk. The exercise scenario introduce some injects and cases that would have allowed the policy to be tested in relation to the category 'breeds at risk' and risk assessments to be produced. On- farm testing of the policy with completion of the risk assessments was not however carried out as part of the exercise. In the event, although there was some discussion of the requirements for potentially sparing breeds at risk from culling, this was not fully tested during the exercise and a further exercise should now be planned to test the rest of the policy, completion of the risk assessments on farm and submission to the relevant policy section for a decision.

**Lesson Identified 22** – The risk assessment developed for potentially sparing animals from the culling policy including ‘breeds at risk’ should now be tested on farm. Once exercised, the policies on sparing animals for culling should be reviewed and refined by the GB administrations and embedded in Animal Health’s Operations Manual.

### 16.7.3 Deployment of Penside Tests

85 Another policy theme was to test policies on the deployment of penside tests during an outbreak. For the purpose of Exercise Silver Birch this was limited to those penside tests which were commercially available at the time of the exercise (Lateral Flow Devices). The scenario enabled wide ranging and detailed discussions at the NEG and ADPG allowing Defra, SG and WAG to examine and test their respective policies.

86 It is well established that the Lateral Flow Devices can only be relied upon in certain circumstances, for example, when there is clear and unequivocal evidence of lesions in the mouth or feet. Bearing this in mind there is a serious limitation to using the devices when confronted with less obvious clinical signs of disease such that a negative result using the Lateral Flow Device cannot be considered definitive and samples would still have to be sent to the national reference laboratory for testing. It was also considered that knowing it was positive did not significantly help the CVOs with their decision making process nor would it always significantly speed up on farm activities. The limitations on the use of Lateral Flow Devices meant that a decision was made during the exercise that based on the specific scenario being played, penside testing would not be used although it was recognised that under certain circumstances, e.g. in the outlying parts of Scotland and the Scottish islands there may well be more scope for using them when samples cannot be transported quickly to the national reference laboratory.

**Lesson Identified 23** – GB Administrations should develop their strategy for the on-farm use of portable diagnostic equipment.

### 16.7.4 Movement Restrictions

87 Livestock movement standstill policies and their likely impact on the livestock and food processing industry were tested, in particular the process for the partial lifting of the national movement ban. The scenario enabled wide ranging and detailed discussions at Stakeholder Group meetings, NEG and ADPG and by the second day of the exercise there was increasing pressure on officials to allow some limited movements of animals to abattoirs, even though it was apparent that the disease was still spreading and the full disease picture remained unclear. During the exercise, the Department for Agriculture and Rural Affairs Northern Ireland (DARD NI) worked on a case for regionalisation which would have been taken forward by ADPG prior to discussion with the European Commission.



**Lesson Identified 24** – UK Administrations should continue to develop policy and strategies and trigger points for the lifting of the national movement ban and potential for regionalisation.

#### 16.7.5 Meat and Meat Products

88 GB Administrations meat and meat products policies were tested. During the exercise, current legislation was used to issue authorisations to abattoirs, cutting plants and other premises in the Protection, Surveillance & Restricted Zones which handled fresh meat. Whilst no practical or operational issues emerged during the exercise, it was reported that the system was bureaucratic and complex.

**Lesson Identified 25** – GB Administrations should review with delivery agents the (designations) of premises in the Protection, Surveillance and Restricted Zones that handle fresh meat with a view to simplification.

#### 16.7.6 Outbreak Structures and Daily Battle Rhythm

89 A recurring theme in the feedback is the need for shorter and more structured internal meetings. The daily communications meeting with the CVO (UK) for example could be reviewed. The meeting as currently structured combines a daily sitrep and discussion between the comms teams in the four administrations, with a session with the CVO (UK) discussing the lines to take, key messages and the media strategy. If the meeting were structured in a different way the CVO (UK) need only attend part of the meeting, thereby freeing up some valuable time in the daily battle rhythm.

**Lesson Identified 26** - The agenda and format of the daily CVO (UK) communications meeting should be reviewed by Defra Strategic Communications and updated as appropriate.

90 CVOs, senior policy leads and JCC and LDCC management found the NDCC and LDCC battle rhythm relentless. Back to back meetings throughout the exercise limited the contact with teams and deputies. On occasions this caused the strategic and operational tempo to slow significantly and delay decisions being taken. It was also observed that a number of decisions were taken by committee (in the ADPG or NEG) rather than by managers and officials who should have been empowered to make decisions. There is a need to review the separate battle rhythms within the individual UK Administrations plans. These plans need to be integrated into a combined UK battle rhythm that is resilient and enables team leaders to direct teams and make effective, well informed decisions. Senior officials and managers also need to make better use of deputies who can be suitably empowered to represent them at meetings. Even though participants found the battle rhythm relentless, many agreed that format for managing outbreak is successful.

**Lesson Identified 27** – UK Administrations to complete an internal review of the National Disease Control Centre (NDCC) battle rhythm and each Administrations' own battle rhythm, procedures and schedule of meetings.

### 16.7.7 Licensing

91 A licensing matrix based on that developed during 2007, was produced in advance of the exercise to enable NDCC and LDCC Licensing cells to be exercised. As well as providing a baseline for permitted movements, it served as a library for the licensing teams and Animal Health Veterinary Operations team showing movement possibilities. The overall opinion was that this matrix should be reviewed, finalised and built into operational template for potential future outbreaks.

**Lesson Identified 28** – UK Administrations to work with Animal Health to review and further develop the Foot and Mouth Disease licensing matrix and to extend to other diseases.

### 16.7.8 Animal Health Priorities

92 During the exercise, requests for Animal Health to continue TB testing in Wales were received. In the event of a medium to large scale outbreak, Animal Health's limited veterinary and technical resources allocated to business as usual (BAU) work would need to be prioritised and it may only be possible to undertake critical activities such as portal inspection work, investigations into reports of suspect exotic animal disease, TSE investigations and critical animal welfare report cases. There was also a pressure on Animal Health to ensure that each Administration LDCCs were fully resourced and non LDCC sites were able to deal with report cases and market tracings. Defra, WAG and SG need to work with Animal Health and produce a framework and governance process for defining and agreeing business as usual priorities during an outbreak and for identifying options for alternative resourcing of BAU activities. They also need to consider how Animal Health prioritise and allocate resource between Administrations.

**Lesson identified 29** – GB Administrations to agree a protocol for prioritising and agreeing Animal Health business as usual and outbreak activities and resources, (particularly in respect of such high-profile and sensitive issues as TB testing), during a significant outbreak of exotic animal disease.

## 16.8 Information Technology

93 A major IT issue that affected the effectiveness of the response of Operational Partners, Stakeholders and Devolved Administrations at the NDCC and LDCCs was the lack of IT connectivity. Partner organisations need to be able to communicate with the NDCC/LDCC and be able to access their own organisations systems and databases. At the NDCC, LDCC and FOB locations there was limited or no broadband / Wi-Fi

connectivity, which affected the communications between the agencies and organisations involved.

**Lesson Identified 30** – Animal Health to investigate the IT connectivity requirements of Operational Partners, Stakeholders and Devolved Administrations, to ensure they are either provided with access to broadband or have access to their required systems when located in a NDCC, LDCC or FOB locations.

## 16.9 Data Management

94 SG and WAG found it difficult to obtain data quickly, in particular tracings movement data and epidemiological information from the NDCC. There did not seem to be current data sharing arrangements for some data sets in place between all the UK administrations outside of outbreaks, this particularly affected Scotland. There is a need to ensure that all UK Administrations are able to share data and information which will enable real time data sharing in response to an outbreak. A review of current data sharing agreements and processes should take place and relevant agreements put in place.

**Lesson Identified 31** – Data sharing agreements between the UK Administrations should be reviewed to ensure that they enhance the disease response and assist in real time data sharing.

95 Exercise Silver Birch was the first time Animal Health's Business Objects based, management information reporting system was used. This reporting system uses data from the outbreak data recording system, the Disease Control System (DCS) and produces a range of pre-determined operational reports on demand. Whilst the exercise demonstrated that the core function of the reports worked successfully, they were not made widely available to key officials and the exercise also highlighted that further enhancements are required, including clarification on the process for initiating the reports and the need for improved user training.

**Lesson Identified 32** – Animal Health to enhance the set of standard operating procedures (SOPS) for the use of the Management Information reporting suite. These enhanced SOPS should be rolled out with local user training delivered by Readiness and Resilience Managers (RRM).

96 The JCC overnight report provides a definitive daily update on the outbreak including disease control objectives, outbreak statistics, disease response developments and international and trade issues. The report is also used by the Cabinet Office as the basis for updating the commonly recognised information picture (CRIP) every evening. Timings for briefing Ministers have changed since the report was originally developed and a review of the report needs to be completed to ensure it is effective in delivering an accurate and up to date picture.

**Lesson Identified 33** – Animal Health Contingency Planning Division in conjunction with the Cabinet Office to review the format and timing of the JCC overnight report to ensure it meets current requirements.

97 During an outbreak affecting all parts of the UK there is a need for an accurate and timely picture of the number and locations of report cases. Current systems provide information about individual cases or can be obtained by running a query from the MI systems but for many individuals they rely on birdtable situation updates 3 times a day and the JCC overnight report. A live real-time IT system or intranet site would enable NDCC, LDCC and the Devolved Administrations to be more aware of the current national picture.

**Lesson Identified 34** – Animal Health IMT to investigate options for an online or IT system to enable real-time reporting and situation updates for report cases received and their current status.

## 16.10 Human Resources

98 In all but the smallest of outbreaks, Animal Health would need to escalate their response rapidly. This would require additional personnel (veterinary, technical and administrative) to be deployed to the outbreak location very quickly. A range of measures are already in place for bringing in additional resources including contracts for temporary staff, contingency Official Veterinarian appointments and the International Animal Health Emergency Reserve but arrangements for bringing in private vets have not yet been finalised. Animal Health needs to ensure that their plans for obtaining resource from outside of Government are reviewed and formalised so they are robust, scalable and aligned with operating structures.

**Lesson Identified 35** - Animal Health should create a framework of measures for obtaining additional Veterinary, Technical and Administrative personnel aligned with its operating structures. This framework should also contain escalation points and clear options for how and where to obtain additional resource.

99 Silver Birch highlighted that HR systems for capturing information about resource requests and deployed staff at LDCCs and the NDCC required enhancement, particularly in the event of a large outbreak. Current systems do not directly interface with regional and divisional processes and there is scope for systems to be unified. One shared system or database should be created to ensure resource deployment can be captured from multiple locations.

**Lesson Identified 36** – Animal Health HR to investigate the requirements for resource management during an outbreak and devise and implement a system for accurately capturing resource details at the NDCC HR unit and any associated LDCCs.

100 The Devolved Administrations and several operational partners noted that Animal Health had not approached them for additional administrative or technical resource (in addition to staff already supporting at LDCCs) during the exercise, though this could have been due to exercise artifice. Animal Health need to ensure the Devolved Administrations and Operational Partners are considered when identifying sources of additional resource. **Lesson Identified 40** refers.

### 16.11 Operational Partners

101 IT connectivity was a major concern for operational partners and resulted in difficulties in communicating with operational partners at NDCC and LDCC levels as they were unable to access their own systems. Some operational partners in the NDCC also felt underutilised on certain issues, such as licensing and animal movements as they were not involved in any specific discussions with policy colleagues although this was not a problem for those operational partners embedded with the Field Operations team. This issue is outlined in **Lesson Identified 28**.

102 In the ECC(W) in Cardiff operational partners were located close to policy teams, which meant that participants were able to resolve issues quickly and effectively. Partners were also aware of their roles and how they integrated into the response model. In Edinburgh, Operational Partners were fully engaged with policy and received the right amount of information required to ensure they could complete their role successfully.

103 Several operational partners flagged that impending changes in the delivery landscape resulting from the comprehensive spending review and the review of arms length bodies would impact on their future ability to respond in the future. UK Administrations need to liaise with operational partners on these changes and ensure they are aware of any potential impact on the operational response or the role required of them during an outbreak.

**Lesson Identified 37** – UK Administrations and Animal Health to review the impact on outbreak response capability of the comprehensive spending review and other changes affecting Local Authorities and Operational Partners.

104 In summary most respondents from across the multi organisation response at NDCC, JCC and LDCC levels felt the exercise increased their knowledge and understanding of their own roles and how they integrated, and felt that it was a good opportunity to practice them in the event of an outbreak.

### 16.12 Stakeholders

105 During the tabletop element of the exercise a member of the England Core Group raised concerns about imposing a 10km Temporary Control Zone (TCZ) on suspicion of

Foot and Mouth Disease. The concern being that livestock keepers might attempt to pre-empt a national movement ban by actually increasing livestock movements outside of the TCZ. There was a suggestion that where clinical signs were indicative of FMD, it might be more appropriate to impose a national movement ban at the point that a decision was made to take samples, rather than to impose a TCZ.

**Lesson Identified 38** - Defra in conjunction with the Devolved Administrations and Stakeholders to discuss the implications of changing the current legislation and disease control policies which require a TCZ to be put in place and to consider alternative strategies and policies such as the application of a national movement ban in the affected country or across the whole of GB on suspicion of vesicular disease in FMD susceptible species.

106 Stakeholders located within the NDCC highlighted IT connectivity as a major concern and impacted on communicating and obtaining or cascading information that could assist the outbreak response. The Core Group requested clarification of their roles and responsibilities, communications channels and how they should obtain information or data. It was not always clear to stakeholders where information was coming from, how to obtain it, or how to feed into it decision making and this on occasion this led to uncertainty on how decisions were formulated.

**Lesson Identified 39** – Contingency Plans to be reviewed and updated to outline how Defra works with the England FMD core group of stakeholders. Defra policy team should also discuss roles, responsibilities with the core group of stakeholders.

107 It was noted by stakeholders that whilst communications between the UK Administrations worked well there were issues around the impact of decisions being taken in one Administration which affected industry in another. The responses of Defra, Scotland, Wales and Northern Ireland need to be better coordinated.

108 The stakeholder groups across the Administrations agreed with Animal Health that further work was required to ensure that adequate resource, particularly veterinary resource, is obtained in response to a large scale outbreak of Foot and Mouth Disease. They urged Government to work in partnership with the veterinary profession to ensure a joined up approach to planning.

**Lesson Identified 40** – Animal Health to ensure relevant operational partners and stakeholders (specifically the vet profession) are involved in outbreak resource planning.

109 Recording and obtaining animal movement data was a concern for stakeholders during the exercise. With a market implicated, the ability to trace animals quickly was paramount. The stakeholder group raised issues with the Animal Movements Licensing System (AMLS2) as some inaccurate data and delayed data entry was reported. This is captured in **Lesson Identified 17**.

110 On vaccination, stakeholders stressed the need for UK Administrations to engage in an education campaign with industry and the general public to explain the issues of a FMD vaccination policy to support a stamping out policy. This campaign needs to address issues around meat from vaccinated animals, highlighting that much of the meat currently handled by the food industry has come from animals that have been vaccinated against different diseases, and that therefore Foot and Mouth Disease vaccinated animal should be no different.

**Lesson Identified 41** - UK Administrations to consider with stakeholders the best way to inform and educate the industry and general public on the issues surrounding Foot and Mouth vaccination, taking into account the impact of the spending review and the current restrictions on government marketing and advertising.

111 Some stakeholders felt that the potential for vaccinating rare breeds and protecting live genetic banks should be further investigated. They considered that it may still be desirable to vaccinate such animals for their long term protection even where there is little overall effect on wider spread of the infection due to local stock densities or disease prevalence.

112 Exercise Silver Birch included a review of the use of on farm diagnostic tests. Members of the stakeholder groups felt that the decision to use these devices should be taken in advance, rather than during an outbreak. Training in operating these devices would need to be rolled out and a decision tree produced to govern the use of such devices. This is covered in **lesson Identified 22**.

113 Stakeholder engagement is essential to an effective response to an outbreak. In particular, WAG identified an issue with stakeholder engagement in the ECC(W). To enable better engagement and a secure environment for WAG policy officials to operate, plans need to be reviewed and where appropriate amended, to ensure that stakeholders are not co-located with officials within the ECC(W). Plans should be reviewed to ensure that stakeholders have the policy liaison contact and suitable facilities that are significantly detached from the ECC(W) environment but still able to contribute effectively to the response.

**Lesson identified 42** – The Welsh Assembly Government to review the physical location of stakeholders within the response structures to ensure they can maximise their the ECC(W) response and provide a secure working environment for WAG officials.

## 17 Exercise Planning and Development

114 Project management principles were followed when planning and delivering Exercise Silver Birch. An Exercise Project Board oversaw the management and delivery of the entire project. The Board comprised of representatives from within Defra, Welsh Assembly Government, Scottish Government and Animal Health. They met on a

monthly basis, discussing and resolving issues, reviewing risks and costs associated with the project. This worked well and applying project management principles to exercise planning should be promoted as best practice.

115 An Advisory Group was established to ensure that the scope of the exercise was understood by our operational partners. This group also met on a monthly basis where they were updated with project, guidance and scenario development. Although exercise planners found these meetings useful, some operational partners found them too frequent. It was also suggested that a representative from Natural England, Rural Payments Agency and the Core Group should sit on this group when planning a national scale exercise.

**Lesson Identified 43** – For exercise planning purposes the scope of the Advisory Group should be reviewed once the exercise aim and objectives have been agreed to ensure the group consists of the relevant organisations to effectively support the exercise.

116 The scenario development team comprised of a national team and four local teams. These developed the scenario at a local and national level. These teams worked well together, sharing injects and issues which resulted in a challenging but realistic scenario of a medium to large scale outbreak spread across England, Scotland and Wales. To produce such a demanding scenario the planners had to create a set of assumptions in which to base decisions and steer development. Due to the need to create a back story of 6 days, some exercise participants thought that some assumptions were unrealistic, (especially an assumption that all livestock keepers were adhering to the law) although appreciated the difficulty in creating a complex six day scenario.

117 During the live exercise, a Master Events List was used to create a storyboard of issues, queries and actions (called injects) to drive forward the scenario. Production of the MEL was completed a month before the exercise, which gave exercise control (EXCON) and evaluators the opportunity to review before the live exercise. Exercise controllers had to ensure that each inject was delivered at a specific time though on a few occasions injects were sent to the wrong contact or mailbox. Another issue was that EXCON sent several important emails such as NDI1s and updates on them to non-outbreak email addresses that were not being monitored rather than the addresses provided in the Exercise Directory. This was partly due to incorrect mailboxes being submitted to the communications directory. In future exercises, more detailed instructions and exercise distributions lists should be produced that better reflect business as usual outbreak processes.

118 The evaluation process involved several forms of feedback. It included a debriefing session at all locations after the exercise had concluded. This has the advantage of capturing lessons as they are fresh in the participants' minds. For the first time in an exotic animal disease national exercise, electronic feedback forms were sent out and the returns collated. This was a quick and constructive way to gather feedback and



statistical information about the exercise, although in a small number of instances responses were unable to be retrieved from WAG and SG due to incompatible IT. Electronic feedback forms should be used to capture lessons at both national and local exercises. This was followed by a structured debriefing session held a month after the exercise, to record issues which come to light on reflection.

**Lesson Identified 44** – The use of electronic feedback forms should be adopted as best practice as a means of quickly and accurately capturing issues and lessons identified as part of any exercise evaluation process.

## 18 Conclusions

119 Exercise Silver Birch enabled the UK administrations to effectively test their contingency plans in the event of an outbreak of Foot and Mouth Disease and identify valuable lessons. Feedback from participants and observers of the exercise has been very encouraging. There is a consensus that it was a well-planned exercise and very successful in meeting its objectives. Encouraging aspects from the exercise include how UK Administrations work together as a joined up function, how the changes in operational structures have provided clearer strategic response at LDCC level and the constructive engagement Government has with Operational Partners and Stakeholders.

120 Although the outcome of the exercise has been positive, the Government still needs to ensure that the lessons identified in this report are learned and that preparedness is further improved. These lessons include improving internal communications processes, IT connectivity and data sharing, working with stakeholders to refine vaccination policies and formalising the plans for resourcing a large scale outbreak.

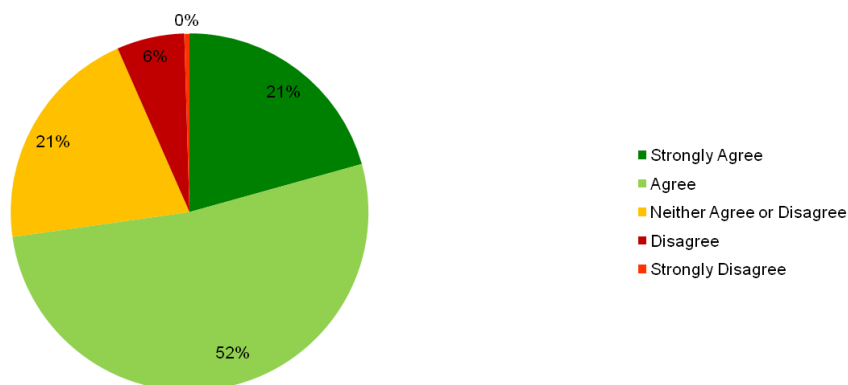
121 As a dynamic framework the contingency plans and control strategies for each administration will continue to be refined as knowledge of the disease increases, technology improves and the corresponding contingency structures evolve. Lessons and issues identified by Exercise Silver Birch will help Government prepare for future outbreaks, and contribute to the ongoing process of testing our emergency preparedness and capability; ensuring robust and effective plans are in place.

122 The overall impression from the exercise observers was that the exercise players understood the complexity of the issues and that they were able to work within the response structure to manage these effectively against a demanding scenario.

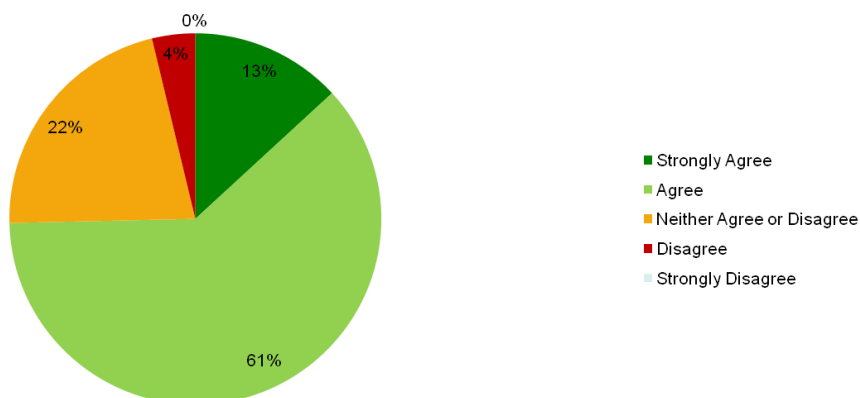
## APPENDIX A: STATISTICAL RETURNS FROM ELECTRONIC FEEDBACK

All participants were asked to complete an electronic feedback form. From this form exercise evaluators were able to collate statistical returns based on questions relating to how effective the exercise was in meeting its objectives. The following responses were received:

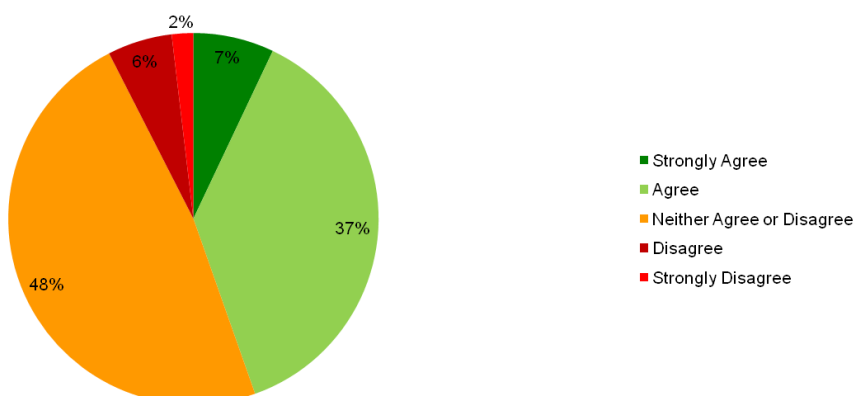
**Question 1 – As a result of the exercise have you an improved understanding of Strategic and Tactical Integration and Interaction, through to Operations?**



**Question 2 - As a result of the exercise have you an improved understanding of the multi agency response, including operational partners and stakeholders?**



**Question 3 – As a result of the exercise have you an improved understanding of Animal Health new operational response, demonstrating increased readiness?**



## APPENDIX B: ORGANISATIONS PARTICIPATING IN THE EXERCISE

This section lists the organisations participating in Exercise Silver Birch.

<p><b>London Nobel House</b></p> <p>Defra Department for Agriculture and Rural Development Northern Ireland Animal Health Plus representatives from Scottish Government and Welsh Assembly Government</p>
<p><b>Saughton House, Edinburgh</b></p> <p>Scottish Government Animal Health</p>
<p><b>Cathays Park, Cardiff</b></p> <p>Welsh Assembly Government Animal Health</p>
<p><b>Animal Health – Regional/Local Offices/HQ:</b></p> <p>Yorkshire and Humberside Inverurie South Wales South East Central Operations Specialist Service Centre Worcester HQ Units (Business Change, IMT, HR, Finance, Communications)</p>
<p><b>Operational Partners – England, Scotland and Wales</b></p> <p>Veterinary Laboratories Agency Institute for Animal Health - Pirbright Environment Agency Food Standards Agency Association of Chief Police Officers Local Government Regulation Welsh Local Government Association Local Authorities Civil Contingencies Secretariat Food Standards Agency Scottish Environment Protection Agency Health Protection Agency Public Health Wales Armed Forces (ECC - Wales)</p>

**Regional Resilience Teams**

South East

Yorkshire & Humber

**Stakeholders (England, Scotland and Wales)**

British Alpaca Society

British Cattle Veterinary Association

British Horse Society

British Llama Society

British Meat Processors Association

British Pig Association

British Pig Executive

British Veterinary Association

Convention of Scottish Local Authorities

Historic Scotland

Institute of Auctioneers and Appraisers

Livestock Auctioneers Association

Loch Lomond and the Trossachs National Park Authority

Meat Promotions Wales

Moredun Research Institute

National Beef Association

National Farmers Union (England, Scotland and Wales)

National Sheep Association

National Sheep Association

Ramblers Scotland

Rare Breeds Survival Trust

Royal Welsh Agricultural Show

RSPCA

Scottish Association of Meat Wholesalers

Scottish Canoe Association

Scottish Countryside Access Network

Scottish Natural Heritage (Deer Commission Scotland)

Scottish Natural Heritage

Scottish Rural Property and Business Association

Sport Scotland

SSPCA

Visit Scotland

Welsh Livestock Auctioneers Association

## **APPENDIX C: EXERCISE SCENARIO**

### **Day Minus Two – 31 October 2010**

1. In the late evening of Sunday 31<sup>st</sup> October 2010, a farmer on a premises in Northallerton, notices that two of his cows are “off colour” displaying lameness and sores. This is initially put down to the fact that these two cows were amongst a group of 30 that escaped into the yard two days previously and had been in contact with chemicals in one of the farm’s sheds. As it was late evening and the light was failing the farmer decided to inspect further in daylight.

### **Day Minus One – 01 November 2010**

2. At early morning feeding the farmer notices that the lameness has progressed to about 10 other animals within the group and that several of the beasts are salivating and appear to be “off colour”. As the animals were reluctant to come to the feed trough, standing back and hanging their heads he called his local veterinary practitioner who was able to inspect the group around late morning/lunch time.
3. The private vet found that the cattle had a fever and found ruptured blisters on the feet of two beasts he examined whilst conducting an inspection he noted that 10 other cattle in the same pen were lame and/or salivating. The local vet stopped the examination and called Animal Health at the Yorkshire and Humber Regional Office and reported suspicion of Foot and Mouth Disease.
4. The Animal Health Veterinary Officer (VO) arrived on the farm to conduct the vet inquiry but this is limited to the affected groups of cattle as the light is failing and it is approaching dusk. The VO concludes that part of investigation makes his the telephone report to VENDU. It is agreed that Foot and Mouth Disease cannot be ruled out and VENDU authorise samples to be taken and to the National Reference Laboratory. The VO also obtained copies of the farmer’s movement records, which enabled initial work on tracings to begin.
5. The samples are taken, packaged and collected from the farm late evening and couriered to the laboratory. Laboratory staff had been alerted and were waiting for the samples to arrive.
6. That evening the Chief Veterinary Officer calls a Case Conference. Taking samples for Foot and Mouth Disease initiates the process of managing the potential outbreak and a Temporary Control Zone (TCZ) of 10km radius is imposed around the premises.

### **Day Zero – 02 November 2010**

7. Overnight the samples from suspect premises arrive at the Pirbright Laboratory and are immediately sent to be processed. Initial results from the tests on samples are received by early morning and are discussed at the Amber Teleconference. Disease is confirmed and the process to ensure that early decisions, actions and licenses are put in place to deal with the confirmed Foot and Mouth Disease outbreak are undertaken immediately.

8. As a consequence of confirmation the Amber Teleconference changed to Red and the National Disease Control Centre (NDCC), Local Disease Control Centre (LDCC) and the Joint Coordination Centre (JCC) are all set up and the Battle Rhythm commences with the initial National Experts Group, England Core Group and Animal Disease Policy Group (ADPG) meetings take place in London.
9. The immediate key issues agreed upon in these meeting were:
  - The setting up of the NDCC and LDCC;
  - The national movement ban imposed;
  - The setting up of Protection and Surveillance Zones;
  - Source and spread tracing from the premises to be initiated.
10. The Yorkshire and Humber Local Disease Control Centre (LDCC) is established. The decision to cull is made and the appropriate authority given, the Protection Zone (PZ) and Surveillance Zone (SZ) and the national movement ban are enforced. Animal Health send a field vet who is trained in field epidemiology to investigate this case in detail with a view to determining how long disease has been there, where it may have come from and where it may have spread to.
11. Once the valuation is completed the culling is able to commence, but is curtailed due to the failing light and continues on the 3<sup>rd</sup> November. The affected animals are culled first followed by the remaining animals on farm. All animals are examined and sampled post mortem for evidence of Foot and Mouth Disease.
12. Animal Health became aware that the farmer of IP1 is frequently helped by a neighbouring farmer who has sheep. Animal Health inspects the neighbour's farm, this becomes a report case and samples are submitted as the VO could not rule out disease.

### **Day One – 03 November 2010**

13. The sample results from the neighbouring farm are positive, confirming IP2 and relevant processes followed. Culling continues and is completed on IP1 and the preliminary cleansing and disinfection is also completed. The final set of epidemiological samples taken from the animals at culling are sent to the National Reference Laboratory for testing.
14. In the North West on the Cheshire plains there is a report case of suspected disease in cattle, samples are taken and submitted for testing. Further report cases are investigated across the country and negated on clinical grounds.

### **Day Two – 04 November 2010**

15. The report case on the Cheshire plains is confirmed as IP3 and there are two further local report cases close to IP3. The CVO authorises Slaughter on Suspicion on these

two premises. Further report cases are investigated across the country and negated on clinical grounds.

### **Day Three – 05 November 2010**

16. In the late afternoon the serology for the epidemiology samples taken at IP1 show that some 28 sheep on the farm are sero-positive, but there are no virology results yet, these results are still pending but prioritised as urgent. Protection zone visits continue around both infected farms.
17. These sheep were bought at an Autumn Breed Sale in Yorkshire on the 13<sup>th</sup> October 2010. Further results from epidemiology sampling are due on 06<sup>th</sup> November. The farm of origin for the sheep to the market was traced and visited (mixed cattle and sheep farm) and no clinical suspicion of disease with last known contact now 23 days ago. All livestock on the farm were sampled with the samples being sent to Pirbright for urgent testing.
18. Defra are informed that the two Slaughter on Suspensions in Cheshire on the 4<sup>th</sup> November are both confirmed positive for Foot and Mouth Disease after sampling and become IP4 and IP5. Culling and preliminary cleansing and disinfection have been completed.
19. One more reported case is received by the Disease Report Team on the 05<sup>th</sup> November close to the Cheshire IPs. The CVO authorised Slaughter on Suspicion and samples are taken. Further report cases are investigated across the country and negated on clinical grounds.

### **Day Four – 06 November 2010**

20. Results for farm of origin (of stock at IP1) are negative and therefore no evidence of Foot and Mouth Disease. This suggested that the sheep became infected after leaving farm and arriving at IP1 and implicates the market or the hauliers involved. The complete final epidemiological results from IP1 are received (both virology and serology) these also confirm that the market could be implicated.
21. The market tracings downloaded from AMLS show that there is a discrepancy between the number of sheep that were taken to the market to be sold and those that were taken from the market. Yorkshire and Humber begin to cross reference AMLS data against the market records to produce a verified list of tracings for farms that supplied and bought sheep at the market along with details of livestock hauliers.
22. Defra are informed that the Slaughter on Suspicion in Cheshire on the 5<sup>th</sup> Nov is confirmed positive for Foot and Mouth Disease after sampling and becomes IP6, culling and preliminary cleansing and disinfection have been completed. One more local report case in Cheshire has been notified to Disease Report Team and investigated, the CVO authorises Slaughter on Suspicion and samples are submitted.
23. There is still no established link between the cases in Yorkshire and Humber and the Cheshire Plains, but this is being investigated as a matter of urgency by the



epidemiologists. Further report cases are investigated across the country and negated on clinical grounds.

### **Day Five – 07 November 2010**

24. Defra are informed that the Slaughter on Suspicion in Cheshire on the 6<sup>th</sup> Nov is confirmed positive for Foot and Mouth Disease after sampling and becomes IP7, culling and preliminary cleansing and disinfection have been completed. Further reported cases in Cheshire are notified and investigated but negated on clinical grounds.
25. In South Wales there is a report case at a mixed livestock holding in Powys. Clinical signs reported by the owner of a vesicular disease in cattle. VO on farm is unable to rule out disease and samples are submitted due to arrive at the National Reference Laboratory late evening. The CVO Wales does not authorise Slaughter on Suspicion as the samples will be given highest priority at the laboratory with results expected early the next day.
26. Animal Health South East takes a report case near Chichester late in the afternoon, with a young bull salivating. The Veterinary Officer is unable to rule out disease samples are submitted to IAH Pirbright for overnight analysis. Further report cases are investigated across the country and negated on clinical grounds.

### **Day Six – 08 November 2010**

27. In Yorkshire and Humber the PZ visits initiated around IP1 and IP2 continue but no further cases are reported. Priority is now being given to tracing animal from the market.
28. In the North West the tracing and PZ visits around the IPs continue.
29. In Wales a clinical assessment of the remainder of stock on the holding is conducted. Samples confirm Foot and Mouth Disease late morning, with authority to cull all susceptible stock on holding received shortly afterwards. All cattle are valued and culled. The South Wales field team were unable to gather the sheep due to hours of daylight and weather conditions. Epidemiology sampling at this farm is to be considered by epidemiologists and experts. An LDCC is setup at Carmarthen Animal Health Regional Office. Initial visits conducted to four contiguous premises. Full assessment of infected premises including H&S completed with all equipment and personnel requirements identified.
30. In the South East the results from the suspect premises in Chichester confirm disease. Contractors arrive late morning and the culling and disposal commences.
31. A farmer on a premises near New Deer, Scotland checks his cattle and suspects that they are showing signs of Foot and Mouth Disease on the 08<sup>th</sup> November 2010. This is reported to Animal Health Office in Inverurie who cannot rule out disease and submit samples for prioritised overnight testing.

32. There is still no established link between the cases in Yorkshire and Humber and the Cheshire plains; this is being investigated as a matter of urgency by the epidemiologists. Further report cases are investigated across the country and negated on clinical grounds.

### **Day Seven - 09 November 2010**

33. On the receipt of sample results (early morning) for the Inverurie suspect case, the CVO Scotland confirmed disease, the first case in Scotland. This led to the outbreak appearing in several regions of England, Wales and now Scotland. Later that day a report case on the Isle of White is investigated, which led to the CVO (UK) authorising Slaughter on Suspicion (SOS). There were several other report cases negated on clinical grounds.

### **Day Eight - 10 November 2010**

34. Further report cases of Foot and Mouth Disease are reported throughout the UK. The CVO UK authorises Slaughter on Suspicion on 2 premises in Yorkshire and Humber close to the first two Infected Premise and both cases are showing classical symptoms for Foot and Mouth Disease. There were also further highly suspicious report cases investigated in the North West.
35. Maps showing the progressions of disease through days 1 – 8 can be found at Appendix D.

### **Day One – Eight – Issues discussed between Stakeholders, National Expert Group and Animal Disease Policy Group**

36. During the pre-live exercise period and also the live exercise both the National Expert Group and Animal Disease Policy Group discussed in detail options for Vaccination, Movement of Livestock to Slaughter, meat and meat products and on farm diagnostic tests.
37. Progress was made on the deployment of vaccination at the National Epidemiology Expert Group, National Expert Group, Stakeholder Groups and the Animal Disease Policy Group. The scenario also enabled the Exodis Model at VLA to be used and for outputs to be generated which helped modelling of the outbreak and allowed some cost benefit analysis work to be done on different control strategies (e.g. target vaccinating rather than the whole country).
38. By the end of the exercise the Animal Disease Policy Group was seeking more detailed information on the role of the market in the spread of the disease, more information on the modelling from the National Expert Group and the costs benefits of vaccinating or not. They highlighted that the deployment of vaccination teams by the contractor and the speed with which they can vaccinate with a defined geographical area (Vaccination Zone) needs further review. The effect of vaccination on the meat and milk industries needs to be examined in more detail with the livestock, dairy and meat industries.

39. The scenario enabled wide ranging and detailed discussions on movements of livestock to slaughter. There was increasing pressure to allow such movements while at the same time, disease was spreading in Cheshire and the full extent of the market in disseminating the disease was not fully understood.

# APPENDIX D: EXERCISE SCENARIO MAPS



CREATOR: NDCC, Defra

SOURCES: Animal health

DATE CREATED: 2010-11-02

PUBLISHER: NDCC, Defra



CREATOR: NDCC, Defra

SOURCES: Animal health

DATE CREATED: 2010-11-03

PUBLISHER: NDCC, Defra



**Exercise Silver Birch - Day002 20101104**  
**Infected premises (IP) with Protection (3km) and Surveillance (10km) Zones and market location**



CREATOR: NDCC, Defra

SOURCES: Animal health

DATE CREATED: 2010-11-04

PUBLISHER: NDCC, Defra



**Exercise Silver Birch - Day003 20101105**  
**Infected premises (IP) with Protection (3km) and Surveillance (10km) Zones and market location**



CREATOR: NDCC, Defra

SOURCES: Animal health

DATE CREATED: 2010-11-05

PUBLISHER: NDCC, Defra



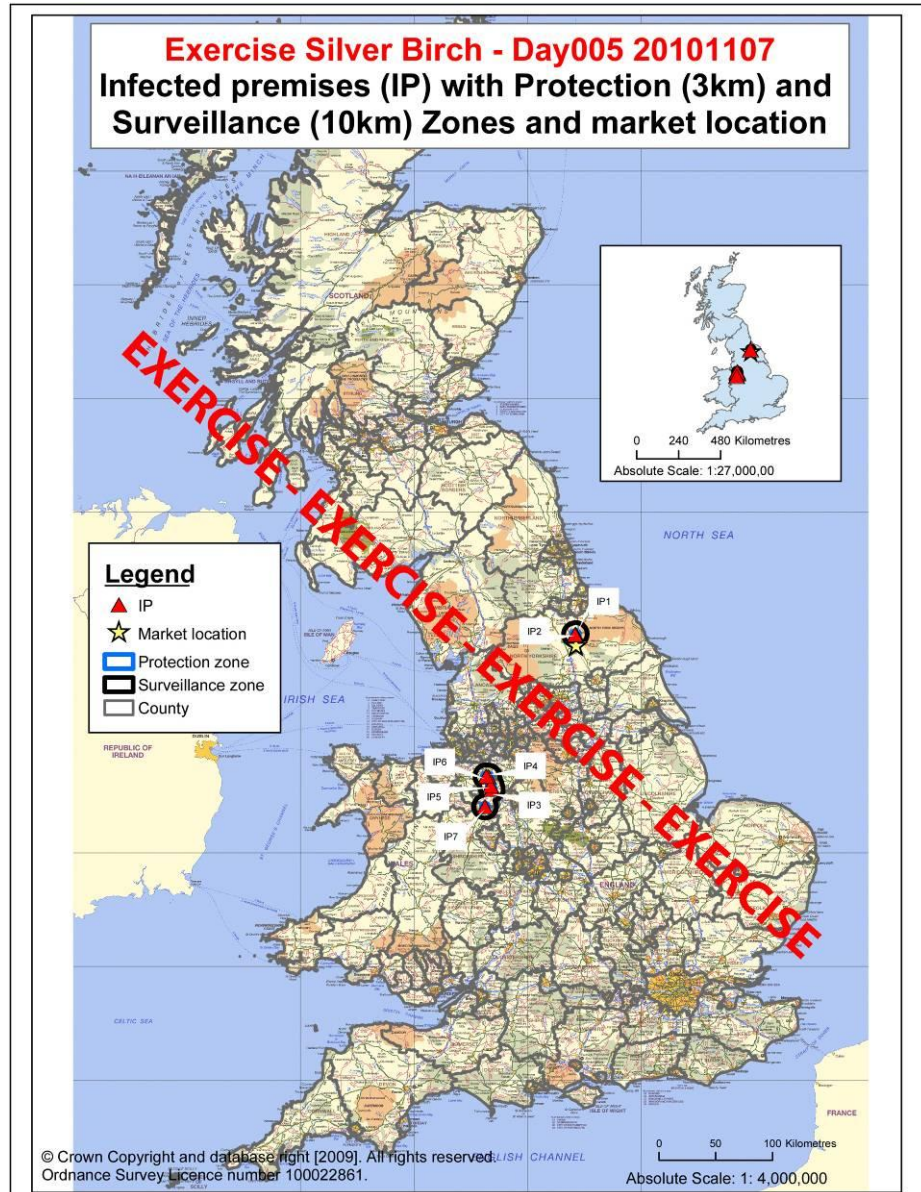


CREATOR: NDCC, Defra

SOURCES: Animal health

DATE CREATED: 2010-11-06

PUBLISHER: NDCC, Defra



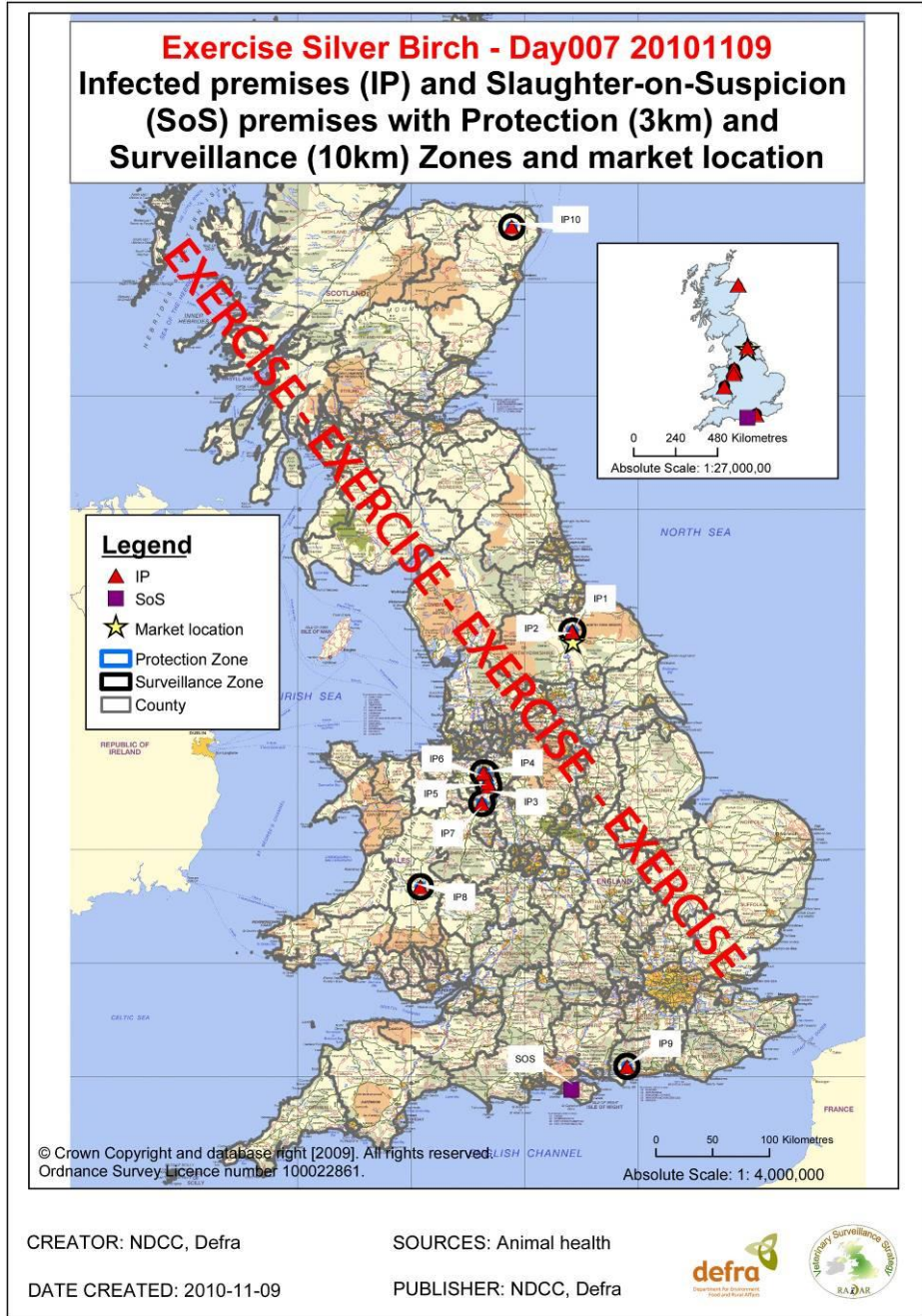
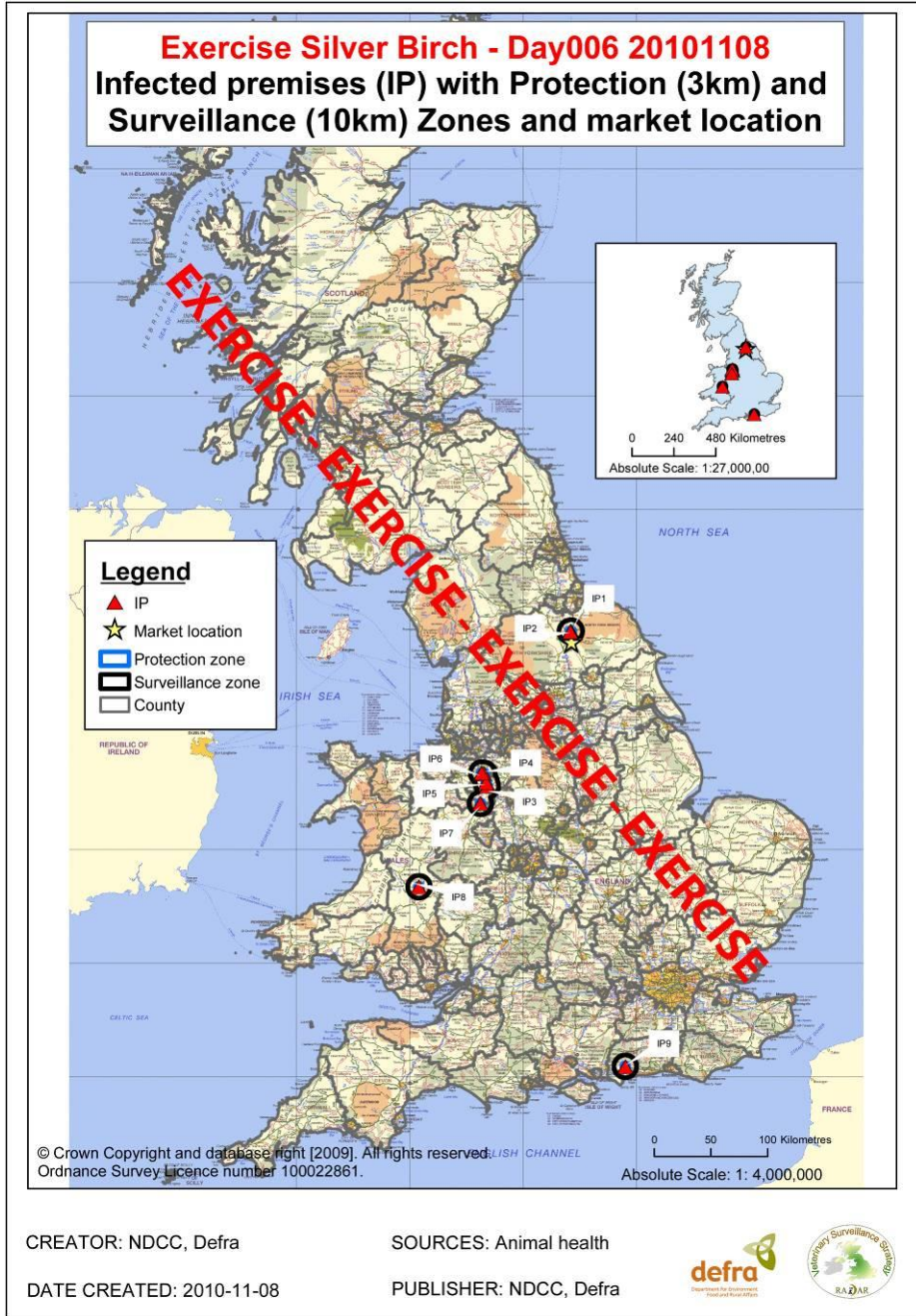
CREATOR: NDCC, Defra

SOURCES: Animal health

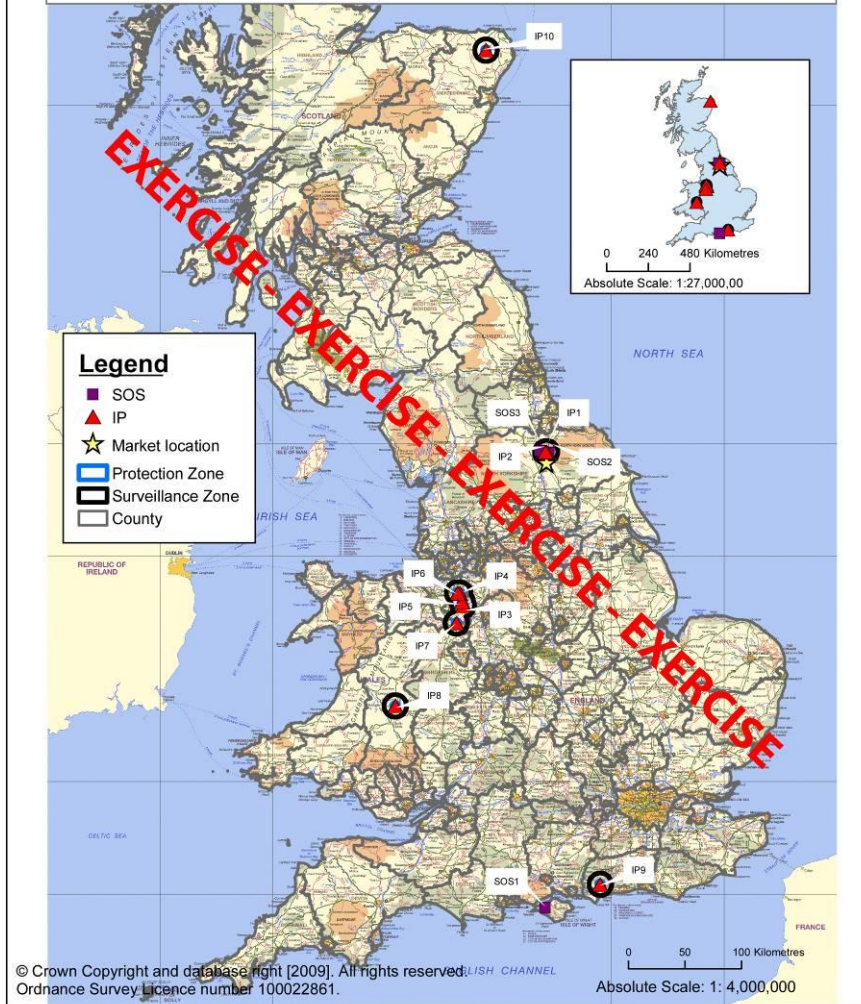
DATE CREATED: 2010-11-07

PUBLISHER: NDCC, Defra





**Exercise Silver Birch - Day008 20101110**  
**Infected Premises (IP) and Slaughter-on-Suspicion (SoS) premises with Protection (3km) and Surveillance (10km) Zones and market location**



CREATOR: NDCC, Defra

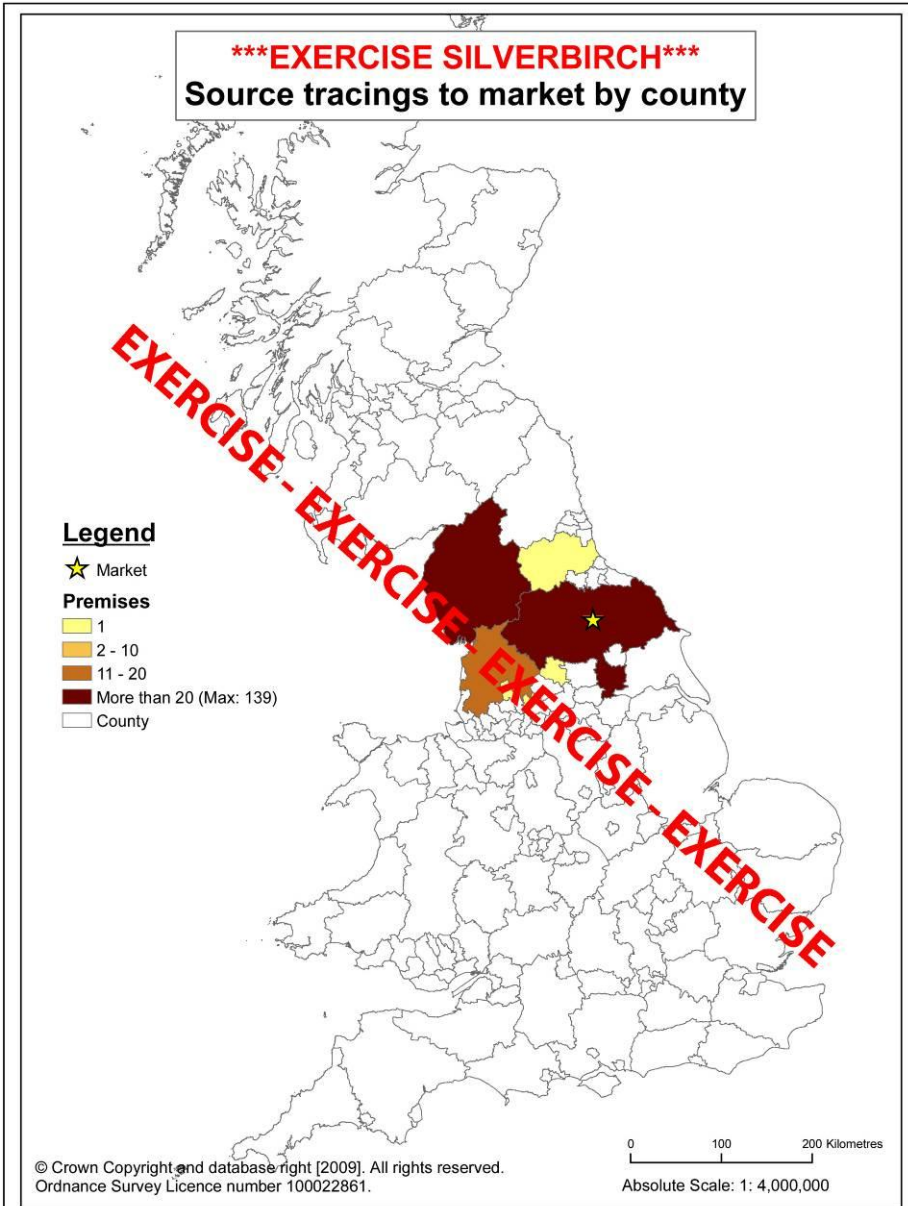
SOURCES: Animal health

DATE CREATED: 2010-11-10

PUBLISHER: NDCC, Defra

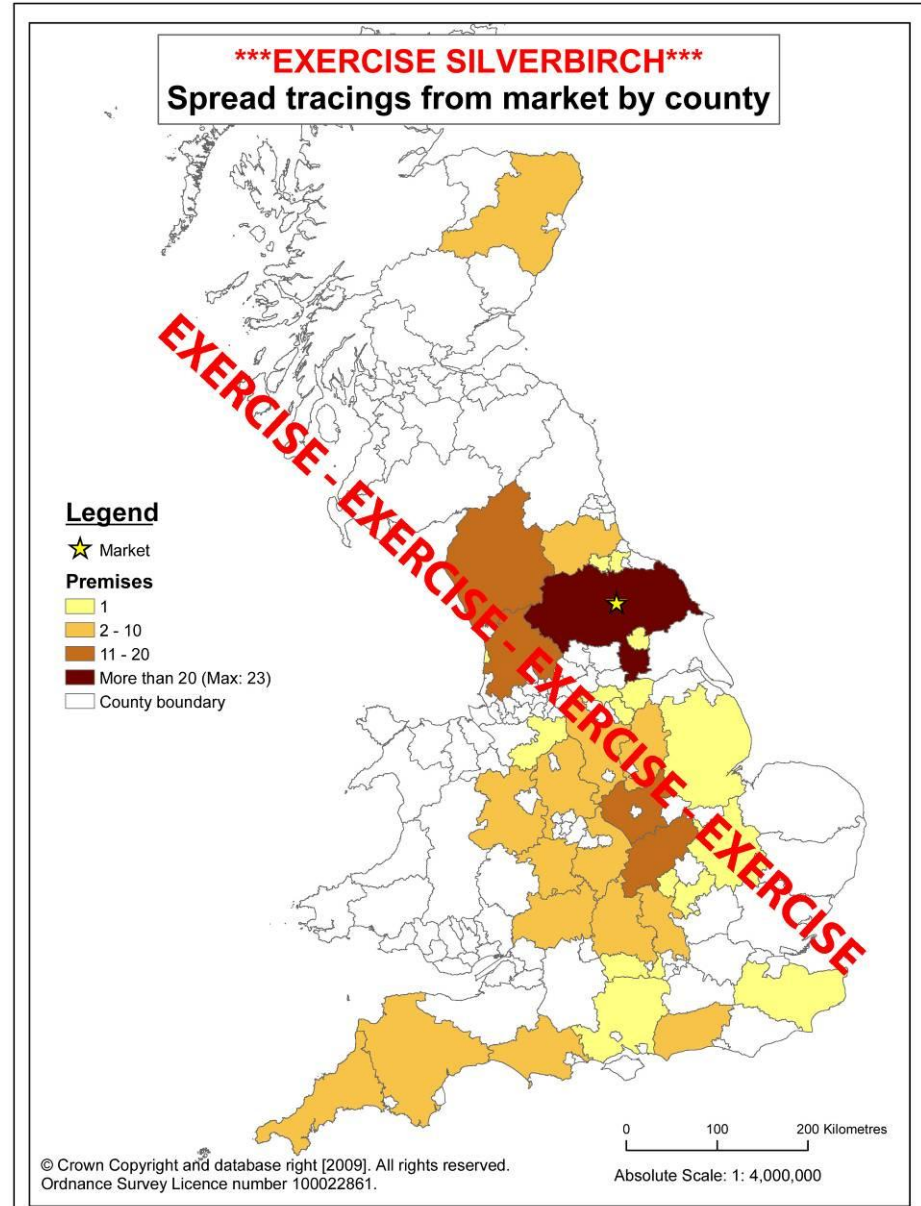






DATE CREATED: 2010-10-14

CREATOR: RADAR team, Defra      SOURCES: RADAR, AMLS



DATE CREATED: 2010-10-14

CREATOR: RADAR team, Defra      SOURCES: RADAR, AMLS



## APPENDIX E: LESSONS IDENTIFIED LOG AND ACTION PLAN

No	Lesson Identified	Responsibility	Action Plan
1	The exercise demonstrated the benefit of regular training. Animal Health to continue to ensure that veterinary and technical staff undergo regular training and assessment in field based activities for report case procedures and case officer activities.	Animal Health.	<ul style="list-style-type: none"> <li>Field exercises will be incorporated in to Animal Health annual exercise programme and targeted.</li> </ul>
2	UK Administrations to ensure that industry stakeholders fully understand the disposal hierarchy and carcass disposal strategy and ensure that stakeholders and operational partners are aware of plans and procedures that are implemented in order to minimise the risks involved in transporting carcasses for disposal.	Scottish Government Exotic Disease Policy.	<ul style="list-style-type: none"> <li>Core and Stakeholder Groups to be informed of disposal strategies and risks involved at core / stakeholder group meetings.</li> <li>Information to be made available on external websites where applicable.</li> </ul>
3	Animal Health and Scottish Government to review the culling authorisation process to ensure a robust process is in place.	Animal Health, Scottish Government Exotic Disease Policy.	<ul style="list-style-type: none"> <li>Internal review by both Animal Health and Scottish Government.</li> <li>Process for culling authorisations to be published on Animal Health Operational Instructions and Scottish Government plans.</li> </ul>
4	The Defra Procurement Commercial Function liaison role to be incorporated into NDCC setup plans. An LDCC exercise should also be undertaken to test the end to end procurement process.	Defra Procurement and Commercial Function, Animal Health.	<ul style="list-style-type: none"> <li>NDCC plans will be amended to include the PCF, operational instruction will be updated where appropriate.</li> <li>A local LDCC exercise will include a PCF element in the 2011/12 exercise programme.</li> </ul>

5	In a large scale outbreak it is recognised that there will be competition for veterinary resource. Animal Health to work with the FMD vaccination contractor to consider the impacts on how the provision of veterinary resource should be managed and prioritised without impacting on either's ability to respond.	Animal Health Human Resources, GENUS.	<ul style="list-style-type: none"> <li>• Review group to consider the risk and impacts of veterinary resource in an outbreak.</li> <li>• Resource impact and escalation plan to be agreed with contractor, and where possible built into current or future contracts.</li> </ul>
6	Although the DCS is due to be decommissioned in 12-18 months time, Animal Health should consider the development of Standard Operating Procedures for the Disease Control system, to limit the number of data entry errors and thus assisting reporting procedures.	Animal Health Contingency Planning Division and Business Design.	<ul style="list-style-type: none"> <li>• Animal Health Business Design in conjunction with Contingency Planning Division to consider the requirements for SOPS to support the DCS system.</li> <li>• Animal Health Business Design to prepare and issue SOPS to operational staff.</li> </ul>
7	Animal Health should also consider whether standard spreadsheets for allocations and surveillance should be incorporated into operational instructions.	Animal Health Contingency Planning Division, RODs and RRM's.	<ul style="list-style-type: none"> <li>• Animal Health RODs and RRM's to assess the training needs of staff to ensure they are fully aware of the exotic disease Operations Manual. Where a need is identified regular training should be introduced.</li> <li>• Animal Health Contingency Planning Division to collate the requirements for national spreadsheets (allocation and surveillance) with RRM's. Identified best practice to be incorporated into operational instructions.</li> </ul>
8	Animal Health to review the logistics for setting up a FOB and investigate whether a separate FOB manager role is required.	Animal Health Contingency Planning Divisions, RRM's.	<ul style="list-style-type: none"> <li>• Animal Health Contingency Planning Division in conjunction with RRM's will review to requirements for FOBs and investigate the role of FOB Manager outlining the specific roles and requirements.</li> </ul>

9	Defra Policy and Animal Health to review the Regional Policy Liaison Function.	Defra Exotic Disease Policy, Animal Health Contingency Planning Division, RODs	<ul style="list-style-type: none"> <li>• Defra EDP and Animal Health Contingency Planning Division to review the current RPLF role.</li> <li>• Any identified changes to be discussed with RODs and incorporated into structures and plans.</li> </ul>
10	The SG and WAG to review and clarify the NDCC Liaison Officers role and remit. Relevant contingency plans should be updated and staff who undertake NDCC roles need to be made aware of the role and its responsibilities.	Scottish Government and Welsh Assembly Government	<ul style="list-style-type: none"> <li>• The Scottish Government and Welsh Assembly Government to review the NDCC liaison roles, with a view of providing more clarity on the role and ensuring NDCC staff are made aware of its role and remit.</li> </ul>
11	Animal Health to ensure that processes are amended to ensure that all interested parties are advised that an AEZ has been requested and once the AEZ is in place.	Animal Health Contingency Planning Division.	<ul style="list-style-type: none"> <li>• Animal Health to review the communications process for activating a AEZ.</li> <li>• All interested parties, including DAs to be included in the communication cascade for AEZ and operational plans / manuals to be updated.</li> </ul>
12	Animal Health Corporate Communications to further refine a scalable remote working model, which supports all the LDCCs when dealing with multiple LDCCs.	Animal Health Corporate Communications, Defra.	<ul style="list-style-type: none"> <li>• Animal Health Corporate Communications in conjunction with Defra to refine the remote working model.</li> <li>• The remote working model to be reviewed by RRM and details incorporated into operational response plans.</li> </ul>
13	The Scottish and Welsh Assembly Governments and Animal Health, to review the communication interfaces between the NDCC, JCC and LDCCs and address any issues.	Scottish Government, Welsh Assembly Government and Animal Health Contingency Planning Division and Veterinary and Technical Services.	<ul style="list-style-type: none"> <li>• A review of the remote JCC functions in the Devolved Administrations to take place to understand the issues and recommend enhancements.</li> </ul>

14	Defra, the Welsh Assembly Government and Scottish Government to review the media communications strategy and outline a proactive response model including the use of daily information notes.	Communications Teams in Defra, Scottish Government, Welsh Assembly Government.	<ul style="list-style-type: none"> <li>Review group to be created involving Defra, Welsh Assembly Government and the Scottish Government communications teams to refresh their communication strategies for responding to outbreaks.</li> </ul>
15	Communications teams in Defra and Animal Health to review the media relations role for supporting the England RODs.	Animal Health Communications, RODs, Defra Communications Directorate.	<ul style="list-style-type: none"> <li>Defra and Animal Health communications teams to review the role media liaison team in England LDCCs.</li> <li>Options and recommendations on the future requirements for the media relations role in the LDCC to be outlined, and demonstrate how this will support the RODs. Animal Health RODs will be consulted on the review.</li> </ul>
16	The role of the Scottish Government Communications Officer in the LDCC needs to be effectively communicated to staff within Animal Health, specifically management teams within Scotland.	Animal Health RRM (Scotland).	<ul style="list-style-type: none"> <li>The role of the Scottish Government Communications Officer in the LDCC, will be introduced to local training packages and delivered to the Divisional Offices in Scotland by RRM.</li> </ul>
17	NEEG Executive to investigate the creation of templates for presenting information to specific policy and scientific customers.	Defra, Scottish Government, Welsh Assembly Government, Departments for Agriculture and Rural Affairs Northern Ireland, Animal Health	<ul style="list-style-type: none"> <li>The NEEG to prepare and agree templates for presenting information. Templates to be agreed by Defra, Welsh Assembly Government, Scottish Government and Animal Health customers.</li> </ul>
18	UK Administrations to review NEEG and NEG roles and responsibilities and confirm the process for policy engagement.	Defra, Scottish Government, Welsh Assembly Government and Animal Health	<ul style="list-style-type: none"> <li>A review group from Defra, Scottish Government and Welsh Assembly Government to review, outline and agree the responsibilities of the NEG and NEEG roles and how they integrate.</li> </ul>

19	Defra, Scottish Government and Welsh Assembly Government together with key stakeholders and Animal Health to review whether there are better and quicker ways of identifying, verifying and tracing animal movements during an outbreak, particularly where a market is involved.	Defra, Scottish Government, Welsh Assembly Government, Animal Health and Stakeholders.	<ul style="list-style-type: none"> <li>• GB Administrations and Animal Health to initiate a workgroup with key stakeholders to consider better and quicker ways of identifying and verifying animal movements during an outbreak, specifically concentrating on animal movements where a market is implicated.</li> </ul>
20	VLA and Animal Health to review the procurement contract for vacutainer tubes, the numbers stored and available for immediate use and ensure a robust plan is in place for emergency replacements.	Animal Health Veterinary and Technical Services and the Veterinary Laboratories Agency.	<ul style="list-style-type: none"> <li>• Animal Health Veterinary and Technical Services and the VLA will review current procedures for obtaining vacutinners.</li> <li>• An outline plan will be prepared for escalating demand, including procurement options outside current contracted suppliers.</li> </ul>
21	Defra, Scottish Government and Welsh Assembly Government Animal Health, VLA, stakeholder groups and the vaccination contractor to review and refine current policies on use of vaccination, to consider the practicalities of its operational implementation and to fully understand the implications of vaccination. This work to confirm the position of food retailers and processors on the marketing of meat and livestock products from vaccinated animals and the effects vaccination would have on UK livestock, meat and milk industries (including cost benefit analysis).	Defra, Scottish Government, Welsh Assembly Government, Animal Health, Veterinary Laboratories Agency and Stakeholder Groups.	<ul style="list-style-type: none"> <li>• A project group will be set up consisting of GB Administrations, Animal Health, stakeholders and scientific experts to take forward actions in line with FMD control strategies.</li> </ul>
22	The risk assessment developed for potentially sparing animals from the culling policy including 'breeds at risk' should now be tested on farm. Once exercised, the policies on sparing animals for culling should be reviewed and refined by the GB administrations and embedded in Animal Health's Operations Manual.	Defra Exotic Disease Policy, Scottish Government, Welsh Assembly Government, Animal Health	<ul style="list-style-type: none"> <li>• Animal Health to setup an on farm exercise to ensure that the risk assessments for sparing animals from culling is tested.</li> </ul>

23	GB Administrations should develop their strategy for the on-farm use of portable diagnostic equipment.	Defra, Scottish Government, Welsh Assembly Government and Animal Health	<ul style="list-style-type: none"> <li>• A project group will be set up consisting of GB Administrations, Animal Health, stakeholders and scientific experts to take forward actions in line with FMD control strategies.</li> </ul>
24	UK Administrations should continue to develop policy and strategies and trigger points for the lifting of the national movement ban and potential for regionalisation.	Defra, Scottish Government, Welsh Assembly Government, Department for Agriculture and Rural Affairs Northern Ireland, Animal Health.	<ul style="list-style-type: none"> <li>• A project group will be set up consisting of UK Administrations, Animal Health, stakeholders to take forward actions in line with FMD control strategies.</li> </ul>
25	GB Administrations should review with delivery agents the (designations) of premises in the Protection, Surveillance and Restricted Zones that handle fresh meat with a view to simplification.	Defra, Scottish Government, Welsh Assembly Government	<ul style="list-style-type: none"> <li>• GB Administrations to review processes with delivery agents.</li> </ul>
26	The agenda and format of the daily CVO (UK) communications meeting should be reviewed by Defra Strategic Communications and updated as appropriate.	Defra Communications and Animal Health Contingency Planning Division	<ul style="list-style-type: none"> <li>• Defra Strategic Communications will review the daily communications meeting and where appropriate amend the format.</li> </ul>
27	UK Administrations to complete an internal review of the National Disease Control Centre (NDCC) battle rhythm and each Administrations' own battle rhythm, procedures and schedule of meetings.	Defra, Scottish Government, Welsh Assembly Government, Department for Agriculture and Rural Affairs Northern Ireland, Animal Health.	<ul style="list-style-type: none"> <li>• UK Administrations will review the battle rhythms of each Administrations contingency plans.</li> <li>• The UK response plan should outline some structures for dealing with an outbreak in which all UK Administrations are involved.</li> </ul>
28	GB Administrations to work with Animal Health to review and further develop the Foot and Mouth Disease licensing matrix and to extend to other diseases.	Defra, Scottish Government, Welsh Assembly Government.	<ul style="list-style-type: none"> <li>• Animal Health, in conjunction with the UK Administrations to agree and finalise the licensing matrix for FMD and other exotic notifiable disease where appropriate.</li> </ul>

29	GB Administrations to agree a protocol for prioritising and agreeing Animal Health business as usual and outbreak activities and resources, (particularly in respect of such high-profile and sensitive issues as TB testing), during a significant outbreak of exotic animal disease.	Defra, Scottish Government, Welsh Assembly Government, Animal Health.	<ul style="list-style-type: none"> <li>• A project group will be set up consisting of, Animal Health and GB Administrations, to take forward actions in line with the relevant exotic disease control strategies.</li> </ul>
30	Animal Health to investigate the IT connectivity requirements of Operational Partners, Stakeholders and Devolved Administrations, to ensure they are either provided with access to broadband or have access to their required systems when located in a NDCC, LDCC or FOB locations.	Animal Health Information Management Technology	<ul style="list-style-type: none"> <li>• Animal Health IMT to review the estates IT connectivity at all potential NDCC, LDCC and FOB locations.</li> <li>• Options and recommendations to be prepared and plans implemented to ensure Operational Partners and Stakeholders can access their own systems during an outbreak of exotic disease.</li> </ul>
31	Data sharing agreements between the UK Administrations should be reviewed to ensure that they enhance the disease response and assist in real time data sharing.	Defra, Scottish Government, Welsh Assembly Government, Department for Agriculture and Rural Affairs Northern Ireland, Animal Health.	<ul style="list-style-type: none"> <li>• Data sharing agreements to be reviewed by UK Administrations. Any outstanding agreements that will assist the disease response should be highlighted and finalised.</li> </ul>
32	Animal Health to enhance the set of standard operating procedures (SOPS) for the use of the Management Information reporting suite. These enhanced SOPS should be rolled out with local user training delivered by Readiness and Resilience Managers (RRM).	Animal Health Contingency Planning Division and Information Management Technology and RRM.	<ul style="list-style-type: none"> <li>• Animal Health IMT to enhance the current SOPS for the use of the Management Information suite of reports.</li> <li>• Additional RRM training to be completed and RRM to be tasked with delivering cascade training to divisions/regions.</li> </ul>
33	Animal Health Contingency Planning Division in conjunction with the Cabinet Office to review the format and timing of the JCC overnight report to ensure it meets current requirements.	Animal Health Contingency Planning Division	<ul style="list-style-type: none"> <li>• Animal Health Contingency Planning Division and Cabinet Office to agree the format and timing of reporting, and include in current contingency plans.</li> </ul>



34	Animal Health IMT to investigate options for an online or IT system to enable real-time reporting and situation updates for report cases received and their current status.	Animal Health Veterinary Exotic Notifiable Diseases Unit, Information Management Technology (VENDU).	<ul style="list-style-type: none"> <li>Animal Health IMT and VENDU will outline options for how real-time reporting of report cases can be introduced.</li> </ul>
35	Animal Health should create a framework of measures for obtaining additional Veterinary, Technical and Administrative personnel aligned with its operating structures. This framework should also contain escalation points and clear options for how and where to obtain additional resource.	Animal Health Human Resources.	<ul style="list-style-type: none"> <li>Animal Health HR will initiate a project to look at how Animal Health obtain additional resources, this project will outline a framework and include options and structures for obtaining resource. Stakeholders and Operational Partners will be consulted on the framework.</li> </ul>
36	Animal Health HR to investigate the requirements for resource management during an outbreak and devise and implement a system for accurately capturing resource details at the NDCC HR unit and any associated LDCCs.	Animal Health Human Resources.	<ul style="list-style-type: none"> <li>Animal Health HR will review and implement a system for recording resource during an outbreak from both the NDCC and LDCC perspective. The new system will be incorporated into plans and procedures.</li> </ul>
37	UK Administrations and Animal Health to review the impact on outbreak response capability of the comprehensive spending review and other changes affecting Local Authorities and Operational Partners.	Defra, Scottish Government, Welsh Assembly Government, Department for Agriculture and Rural Affairs Northern Ireland, Animal Health.	<ul style="list-style-type: none"> <li>UK Administrations and Animal Health, to regularly review the impact of the comprehensive spending review that impact on the outbreak response capability at the Outbreak Readiness Board.</li> </ul>
38	Defra in conjunction with the Devolved Administrations and Stakeholders to discuss the implications of changing the current legislation and disease control policies which require a TCZ to be put in place and to consider alternative strategies and policies such as the application of a national movement ban in the affected country or across the whole of GB on suspicion of vesicular disease in FMD susceptible species.	Defra, Scottish Government, Welsh Assembly Government.	<ul style="list-style-type: none"> <li>A review group will be set up consisting of GB Administrations, Animal Health, stakeholders to take forward actions in line with FMD control strategies.</li> </ul>

39	Contingency Plans to be reviewed and updated to outline how Defra works with the England FMD core group of stakeholders. Defra policy team should also discuss roles, responsibilities with the core group of stakeholders.	Defra Exotic Disease Policy.	<ul style="list-style-type: none"> <li>• Animal Health to include a generic description of Defra's working core group in the Defra Contingency Plan.</li> <li>• Defra to discuss and agree roles and responsibilities with the England FMD Core Group.</li> </ul>
40	Animal Health to ensure relevant operational partners and stakeholders (specifically the vet profession) are involved in outbreak resource planning.	Animal Health Human Resources.	<ul style="list-style-type: none"> <li>• Animal Health HR to review and update their outbreak resource planning records. The vet operational partners and the vet profession should be consulted on outbreak resource planning.</li> </ul>
41	UK Administrations to consider with stakeholders the best way to inform and educate the industry and general public on the issues surrounding Foot and Mouth vaccination, taking into account the impact of the spending review and the current restrictions on government marketing and advertising.	Defra, Scottish Government, Welsh Assembly Government, Department for Agriculture and Rural Affairs Northern Ireland, Animal Health.	<ul style="list-style-type: none"> <li>• Lesson 21 refers.</li> </ul>
42	The Welsh Assembly Government to review the physical location of stakeholders within the response structures to ensure they can maximise their the ECC(W) response.	Welsh Assembly Government.	<ul style="list-style-type: none"> <li>• WAG to agree the locations of stakeholders in the ECC(W) as part of their internal review.</li> <li>• Plans will be updated to reflect relevant changes.</li> </ul>
43	For exercise planning purposes the scope of the Advisory Group should be reviewed once the exercise aim and objectives have been agreed to ensure the group consist of the relevant organisations to effectively support the exercise.	Animal Health Contingency Planning Division	<ul style="list-style-type: none"> <li>• Animal Health Contingency Planning Division to amend the role of the Exercise Advisory Board, to ensure they are used effectively. The list of relevant participating organisations is to be reviewed and updated.</li> </ul>

44	The use of electronic feedback forms should be adopted as best practice as a means of quickly and accurately capturing issues and lessons identified as part of any exercise evaluation process.	Animal Health Contingency Planning Division	<ul style="list-style-type: none"> <li>Animal Health Contingency Planning Division to introduce electronic feedback for all national exercise and investigate the possibility for local/regional exercises.</li> </ul>
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## **APPENDIX F: GLOSSARY OF TERMS**

<b>ACPO</b>	Association of Chief Police Officers
<b>ADPG</b>	Animal Disease Policy Group
<b>AEZ</b>	Air Exclusion Zone
<b>AHDO</b>	Animal Health Divisional Office
<b>AHRO</b>	Animal Health Regional Office
<b>BVA</b>	British Veterinary Association
<b>C&amp;D</b>	Cleansing and Disinfection
<b>CCC</b>	Civil Contingencies Committee
<b>CCC(M)</b>	Civil Contingencies Committee (Ministers)
<b>CCC(O)</b>	Civil Contingencies Committee (Officials)
<b>CCS</b>	Civil Contingencies Secretariat (Cabinet Office)
<b>CCU</b>	Customer Contact Unit (of Defra)
<b>CD</b>	Defra Communications Directorate
<b>CE</b>	Chief Executive
<b>CLG</b>	Communities & Local Government
<b>CLVI</b>	Contingency Local Veterinary Inspector
<b>COBR</b>	Cabinet Office Briefing Room
<b>COI</b>	Central Office of Information
<b>COO</b>	Chief Operating Officer (Animal Health)
<b>CPD</b>	Contingency Planning Division (Animal Health)
<b>CPSD</b>	Contingency Planning & Securities Division
<b>CRIP</b>	Commonly Recognised Information Picture (CCS)
<b>CVO</b>	Chief Veterinary Officer
<b>DA</b>	Devolved Administration
<b>DARDNI</b>	Department of Agriculture and Rural Development Northern Ireland
<b>DC</b>	Dangerous Contact – These are animals of susceptible species which are believed to have been exposed to infection.
<b>DCS</b>	Disease Control System
<b>DCVO</b>	Deputy Chief Veterinary Officer, Director Vet Policy
<b>Defra</b>	Department for Environment, Food and Rural Affairs
<b>DERC</b>	Departmental (or Disease) Emergency Response Committee

<b>DRT</b>	Disease Reporting Team
<b>DVM</b>	Divisional Veterinary Manager (Scotland only)
<b>EA</b>	Environment Agency
<b>EAs</b>	Emergency Actions (Animal Health instruction)
<b>EC</b>	European Commission
<b>ECCW</b>	Emergency Co-ordination Centre Wales
<b>EDP</b>	Exotic Diseases Policy
<b>EDPRT</b>	Exotic Disease Policy Response Team
<b>EFRA</b>	Environment, Food and Rural Affairs (Select Committee)
<b>EI</b>	Emergency Instruction (Animal Health)
<b>EMB</b>	Emergency Management Board (Defra)
<b>ENPAA</b>	English National Parks Authority Association
<b>EPO</b>	Emergency Planning Officer (Local Authority)
<b>ESA</b>	Environment Services Association
<b>EU</b>	European Union
<b>EXCON</b>	Exercise Control
<b>FFG</b>	Food and Farming Group (Defra)
<b>FMD</b>	Foot and Mouth Disease
<b>FSA</b>	Food Standards Agency
<b>GAH</b>	Global Animal Health (formerly International Animal Health Core Function) (Defra)
<b>GB</b>	Great Britain
<b>GCN</b>	Government Communications Network
<b>GIS</b>	Geographic Information Systems
<b>GOs</b>	Government Offices in the Regions
<b>HPA</b>	Health Protection Agency
<b>HQ</b>	Head Quarters
<b>HR</b>	Human Resources
<b>IAH (Pirbright)</b>	Institute for Animal Health (Pirbright Laboratory)
<b>IAHER</b>	International Animal Health Emergency Reserve
<b>IMT</b>	Information Management and Technology
<b>IP</b>	Infected Premises

<b>JCC</b>	Joint Coordination Centre
<b>LA</b>	Local Authority
<b>LDCC</b>	Local Disease Control Centre
<b>LGA</b>	Local Government Association
<b>LGR</b>	Local Government Regulation
<b>LRF</b>	Local Resilience Forum
<b>LVI</b>	Local Veterinary Inspector acting as an Official Veterinarian
<b>MEL</b>	Master Events List
<b>MHS</b>	Meat Hygiene Service
<b>NDCC</b>	National Disease Control Centre
<b>NE</b>	Natural England
<b>NEG</b>	National Experts Group
<b>NEEG</b>	National Emergencies Epidemiology Group
<b>NFU</b>	National Farmers Union
<b>OD(W)</b>	Operations Director Wales
<b>OGD</b>	Other Government Department
<b>OIE</b>	World Organisation for Animal Health (known as Office International des Epizooties until 2003)
<b>PCF</b>	Procurements and Commercial Function
<b>PERT</b>	Procurement Emergency Response Team
<b>Preliminary Cleansing and Disinfection</b>	Bio-security procedures put in place during the culling and disposal of animals and the initial treatment of contaminated areas of a premises with disinfectant.
<b>PZ</b>	Protection Zone
<b>RADAR</b>	Rapid Analysis and Detection of Animal-Related Risk
<b>RAM</b>	Regional Admin Manager (LDCC Manager in an outbreak)
<b>RCC</b>	Records Control Centre
<b>RCCC</b>	Regional Civil Contingencies Committee
<b>RCVS</b>	Royal College of Veterinary Surgeons
<b>RFM</b>	Regional Field Manager
<b>ROD</b>	Regional Operations Director

<b>RPLO</b>	Regional Policy Liaison Officer
<b>RRF</b>	Regional Resilience Forum
<b>RRM</b>	Regional Resilience Manager (Animal Health) (England) Readiness & Resilience Manager (Scotland & Wales)
<b>RRT</b>	Regional Resilience Team (Government Office)
<b>RSPCA</b>	Royal Society for the Prevention of Cruelty to Animals
<b>RVL</b>	Regional Veterinary Lead
<b>SCoFAH</b>	Standing Committee (of the European Commission) on Food Chain and Animal Health
<b>Secondary Cleansing and Disinfection</b>	After preliminary cleansing and disinfection, the cleansing (including disposal of manure, bedding etc.), degreasing, washing and disinfecting of premises to remove the infective agent, reduce the level of it, such that recrudescence will not occur on restocking.
<b>SEPA</b>	Scottish Environment Protection Agency
<b>Sitrep</b>	Situation Report
<b>SoS</b>	Secretary of State
<b>SOS</b>	Slaughter On Suspicion
<b>UK</b>	United Kingdom
<b>UKREP</b>	United Kingdom Permanent Representation to the European Union
<b>VENDU</b>	Veterinary Exotic Notifiable Diseases Unit
<b>VLA</b>	Veterinary Laboratories Agency
<b>VO</b>	Veterinary Officer
<b>VSM</b>	Veterinary Services Manager
<b>VTVS</b>	Vetnet Tracing Verification System
<b>WAG</b>	Welsh Assembly Government
<b>WAG RA</b>	Welsh Assembly Government Rural Affairs Department
<b>WCC</b>	Welsh Co-ordination Centre

exercise  
SILVER BIRCH



Llywodraeth Cynulliad Cymru  
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