

# DEFRA'S OVERVIEW OF EMERGENCY PREPAREDNESS FOR EXOTIC ANIMAL DISEASES

(supplementing the Defra Framework Response Plan for Exotic  
Animal Diseases)

Presented to Parliament pursuant to Section 14A of the Animal  
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## FOREWORD

Contingency planning for exotic animal diseases is currently at the forefront of worldwide concerns relating to animal health. Whilst we live in a time where the prevention and control of Avian Influenza most captures the public imagination, it is important to recognise the breadth and range of responses required to meet the demands of any disease outbreak situation.

I am pleased to introduce the first edition of the Defra Overview of Emergency Preparedness for Exotic Animal Diseases. Its purpose is to demonstrate the vast amount of work undertaken by Defra, the State Veterinary Service (SVS) and the department's other delivery agents to ensure that our level of emergency preparedness remains high.

This document supplements Defra's Framework Response Plan for Exotic Animal Diseases. Whilst the response plan sets out our command and control structures and arrangements for managing a confirmed case of exotic animal disease, this overview provides details of how our peacetime preparedness work translates into our operational response during an outbreak.

The SVS takes the lead in the operational aspects of contingency planning for exotic animal diseases. Over the past year it has also led the operational response to a number of small scale incidents of poultry diseases, through which many valuable lessons have been learned. The implementation of these lessons has assisted in improving our capacity for operational delivery in the future.

What follows demonstrates that not only do we have dynamic and robust contingency plans in place to respond to an outbreak of exotic animal disease, regardless of its size or scale, but we also have the operational capability to support these arrangements. We are also committed to ensuring that our policies enable disease to be contained and controlled in the most effective and efficient manner, in order to limit its impact upon our rural communities, our natural environment, and our economy.

I am confident that we will continue to work closely with our operational partners and stakeholders to ensure that we are ready and able to cope with any future challenges that may arise. Defra and the SVS remain committed to working in partnership to improve our capability to respond for many years to come.

**DEBBY REYNOLDS**  
**Chief Veterinary Officer**

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# 1. DISEASE INFORMATION SUMMARY

## Foot and Mouth Disease (FMD)

1.1. FMD is a highly infectious viral disease affecting cloven-hoofed animals, in particular cattle, sheep, pigs, goats and deer. Other susceptible animals include camelids and some wild animals such as coypu, deer and zoo animals including elephants.

1.2. Fever is followed by the development of vesicles or blisters - chiefly in the mouth or on the feet. There are 7 main types of virus, which produce similar clinical signs and which can only be differentiated in the laboratory.

1.3. FMD can spread by direct or indirect contact with infected animals. Infected animals begin excreting the virus a few days before signs of the disease develop. Pigs in particular produce large numbers of virus particles. The disease is spread mechanically by the movement of animals, persons, vehicles and other things, which have been contaminated by the virus. Airborne spread of the disease can also take place. The prevailing meteorological conditions and local topography determine the distance that the disease can travel and this may be considerable.

1.4. Meat from the carcasses of animals infected with FMD at the time of slaughter can transmit the virus. In the past, outbreaks of the disease have been linked with the importation of infected meat and meat products.

1.5. Advice from the Department of Health is that it is very rare for humans to be affected by FMD. There has only been one recorded case of FMD in a human being in Great Britain in 1966. The general effects of the disease in that case were similar to influenza with some blisters. The Food Standards Agency has advised that the disease has no implications for the human food chain.

1.6. The FMD virus can be destroyed by heat, low humidity, or certain disinfectants, but it may remain active for a varying time in a suitable medium such as the frozen or chilled carcass of an infected animal and on contaminated objects.

1.7. Good biosecurity is required to stop onward spread.

1.8. The prompt detection and reporting of the initial outbreak of disease are crucial in limiting the ultimate scale of the outbreak, and arrangements to enhance surveillance are being taken forward under Defra's Veterinary Surveillance Strategy. Part of this strategy aims to upgrade the use of information on the numbers and location of livestock, which will be important in the smooth operation of this contingency plan in the event of an outbreak. Management of the outbreak will also

depend upon the availability of geographical information systems and expertise, which is being developed with this plan.

1.9. Current policies for the control of an outbreak of FMD can be viewed online at <http://www.defra.gov.uk/animalh/diseases/notifiable/index.htm>

## **Avian Influenza (AI)**

1.10. AI is a highly infectious viral disease that can probably affect all species of birds. The severity of disease depends upon the strain and subtype of virus and the type of bird infected.

1.11. Highly pathogenic AI (HPAI) viruses have the potential to cause severe disease in poultry, associated with a high death rate (up to 100%); the course of such disease can be so rapid the birds may die without showing signs of disease.

1.12. Infection with low pathogenic AI (LPAI) viruses usually results in milder, less significant disease. However, some LPAI viruses can mutate into highly pathogenic strains and severe disease may be seen with concurrent infection or immunocompromised birds.

1.13. It is possible for some species of birds such as wildfowl to be infected with avian flu viruses and show only mild or inapparent signs of disease acting as a potential source of infection to other birds. Migratory wildfowl are considered as one of a number of risk factors for the spread of disease.

1.14. EU legislation to control and eradicate AI applies to HPAI viruses and LPAI viruses of subtypes H5 and H7. Flocks found to be infected with LPAI would be assessed. It is likely that such flocks would be slaughtered.

1.15. Controls would apply to domestic fowls, turkeys, geese, ducks, guinea fowls, quails, pigeons (reared for meat), ratites (e.g. ostriches), pheasants and partridges and any other poultry reared or kept in captivity for breeding, the production of meat or eggs for consumption or eggs for restocking supplies of game.

1.16. It is thought to be possible that AI can be introduced to domestic poultry through contact with infective migrating wild birds, particularly wild fowl. Contact may be direct through mingling or indirect through contamination of feed, water, utensils or clothing, particularly with faeces. There is also a risk of introduction from the illegal import of live birds.

1.17. Current policies for the control of an outbreak of AI can be viewed online at <http://www.defra.gov.uk/animalh/diseases/notifiable/index.htm>

## Newcastle Disease

1.18. ND is a highly infectious disease affecting poultry and other birds. Disease is caused by infection with virulent strains of Newcastle disease virus (NDV). There are a variety of strains of NDV, which range in virulence. Low virulence strains may cause sub clinical or mild respiratory disease. Highly virulent strains can cause severe disease which is characterised by high death rates and a range of clinical signs. Control is targeted at strains with a high pathogenicity (ability to cause severe disease).

1.19. The severity of the disease also varies depending upon the species, degree of immunity and age of bird, environmental conditions and general health status of the flock.

1.20. Controls would apply to domestic fowls, turkeys, geese, ducks, guinea fowls, quails, pigeons, ratites (e.g. ostriches), pheasants and partridges and any other poultry reared or kept in captivity for breeding, the production of meat or eggs for consumption or eggs for restocking supplies of game.

1.21. It is possible that ND could be introduced to domestic poultry by contact with infective wild pigeons and other wild birds or indirectly through contamination of feed or objects.

NDV can be carried on objects or clothing contaminated with excretions from infective birds, particularly faeces. Such material could be imported on clothing or shoes of people, that had been in contact with infective birds.

1.22. Illegal imports of live birds also pose a risk of introduction but this is difficult to quantify.

1.23. Good biosecurity reduces the risk of onward spread.

1.24. The ND virus has been shown to be infectious to humans and other animals, although severe disease has only been observed in birds. In humans infection occasionally results in mild disease characterised by conjunctivitis. The majority of human cases have occurred in laboratory workers or people handling live vaccines. NDV does not pose a significant risk to public health.

1.25. Current policies for the control of an outbreak of ND can be viewed online at <http://www.defra.gov.uk/animalh/diseases/notifiable/index.htm>

## **Classical Swine Fever**

1.26. Classical Swine Fever (CSF) is a highly contagious viral disease, which affects pigs. Infected animals suffer a variety of clinical signs including loss of appetite, purple discolouration of the skin, and constipation followed by diarrhoea. More severe cases of the disease may result in abortion or weak litters, as well as nervous signs such as tremors or convulsions, particularly in newborn piglets. The disease can result in mortality of affected animals.

1.27. The movement of infected pigs is a common method of spreading CSF. However all excretions from an infected animal contain the virus. Therefore any animal, human, or object which has been in contact with such excretions and then in turn comes into contact with a pig, can spread the disease. Although other animals are able to mechanically spread the disease through contact with infected excretions it is not possible for them to display clinical signs of CSF. A main source of its spread appears to be from pigs eating infected pork or pork products. In this form the CSF virus can remain active for many months.

1.28. When it first enters a herd it can spread very rapidly; a high proportion of the pigs may become ill with a high fever, and many of them may die. The effects of CSF are very similar to another serious notifiable disease of pigs, African Swine Fever (ASF), which is caused by an unrelated virus. The diseases can only be told apart by use of laboratory tests. Recently, less virulent forms of CSF have occurred which are easy to recognise. A second complication in the diagnosis of CSF is the emergence of two new pig diseases, Post- Weaning Multi Systemic Wasting Syndrome (PMWS) and Porcine Dermatitis and Nephropathy Syndrome (PDNS). PDNS, which may be a sequel to PMWS, can easily be confused with CSF and ASF.

1.29. A potential route for the introduction of Swine Fever into the United Kingdom is through the illegal import of infective porcine meat products leading to the subsequent infection of pigs by ingestion. There is also a risk of disease introduction from the illegal import of infective live pigs, however the level of risk is difficult to quantify.

1.30. Direct contact with infected pigs up to one month after infection and the ingestion of waste food containing uncooked pig meat or pig meat products are the main ways in which infection spreads.

1.31. Because CSF cannot be distinguished from ASF by either clinical or post-mortem examination, all suspected cases of swine fever must be confirmed by laboratory examination.

1.32. Advice from the Department of Health is that humans are unlikely to be affected by CSF. The Food Standards Agency (FSA) has advised that the disease has no implications for the human food chain.

1.33. Current policies for the control of an outbreak of CSF can be viewed online at <http://www.defra.gov.uk/animalh/diseases/notifiable/index.htm>

## **African Swine Fever (ASF)**

1.34. African Swine Fever (ASF), otherwise known as African pig disease or warthog disease is a highly infectious viral disease of pigs. It is caused by a large DNA virus and some strains of the virus can cause severe disease and high mortality.

1.35. The clinical signs are indistinguishable from those seen in classical swine fever (hog cholera) and vary with virus strain.

1.36. Disease caused by ASF virus can vary in severity, being either acute, sub acute or chronic. In parts of Africa where the disease is endemic wild pigs and hogs can be infected without showing signs of disease. However, infection of domestic pigs with virulent strains of the virus may result in very high death rates.

1.37. Acute disease is characterised by a period of fever which is followed by a range of clinical signs such as: appearance of blotchy skin lesions, depression, inappetence, weakness, vomiting, diarrhoea, nasal and ocular discharges, coughing, breathing difficulties, rapid pulse rate, reluctance to move. Groups of affected pigs may huddle together and pregnant sows may abort.

1.38. Sub acute disease is characterised by fever that may persist for up to 2-3 weeks and less intense clinical signs such as depression, lethargy and abortion in pregnant sows. The mortality rates due to sub acute disease vary and may be less than 5%. Recovered pigs and their meat products may remain infectious for several weeks.

1.39. Chronic disease is characterised by weight loss, intermittent fever, skin ulcers, arthritis, swelling over joints and respiratory signs. Mortality due to chronic disease is low.

1.40. The severity and distribution of lesions vary with virus strain. Haemorrhages occur in the lymph nodes, heart and kidneys; haemorrhages in other organs are variable in incidence and distribution.

1.41. On clinical grounds the disease and pathologically of the disease may be confused with classical swine fever. However, CSF virus and ASF virus are in different taxonomical families. Laboratory tests differentiate between the two diseases and immunity to CSF does not confer immunity to ASF or vice versa.

1.42. ASF can be spread by direct contact, ingestion of contaminated porcine meat products and by specific tick vectors. The virus is present in all secretions and excretions during the acute period of infection. Pigs are usually infected by nuzzling, although primary infection may sometimes occur through the lower respiratory tract. At present there are not any significant numbers of specific tick vector species in the UK. Therefore the current risk of spread by this route in the UK is negligible.

1.43. A potential route for the introduction of swine fever to the United Kingdom is through the illegal import of infective porcine meat products leading to the subsequent infection of pigs by ingestion. There is also a risk of disease introduction from the illegal import of infective live pigs, however, the level of risk is difficult to quantify. It is also possible for infective ticks to introduce disease to the UK.

1.44. Direct contact with infected pigs up to one month after infection and the ingestion of waste food containing uncooked pig meat or pig meat products are the main ways by which infection spreads.

1.45. Because ASF cannot be distinguished from CSF by either clinical or post-mortem examination all suspected cases of swine fever must be confirmed by laboratory examination.

1.46. Advice from the Department of Health is that humans are unlikely to be affected by ASF. The Food Standards Agency (FSA) has advised that the disease has no implications for the human food chain.

1.47. Current policies for the control of an outbreak of ASF can be viewed online at <http://www.defra.gov.uk/animalh/diseases/notifiable/index.htm>



## Swine Vesicular Disease

1.48. Swine vesicular disease (SVD) is a contagious viral disease of pigs, the signs of which in the acute forms of the disease are clinically indistinguishable from the other vesicular diseases of pigs, notably Foot and Mouth disease (FMD).

1.49. Clinical disease is of high morbidity in groups of pigs. Fever is followed by the development of vesicles or blisters. In the initial stages there is a fever and a transient loss of appetite. Lameness develops due to the eruption of vesicles at the top of the hooves and between the toes. Vesicles may also develop on the snout, tongue and lips.

1.50. The disease usually appears suddenly, but does not spread as rapidly as foot-and-mouth disease. Recovery is usually complete within two or three weeks. The descriptions of the symptoms of SVD will vary according to the age of the pigs affected, the conditions under which they are kept, and the strain of SVD virus involved.

1.51. The disease is usually mild, but in acute cases there can be some loss of production. However, due to its similarity to FMD, it is of economic importance and as a result strict control measures are in place.

1.52. Infection can be initiated from abrasions on the feet and through the tonsil depending on the exposure to infected material. Vesicular fluid/material, faeces and any viraemic tissue are all highly infective. The incubation period is 2-7 days and pigs can excrete virus prior to exhibiting disease for a period of up to 3 weeks.

1.53. The Swine vesicular disease virus is very resistant to chemical and physical disinfection (more so than FMDV) and is only inactivated by extremes of pH and temperatures. The virus can persist in manure for 6 months and indefinitely in pork or pork products that are not heated for 56 degrees centigrade for 1 hour.

1.54. Clinical disease has only been observed in pigs. Advice from the Department of Health is that humans are unlikely to be affected by SVD. The Food Standards Agency (FSA) has advised that the disease has no implications for the human food chain.

1.55. A potential route for the introduction of swine fever to the United Kingdom is through the illegal import of infective porcine meat products leading to the subsequent infection of pigs by ingestion. However, the ban on swill feeding has removed this threat to farmed pigs; although illegal feeding practices or scavenging on discarded illegally imported pork and pork products would still carry a risk. Feral pigs and wild boar are more likely to acquire infection through scavenging than farmed pigs.

1.56. There is also a risk of disease introduction from the illegal import of infective live pigs. However, in view of strict import regulations there is negligible risk from the

legal import of live pigs or porcine meat products. There is also a risk from movement of contaminated pig transport vehicles.

1.57. Current policies for the control of an outbreak of SVD can be viewed online at <http://www.defra.gov.uk/animalh/diseases/notifiable/index.htm>

## **2. PREPAREDNESS**

### **The State Veterinary Service and Emergency Response to Exotic Animal Disease**

2.1. The State Veterinary Service, since becoming an executive agency of the Department for Environment, Food, and Rural Affairs in 2005, takes the lead in the operational aspects of containing and controlling an outbreak of exotic animal disease.

2.2. Disease control operations are centrally coordinated by Defra's National Disease Control Centre in London. Alongside this, the local response is managed at one of the SVS's Local Disease Control Centres (LDCCs), which are usually based at one of the 24 SVS Animal Health Divisional Offices (AHDOs).

2.3. Defra's Framework Response Plan for Exotic Animal Diseases (which accompanies this document) sets out the structures and systems which have been put in place to coordinate the disease control operation, together with the roles and responsibilities of the individuals involved.

2.4. This overview of emergency preparedness describes the SVS's peacetime contingency planning function and its role in responding to an outbreak of animal disease. It also demonstrates Defra/SVS's capability in managing a outbreaks of different types of animal disease of varying size and scale.

2.5. Defra and the SVS work closely with a variety of other agencies and operational partners such as Local Authorities, the Health Protection Agency (HPA) and the Veterinary Laboratories Agency (VLA) to ensure that any response is joined up and coordinated, and involves the appropriate specialists.



## **HUMAN RESOURCES**

2.6. There are many individual roles which contribute to our ability to be prepared to respond to an outbreak of exotic animal disease. The following describes these functions, and the training which is provided to ensure that each individual concerned is able to carry out their duties effectively.

### **Animal Health Divisional Office (AHDO) Readiness and Resilience Managers (RRMs)**

2.7. Each of the AHDOs throughout Scotland, England and Wales has been allocated a Readiness and Resilience Manager (RRM). The RRM is responsible for supporting the Divisional Veterinary Manager (DVM) in the preparation of contingency and emergency plans, so that the AHDO maintains a continuous state of emergency readiness and resilience within a Government Office (GO) Regional strategy framework, and in line with national SVS policies and procedures.

2.8. The primary role of the RRM is to ensure that their AHDO is always at the required state of readiness and has the resilience to deal with emergencies caused by animal diseases and also to deal with situations where animal welfare is in jeopardy as a consequence of other types of emergencies. However, the scope of the work undertaken by each AHDO will differ and reflect the particular animal health and welfare needs within the area for which it has responsibility. As a consequence, there may be differences in the responsibilities of RRM from office to office, however their primary responsibilities are as follows:

- To ensure that the AHDO has in place a contingency plan that complements the Defra Contingency Plans and SVS Instructions, arrangements, and supplies to deliver readiness as set out in and measured by the Emergency Response Management Assurance Scheme (ERMAS).
- To ensure that the AHDO has in place business continuity plans to deal with incidents that may interrupt the delivery of services by the AHDO.
- To build effective networks through the Regional Contingency Planning Groups with SVS Contingency Planning Division and with other RRM to share best practice and to ensure that the AHDO's contingency plans and processes are consistent with national policies and procedures.
- In liaison with SVS CPD to assess current coverage and capability of locally based contingency contracts and where necessary to propose additional contractors and thereafter to keep under continuous review.

- To work with the DVM and other staff in the AHDO to plan, organise and deliver AHDO exercises as set out in the National AHDO Exercise Programme.
- To agree and establish with the DVM the role that the RRM would take in an outbreak.

### **Regional Operations Directors (RODs) & Divisional Operations Managers (DOMs)**

2.9. Members of the Senior Civil Service have been appointed for three year terms as contingency Regional Operations Directors (RODs) to take up post in the event of an outbreak of any exotic animal disease covered by this plan to lead the LDCCs. They are each allocated to a group of AHDOs in England. The State Veterinary Service Contingency Planning Division (SVS CPD) maintains a list of RODs.

2.10. Grade 6 Defra staff (or Grade 7s on temporary promotion) have been appointed for three year terms as contingency Divisional Operations Managers (DOMs) to take up posts in the event of an outbreak of any animal disease covered by this plan and to work alongside DVMs to manage the administrative (non-veterinary) part of the operation. Like RODs, they have been allocated to a group of AHDOs in England

2.11. During their period of appointment, the contingency RODs and DOMs will spend 5 days a year training, developing effective links with AHDOs, DVMs and key local stakeholders and taking part in contingency planning exercises.

2.12. Similar arrangements are set up in Scotland and Wales.

### **Veterinary Resource**

2.13. Veterinary staff from Defra policy divisions, the SVS and other government departments will provide the initial emergency response capability.

## **Contingency Local Veterinary Inspectors (CLVIs)- Non Government Veterinary Personnel**

2.14. LVIs will have an important role which will have been negotiated in peacetime.

2.15. In event of outbreak of exotic notifiable disease CLVIs would be called upon immediately to undertake roles that would otherwise be undertaken by wholetime SVS Veterinary staff. The roles could include:

- providing veterinary expertise to teams within the LDCC, e.g. to prioritise tracings or job allocations.
- providing veterinary expertise that can take account of the local situation, e.g. husbandry, geography, marketing, movements etc.
- advice on the disease situation to incoming staff.
- approval of licence applications.
- acting as a point of contact and mentoring for casual or temporary veterinary staff undertaking work in the Field, e.g. Veterinary Inquiries, supervision of slaughter, assessment of dangerous contacts, etc.
- It is not the intention that they will undertake routine field work. Other veterinary surgeons will provide this resource and this work is being taken forward separately.

### **Actions in pre outbreak:**

2.16. *Training* – initially on appointment there will be a significant training requirement for these LVIs. This will need to cover:

- Similar induction to new Veterinary Officers (VOs) (everything from layout of the AHDO/LDCC, through financial procedures in Defra and SVS to policies on Diversity etc).
- Awareness and use of Veterinary Instructions.
- Establishment of LDCC and roles the LVI would fill.

2.17. Up to four contingency LVIs have been appointed to each AHDO. They are offered 3 days training a year and will augment the whole time SVS veterinary resource in the event of an outbreak.

2.18. Their engagement includes:

- Training for suitable roles (excluding Veterinary Inquiries or other Field Work) as part of emergency preparedness and during an outbreak of any exotic disease.
- Providing a rapidly available local veterinary resource for augmenting emergency response in the event of an outbreak.

2.19. *Exercising* – a component of training is the involvement of the LVIs in exercises.

2.20. *Emergency Preparedness*: As the LVIs become familiar with their roles the amount of such preparatory training that is required will decrease. Involvement in exercises will still be required but it is likely that there will be a number of days for which the contingency LVIs are available for other activities (assuming a commitment of 3 days per year).

2.21. The LVIs could be used on these “spare” days on tasks that could lead to an improvement in the wider context of local emergency preparedness.

2.22. In addition to providing advice to the local community on disease prevention, suspicion etc, these staff might be able to act as the Department’s ears, eyes and mouthpiece, listening to local concerns, reporting back to the DVM and putting forward the department’s policies and views.

### **Overseas Government Veterinary and Technical Personnel**

2.23. The International Animal Health Emergency Reserve (IAHER) agreement was signed in 2004 with Ireland, USA, Canada, Australia and New Zealand to provide vets and technical staff in the event of an outbreak of disease. Assistance may also be sought from other EU member States and is arranged by means of direct contact between Chief Veterinary Officers (CVOs).

### **Emergency Volunteers Register**

2.24. In the event of an outbreak of exotic animal disease Defra’s Human Resource Services Division (HRSD), Worcester will co-ordinate action on the redeployment of administrative staff from the Defra Emergency Volunteers Register, and other staff, to the NDCC and to LDCCs. They will also lead on the recruitment of veterinary, technical and administrative personnel except those employed on a short-term (casual) basis who will be recruited locally.



## **TRAINING**

### **SVS Staff (veterinary, technical and administrative staff)**

#### **Veterinary staff**

2.25. Selected individuals attend specific Continuing Professional Development training, e.g. in Epidemiology. Courses are held, as required, to ensure an adequate resource of trained staff. All new veterinary entrants attend a one-day course on exotic viral diseases at the Institute for Animal Health, Pirbright, in addition to general and specific training related to other work areas including training in notifiable disease procedures.

#### **Technical staff**

2.26. Some training packages are now in place and more are being developed for existing staff which would also be suitable for casual staff employed during an outbreak. All new technical staff receive background training in animal disease awareness, this covers the specific roles in a disease outbreak.

#### **Staff involved in finance or procurement**

2.27. AHDO Finance staff will be involved in a training programme, that will ensure they are fully trained to use all appropriate systems such as : Buy4Defra and iExpenses to support the financial management of the outbreak from the initial financial decisions, including setup of the LDCC, and all the subsequent financial information.

They will also be trained to set up the appropriate files to capture financial information that will support any claim to both the EU and HM Treasury and also provide timely, financial management information to senior management. This training is part of an ongoing 'resilience plan'.

#### **Administrative staff**

2.28. Staff in AHDOs are regularly involved in a structured programme of training designed to equip them with the skills and knowledge to provide administrative support during an outbreak situation and to support the requirements for Finance and Management Information. Additionally, there is local and national level exercising of the contingency plan. The FMD Plan in particular, must be exercised at national level at least once every four years under the terms of the EU FMD Directive. Some local offices will also participate in these national exercises, testing their ability to function as a LDCC during a national disease outbreak.

## **Key Administrative, Field & Technical Staff**

2.29. The NDCC and LDCCs will require middle managers who are able to take up key positions on confirmation of disease. Key posts have been identified in the NDCC & LDCCs, together with job descriptions and Day 1 tasks.

2.30. Staff in an AHDO in which an LDCC is being set up, and in the SVS more widely, will be the first to be called upon if disease is confirmed. Key administrative personnel will be expected to take part in contingency testing exercises. This is part of their job descriptions and work objectives.

## **General Field, Technical and Administrative Staff**

2.31. The NDCC and LDCCs will require general field and administrative staff to support key personnel and veterinary colleagues in the eradication of disease.

2.32. The Chief Executive of the SVS will seek Management Board authority to require the release of staff from Defra and Defra Agencies to work on emergency duties. As appropriate, the Management Board will provide clear direction to Divisions, Agencies and work groups, in order that non-essential staff can volunteer their services and be released quickly. First called will be those staff on the Defra Emergency Volunteers Register and those who have left the Department but have said they would wish to be contacted in the event of an emergency.

2.33. SVS HR in conjunction with Defra Shared Services, will lead on coordinating all staffing issues.

2.34. The Department will also make use of the central Memorandum of Understanding on Mutual Aid and the Redeployment of Human Resources, which will be triggered if necessary. This relates to the loan of staff from other government departments.

### **3. ARRANGEMENTS**

#### **Operational Instructions**

3.1. Operational instructions are available for SVS staff. They provide instructions and guidance for key tasks in responding to an outbreak of exotic animal disease.

#### **Contingency Contracts**

3.2. National/Local Contingency Agreements and Supply Contingency Arrangements

3.3. Defra Procurement and Contracts Division (PCD) and SVS Animal Health Divisional Offices (AHDOs) are currently working together to put in place national/local contingency agreements and supply contingency arrangements to meet the foreseeable requirements of an emergency. These suppliers will be vetted and subjected to regular review and appraisal by PCD to ensure their ongoing suitability for use in an outbreak.

3.4. These agreements and arrangements will cover all the relevant supply chains and will include slaughter and disposal, shepherds and gatherers, poultry catchers and ancillary equipment; carcass pick-up and transportation; preliminary cleansing and disinfection (C&D) including pressure washers, mobile units; slurry treatment; lagoon and environmental protection measures; electrical works and technical services e.g. dairy engineers. A list of call-off contracts/agreements and contingency supply arrangements is available on-line for internal use on the PCD intranet site with links to the SVS operational instructions.

3.5. Supplementary lists of preferred and vetted suppliers for use in an emergency situation are also available for internal use. These suppliers are a back-up to the contingency agreements already in place and are likely to be engaged where animal diseases cannot be confined either in number of outbreaks or geographically. The Procurement Emergency Response (PERT) team will be responsible for negotiating robust contracts with these suppliers should the extent of the outbreak require additional supply.

3.6. For each AHDO a list of transport companies is provided indicating the number and type of vehicles that the companies have available for immediate use together with the companies' ability to scale up supply within defined timescales.

3.7. Details of agreements made and preferred suppliers available to AHDOs are on the PCD webpage for internal use. DVMs should liaise closely with PCD to ensure timely, scalable and appropriate supply arrangements in the event of an outbreak of an animal disease covered by this plan. PCD emergency contacts and their details are available for internal use.

## **Equipment and stores**

3.8. *Provisions of stores and equipment at National level:* The SVS has a Service Level Agreement with VLA Weybridge. Under the terms of this agreement equipment required by the SVS to carry out its routine duties are provided within defined time limits. No minimum contingency stocks are held at VLA, but normal routine stocking levels would provide initial requirements. VLA has undertaken to provide as much equipment as possible until emergency contracts with key suppliers take effect. The SVS has a national network of stores facilities.

3.9. *Divisional minimum stocking levels:* At the local level, each AHDO is required to hold or have immediate access to sufficient equipment to deal with up to 10 disease outbreaks in the first 48 hours, including provision for equipping up to 20 additional Veterinary Inspectors. Stock levels are managed by designated local staff, who have day to day responsibility for monitoring availability and serviceability of stores. A new generic stock control system is currently being developed this will provide visibility of all stock held within the SVS allowing for mutual support across AHDOs.

## **Health and Safety**

3.10. On confirmation of an outbreak of exotic animal disease the Departmental Health and Safety Manager (DHSM) will allocate a safety professional(s) to be attached to each LDCC. The name of this person will be passed to the relevant Regional Operations Director (ROD) or Divisional Veterinary Manager (DVM) as will the contact details of the local welfare officer;

3.11. The DHSM will ensure that there is sufficient health and safety professional cover to allow for suitable working patterns

3.12. Where the disease outbreak is a zoonosis, the DHSM will ensure that the relevant arrangements in place with the occupational health provider are put into place and operated consistently throughout Defra. They will also ensure that a similar regime is in place with the Health Protection Agency (if involved) and the HPA and the occupational health provide and maintain appropriate contact.

3.13. The DHSM will provide strategic safety advice and guidance to the Head of Operations in the NDCC. The SVS Health and Safety Manager will have oversight of the operational aspects of the work. The DHSM and the SVS HSM will work together to ensure that risks are appropriately controlled.

3.14. The DHSM will inform the relevant senior managers within the Health and Safety Executive of developments and will ensure liaison between Defra and HSE is undertaken at a national level.

3.15. Depending on the scale of the outbreak the DHSM will arrange for assistance from external health and safety providers.

3.16. The DHSM in liaison with the SVS HSM will ensure that relevant risk assessments and other documentation/arrangements necessary to comply with legislation are produced in relation to the work undertaken by Defra.

3.17. The DHSM and the SVS HSM ensure that the safety professionals in the LDCC work in a co-ordinated manner to ensure consistency of approach.

### **Role of the Safety Professional in LDCC**

- To act as Health and Safety Adviser at the LDCC advising and assisting NDCC Managers to fulfil their H&S responsibilities;
- To provide a contact/liaison point for H&S issues between the local LDCC and national NDCC;
- To liaise with the Departmental Health and Safety Manager, SVS Health and Safety Manager and other safety professionals as necessary (including the occupational health service) to ensure parity of approach for H&S issues across the Department.

### **Job Functions of the Safety Adviser within the LDCC**

3.18. The safety adviser attached to each LDCC will:-

- ensure that health and safety office is established with all necessary facilities including telephone and PC Communications links, files, documentation and dedicated administrative support;
- establish lines of communication with NDCC via head of DHSU (or other nominated safety professional in NDCC), with H&S professionals in other LDCCs, with local HSE, with the occupational health service/ Health Protection Agency (where relevant) and with H&S persons in other organisations working with or under contract to Defra relevant to the locality of work;
- establish a Health and Safety team within the locality, based on risk (numbers will depend on size of emergency within any particular LDCC) drawn from local staff with appropriate experience or from register of available persons with H&S expertise. Any shortfall in numbers of available staff will be identified by the safety professional, who will inform DHSU;
- provide **basic training** to others to enable the health and safety team to function appropriately;
- undertake **safety briefings for all staff from day one** and ensure that these are done on a sufficiently regular basis so that all are briefed on health and safety issues, relevant to the risk, before starting work. These briefings should include the arrangements in place to ensure employee support. Records must be kept of those staff attending briefings;

- organise and deliver under national guidelines (to be agreed via DHSU) more in depth **training and safety briefings for managers and specialist groups locally** e.g. Slaughter teams, C&D teams, Bleeding teams and if necessary outside bodies which may include contractors representatives and military personnel;
- ensure that basic health and safety **information packs** and other local documentation are kept up to date and include centrally issued information and are available/issued to all staff that need them and as far as possible records are kept of those staff issued with the documents;
- ensure that there is **health and safety documentation** relevant for each premises and that all safety reports, records and information are filed appropriately;
- ensure **visits to premises** are undertaken by the local safety team to carry out preliminary inspections;
- monitor compliance of health and safety procedures and assist and advise managers on appropriate safety requirements relevant to the risk;
- attend **management meetings/briefing and debriefing sessions** and ensure that Centre Managers and NDCC (via DHSU) are kept informed and advised on current and anticipated H&S issues and problem areas;
- monitor and assess the **requirements for additional health & safety support** as situations develop/risk increases and ensure NDCC (via DHSU) are kept appraised;
- ensure that the Departmental system for **reporting and recording accidents** is in place and that all staff are aware of accident reporting procedures and accidents are reported appropriately
- assist with **investigation of accidents and incidents** liaising with HSE and other outside bodies as necessary. Feed information back to NDCC via DHSU so that Risk Assessments and work practices can be reviewed and updated.

## Public Health

3.19. In the event of an outbreak of zoonotic disease such as Avian Influenza the Divisional Veterinary Manager of the local Animal Health Divisional Office (AHDO) will notify:

- the Health Protection Agency's duty officer at the Centre for Emergency Response.

- the local Consultant in Communicable Disease Control (CCDC) and Director of Public Health within the Primary Care Trust.

3.20. Upon receipt of a notification of suspected or confirmed avian influenza in birds, the role of the Health Protection Agency is to support Defra and the State Veterinary Service in the investigation and control of the incident in relation to the protection of human health. This support will include the surveillance of influenza diseases in the populations at risk associated with the outbreak, provision of advice and guidance on public health control measures, medical interventions and health advice to the public. Specifically the HPA will:

- Notify the local Health Protection Unit in the area within which the disease is occurring
- Notify the Department of Health
- Liaise with the local Director of Public Health in the area where the disease is occurring as to the steps needed for the protection of human health and communication with the public
- Locally, through the Health Protection Unit and in consultation with the local Director of Public Health and NHS colleagues and Defra's occupational health services, coordinate the investigation of human health implications of confirmed disease in birds and the provision of all necessary medical interventions, such as the administration of antiviral drugs and flu vaccine to those at risk of avian influenza infection including to those at risk of infection as a result of occupational exposure.
- Locally through the Health Protection Unit and in consultation with the local Director of Public Health and DVM, ensure that a joint Incident Control Team is convened as appropriate

### **Worker Protection for Zoonotic Diseases (e.g Avian Influenza)**

3.21. Everyone in contact with diseased birds must follow the precautions detailed in the relevant risk assessment. Because of the possible different strains and varying infectivity of each strain of avian influenza virus to people, a precautionary approach should be taken. Anyone with medical conditions that may increase the risk of infection with avian influenza, such as respiratory disease or a reduced immuno-competence will be advised to stay away from poultry farms, avoid all contact with infected birds and seek appropriate medical advice.

3.22. All who have had, or are likely to have contact with infected birds will need to be provided with information as to how to protect themselves and their families from infection.

3.23. To protect against infection, a hierarchy of control measures are needed which include:

- safe working practice in accordance with the risk assessment
- the wearing of all appropriate personal protective equipment by poultry workers/handlers/cullers/veterinarians;
- safe disposal of used personal protective clothing and equipment
- the use of the antiviral oseltamivir ('Tamiflu') or other appropriate antiviral agent for the prescribed period by all who are considered to be at risk of infection and for whom antiviral therapy is not contraindicated
- vaccination with seasonal flu vaccine of all those considered to be at risk of infection and for whom vaccine is not contraindicated
- monitoring of health status of persons exposed to infected birds
- guidance to those at risk of infection on the personal hygiene measures to be taken to protect their health and to prevent the spread of infection.

3.24. The Joint Committee on Vaccination and Immunisation has advised that in the event of an outbreak of HPAI in poultry, those exposed to infection should be offered seasonal flu vaccine as a precaution against the possibility of co-infection with human flu. Vaccine should be given as soon as possible, either before or at time of exposure, and at least within 48 hours of initial exposure.

3.25. Antiviral therapy should be given as soon as possible, either before or at the time of exposure, and at least within 48 hours of initial exposure.

3.26. Information and guidance for anyone working with poultry that may be affected with avian influenza, may be found at:

<http://www.defra.gov.uk/animalh/diseases/notifiable/disease/HSforal.pdf>

3.27. Persons not employed by Defra should also seek health and safety guidance from their employer's Health and Safety adviser or medical practitioner. Advice is also available from the Health and Safety Executive on their website: <http://www.hse.gov.uk>



## **Laboratory Capacity**

3.28. The Institute for Animal Health (IAH) Pirbright and the Veterinary Laboratories Agency (VLA) at Weybridge provide the diagnostic testing service for FMD. IAH also carries out additional tests (i.e. VNT) on positive or inconclusive serology samples submitted by VLA.

3.29. IAH Pirbright offers an immediate serology capacity of up to 8,000 samples per week. Defra has an agreement with the VLA that they will provide serological testing capacity for FMD on a contingency basis of 120,000 samples per week at three laboratories. The first laboratory would be ready to start testing within three weeks of notification with an initial capacity of 7,000 tests per week, 20,000 tests in the second week and reaching full capacity of 40,000 in the third week. The second laboratory would be operational within 6 weeks and a third laboratory within 8 weeks with the same capacity build up. Full capacity of 120,000 tests per week would be reached by the 10<sup>th</sup> week.

3.30. VLA also provides the diagnostic testing service for Avian Influenza and Classical Swine Fever. IAH Pirbright is the National Reference Laboratory for African Swine Fever and Swine Vesicular Disease.

## **Emergency Readiness Management Assurance Scheme (ERMAS)**

3.31. The aim of ERMAS is to measure the preparedness of AHDOs to operate initially independently in response to an animal disease emergency, to affect the transition to the status of a functional LDCC and to sustain operations at a reinforced level thereafter.

This readiness is measured against an agreed disease scenario. The first round of assessments took place in 2005/2006 and the second is taking place in 2006/2007. In the first year all ADHOs scored amber (in a red, amber, green system) and the target is for all to achieve green in 2006/2007. A separate version of the scheme is being developed to assess the readiness of the SVS central divisions.

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## **4. KEY OPERATIONS**

### **Veterinary Operations**

4.1. During an outbreak of Exotic Animal Disease the Veterinary Operations Team of the National Disease Control Centre (NDCC) coordinates and manages the veterinary aspects of the control, eradication and recovery operation in liaison with the local Divisional Veterinary Manager.

4.2. Depending on the size and scale of the outbreak additional veterinary resource may also be obtained by means of Local Veterinary Inspectors (LVIs) and vets from other countries.

### **Culling (Slaughter)**

4.3. Culling as a disease control measure is carried out on the affected premises under the supervision of a veterinary surgeon. The methods deployed will depend on the species and number of livestock that need to be culled and will take account of the specific site conditions and any resource constraints.

4.4. In most cases the culling will be undertaken by licensed slaughtermen who will be contracted by the department and a range of contingency contracts are in place with licensed slaughtermen and marksmen.

4.5. The following are the main culling methods for cattle, sheep and pigs.

- Lethal injection
- Electrical stun/kill
- Captive bolt followed by pithing
- Use of a free bullet

4.6. Detailed guidance to staff is available in the SVS Operational Instructions and the department has produced an interactive training guide “Getting it right first time, every time” which is available from the Stationery Office.

4.7. For poultry the main options are:

- Maceration (limited to day old chicks)
- Lethal injection
- Neck dislocation

- Percussion killing
- Electrical stun/kill
- Exposure to anoxic gas mixtures

4.8. Under certain very limited circumstances where there is a threat to public health or where resources to combat the disease are severely stretched, the department would consider the use of ventilation shutdown as a method of last resort.

4.9. Many of these options require the birds to be caught and either placed in crates or restrained prior to killing. The department has contingency contracts with a number of specialist catchers and in the event of a major disease outbreak Defra would seek to work with the poultry industry to get additional catchers released from their existing work.

4.10. For poultry there are insufficient licensed slaughtermen and equipment available to provide the capacity that may be required in an outbreak of exotic disease. It is therefore likely that SVS staff will undertake the culling.

4.11. The SVS has 50 containerised gassing units available for immediate deployment as well as a number of specialist percussion killers. The SVS is also working with a number of gas suppliers to enhance its capability to deliver whole house gassing.

4.12. Information on Defra's policies for slaughter can be found at:

<http://www.defra.gov.uk/animalh/welfare/farmed/slaughter.htm>

## **Disposal**

### **Disposal Policy**

4.13. A range of disposal options are available for the disposal of carcasses culled as part of disease control measures. Defra's preferred hierarchy of disposal options for carcasses is

- Commercial fixed plant incineration (animal by-product incinerators)
- Rendering
- Permitted commercial landfill sites.

4.14. Each option is supported by a detailed protocol covering operational considerations. This hierarchy was agreed following the 2001 FMD outbreak and has formed the basis of disposal policy for all exotic diseases since then, it has recently been reviewed by a cross departmental working group and found still to be appropriate.

4.15. Other disposal options available, such as on-farm burial, pyre burning, air curtain burners, incineration in cement kilns and the use of hazardous or municipal incineration etc are potentially also available in certain limited circumstances.

4.16. A number of strategies, such as emergency vaccination, are now available, which could reduce the numbers of animals to be disposed of in an outbreak, and this should mean that these three disposal routes would be sufficient. Although mass pyres will not be used in England in the future, the use of alternative methods of disposal routes, such as on-farm pyres and on-farm or mass burial cannot be completely ruled out if demand exceeds the capacity of the preferred options of incineration/rendering and licensed commercial landfill.

4.17. On-farm pyres and on-farm burial will normally only be considered in remote areas (e.g. The Isles of Scilly) where access to other routes of disposal is limited). Any decisions to use these disposal routes will be taken in consultation with key stakeholders and appropriate environmental and public health assessments will be undertaken at each disposal location prior to use.

4.18. Defra recognises that there are several factors that may impact on the disposal hierarchy in the future. These include the implementation of possible new environmental or waste management legislation and changes to capacity and accessibility of the disposal outlets. The hierarchy will therefore be regularly reviewed, in consultation with relevant stakeholders, to take account of these issues. New technologies and facilities will also be reviewed on a regular basis.

## **Disposal Capacity**

4.19. Disposal capacity is limited and subject to significant seasonal variation. Capacity is also poorly matched to the distribution of poultry within the UK since the main disposal facilities are Category 1 and Category 2 Animal By Product facilities and these tend to be located in areas of high cattle and sheep densities.

4.20. In an outbreak there will be a need to optimise disposal capacity and to work with the disposal industry either to divert existing business to other facilities or to ensure that biosecurity at a particular site is rigorous enough to permit existing waste streams to continue to be received. For diseases such as foot and mouth disease the SVS is likely to require a dedicated disposal site; for some poultry diseases it may be preferable, for operational reasons, for a mixed poultry and mammalian waste stream to be received.

## Disposal options

4.21. **Incineration** - Defra has obtained agreement in principle with most large animal incinerators in GB to dispose of carcasses. The contractual position varies between plants with some having contracts with the Rural Payments Agency (RPA) under the Older Cattle Disposal Scheme (OCDS), some having contracts under the Scrapie Scheme and some having framework contingency contracts which would be invoked in the event of an outbreak. The SVS keeps this list under review and as part of its ongoing contingency and resilience planning. However, incineration capacity is limited and may only be sufficient for small outbreaks involving small premises.

4.22. Operational protocols for use of incineration in an outbreak of an exotic disease have been produced and shared with Environment Agencies and the Association of Registered Incinerator Operators (RIO).

4.23. **Rendering** - Defra has an understanding with a number of major rendering operators to ensure a minimum lead-in time in the event of an outbreak of disease and there are a range of contracts in place through the OCDS and Scrapie Schemes. Procurement and Contracts Division are working with UKRA on a framework contract, which would be used in the event of an outbreak or incident.

4.24. Additional capacity would be arranged as required in consultation with the United Kingdom Renderers Association (UKRA). Readily available disposal capacity varies between 2,500 and 10,000 tonnes per week depending on the time of year, although additional capacity could be brought on stream over a period of weeks. It is unlikely that more than about 16,000 tonnes per week would ever be available for carcase disposal. Local Animal Health Offices have plans in place to invoke this disposal route as required. Operational protocols for use of rendering in an outbreak of an exotic disease have been produced and shared with Environment Agencies and UKRA.

4.25. **Permitted commercial landfill sites** - The use of permitted landfill may need to be considered if incineration or rendering capacity has been exhausted or where the distance from the infected premises to the nearest available facility is considered to be too great or to pose a risk to animal or public health. A protocol detailing the requirements for individual sites has been produced in consultation with the Environment Agencies, the DoH, the HPA, the Environmental Services Association (ESA) and the devolved administrations.

4.26. Amendments to section 57 of the Environmental Protection Act 1990 have been introduced and have extended the SoS's power of direction to require sites to accept carcasses and other wastes. These powers were originally limited to sites subject to waste management licensing, however, as landfills now increasingly operate under the Pollution Prevention and Control (PPC) regime the powers needed to be extended to PPC permits. The availability of powers of direction does not necessarily mean that the powers will need to be exercised since it may be possible to obtain voluntary agreement with site operators subject to the Environment Agency's satisfaction.

4.27. It should also be noted that the SoS powers of direction would only extend to England – Ministers in Wales and Scotland would need to take similar powers.

4.28. **On-Farm Burial** - If incineration and rendering capacity has been exhausted and licensed landfill capacity is limited, it may be necessary to consider on-farm burial. In this event Defra will consult with the EA to ensure that no burial is undertaken until an appropriate risk assessment has been completed and prior written authorisation from the EA has been obtained. All burials would be undertaken in accordance with the relevant EU and national regulations so as to minimise the risk of environmental and public health impact.

4.29. **Pyre Burning** - Pyre burning would not normally be considered in England or Wales until the use of Air Curtain Burners had also been considered, and then only in exceptional circumstances. If it is decided that pyre burning has to be utilised on a limited basis, the SVS operational instructions will be followed. The ROD and SVS field operations staff will consult with local authorities, the Health Agencies and EA and ensure that any burning is undertaken in accordance with the relevant EU and national regulations so as to minimise the risk of environmental and public health impact.

4.30. Advice on air quality issues would be obtained from the local authority in the case of pyres and from the EA in the case of Air Curtain Burners. Pyre burning will not be considered for the disposal of poultry. Defra has no plans to use mass pyres.

### **Arrangements for the disposal of carcasses**

4.31. Subject to the above considerations the NDCC disposal cell will identify suitably approved ABPR and Waste Framework Directive facilities taking account of the proximity of the facilities to the affected premises, the tonnage of carcass material that needs to be disposed and any epidemiological data or modelling which may suggest the likely scale of the outbreak. Once a potentially suitable site is identified the EA, local authority and relevant Defra policy divisions will be consulted to establish whether or not there are any known constraints (e.g. issues over permits, ongoing nuisance or litigation etc.) affecting the use of the facility by Defra.

4.32. Available capacity can however only be assessed on the day, although the SVS regularly reviews capacity generally through stakeholder meetings and local intelligence, accidents, breakdowns and routine maintenance can all have a major effect on disposal capacity.

4.33. Once a site has been identified and the regulatory bodies have confirmed that there are no known issues, the contractual arrangements are finalised with the operator. The local SVS are responsible for reviewing the site biosecurity and ensuring that the plant complies with the disposal site protocols. For zoonotic diseases, HPA are also involved assessing the potential exposure of workers and will issue guidance and prophylaxis as appropriate. Once agreements and

biosecurity protocols are in place, transport will be tasked to deliver the carcasses to the disposal site.

4.34. The NDCC disposal cell will use the disposal hierarchy as a guide, but for large units it will tend to favour rendering since the greater individual disposal capacities available at each rendering plant means that all carcasses from an IP can be disposed of at a single site, whereas it may require 2 or more incinerators to be used – the decision is based on a balance of distance, available capacity at each site, quantity of carcasses to be disposed, forecast culls and the ability of each site to comply with the strict biosecurity requirements. Where possible the closest disposal facility to the IP will be used.

4.35. In an outbreak disposal capacity will be optimised and it is recognised that in the event of demand exceeding supply there will be a need to give priority to rendering and incineration of infected carcasses even if this means that some lower risk wastes e.g. carcasses of welfare culls have to be transported longer distances or are diverted to landfill. The NDCC disposal manager in consultation with the EA and waste management policy officials will take an overview of the disposal of all wastes for which Defra/SVS is responsible for the application of agreed hierarchy and will seek to optimise the utilisation of appropriate disposal capacity.

4.36. For other waste arising, such as the disposal of disinfectant washwaters, where the department is not responsible for waste disposal/recovery joint guidance for the farmers and other individuals responsible for disposal have been produced by the EA and Defra.

### **Livestock Welfare Disposal Scheme**

4.37. Defra is currently considering arrangements for a scheme to prevent deterioration in welfare standards and to ensure that standards of animal welfare are not adversely affected by the imposition of movement restrictions.

### **Transport**

4.38. Defra has in place a series of centrally negotiated call-off agreements with a number of specialist local, regional and national haulage companies. Procurement advisers will identify and procure appropriate transport for carcass disposal in consultation with the NDCC disposal team, the local DVM and the LDCC disposal manager.

4.39. Defra also has an emergency call-off contract in place to supply a national transport logistics manager and supporting regional transport manager(s) - within 36 hours of confirmation of an outbreak. The regional transport managers will take over responsibility for all transport logistics and tasking from the local DVM. There is sufficient transport capacity to transport around 50,000 tonnes of carcass material per day.



4.40. Each vehicle would be leak-tested prior to being loaded and would travel by a pre-determined route to the chosen disposal facility. Each vehicle would also be escorted and the driver would carry a transport incident record card, which advises police and emergency services of any precautions that should be taken in the event of a serious road traffic accident or incident.

## **Valuation**

4.41. The State Veterinary Service holds and maintains a list of approved valuers, which is subject to review on an annual basis. In the event of an outbreak all valuers on the list will be contacted to ensure they are still eligible for approval and to remind them of their responsibilities.

4.42. Valuations of animals slaughtered for control of FMD or CSF must be undertaken only by a Valuer from the approved list.

4.43. In order to ensure consistency in delivery of valuation policy the Department has appointed four Monitor Valuers (these appointments are reviewed on a regular basis, at least every three years). Although initially based in London, the Monitor Valuers may visit LDCCs as necessary, depending on the extent of the outbreak.

4.44. For valuation of poultry, rate cards will be used.

4.45. Defra is currently undertaking a review of animal disease valuation and compensation procedures with a view to rationalising and simplifying them. Part of this process will be to look at the case for compulsory standard valuations. This would remove the need for individual valuation by approved valuers in many cases and would reduce the risk of disease spread by speeding up the slaughtering process.

## **FMD Emergency Vaccination Operations**

4.46. Genus plc was appointed to implement any future vaccination programme for FMD under the Direction of the SVS. The contract was let in May 2004 for a period of 3 years and is now being extended for a period of 2 years.

4.47. Under the terms of the contract, Genus are required to be operationally ready to implement a programme of emergency vaccination within 5 days of an outbreak, if requested. As a first response, some 50 (3 person) teams and 60 vets have been recruited and trained. Genus have also built up a register of an extra 360 staff who are on standby to assist if an outbreak occurs. We also have a provision to require Genus to ramp up the level of response to meet any reasonable disease scenario at 4 to 5 days notice.

4.48. A detailed emergency vaccination plan for FMD can be found at **Annex A**.

## **Classical Swine Fever Vaccination**

4.49. Vaccination would not normally be considered as a control measure in the current CSF control strategy. CSF vaccination is restricted by legislation, which states that no person shall administer a CSF vaccine to any pig unless authorised to do so by the Secretary of State.

4.50. In exceptional circumstances, emergency vaccination may be considered, for example where there was a dramatic increase in the number of premises being confirmed each day or in areas of very high pig density areas during a prolonged epizootic. This would need to be approved by the Secretary of State.

4.51. Since emergency vaccination is not likely to be used in the UK there are currently no operational arrangements in place to mount a widescale CSF emergency vaccination programme in the event of an outbreak in Great Britain.

4.52. However, in accordance with our obligations under obligations under the provisions of EU Classical Swine Fever Directive 2001/89/EC, a detailed vaccination plan for CSF can be found at **Annex B**.

## **Information Management/ Information Technology**

### **Disease Control System (DCS)**

4.53. DCS is the key Management Information System to be used in the event of an outbreak. There are currently three similar DCS systems: the CSF DCS, the FMD DCS and the Diseases of Poultry (DP) DCS. The appropriate system would be used in the event of a disease emergency.

4.54. The system records all actions taken to control the disease in relation to each premises affected and provides reports on the progress of the disease and its management. DVMs will ensure that AHDO staff are familiar with the functionality of DCS, requesting additional staff training from SVS Learning and Development Unit (SVS LDU) as appropriate. A separate standalone database is in existence for use by the FMD vaccination contractor.

4.55. Preventative contingency measures for system failure of all DCSs are in place at the national level. These include the use of a cluster server, which enables mirroring between two web servers and databases. This will ensure that should one fail, the second will take over. In addition, the back up routine that is in place means that the risk of data loss in cases of total failure is minimal.

## **Vetnet Tracing Verification System (VTVS)**

4.56. A system for the tracing of animals - Vetnet Tracing Verification System (VTVS), updated and enhanced during the 2001 outbreak of foot and mouth disease to take account of vehicle and personnel movements, is used for tracings on a day-to-day basis. A project to review further tracings work has been initiated, with a view to encompassing both endemic and exotic diseases. There is also now an Avian Influenza Tracing System (AITS).

## **Geographical Information System (GIS)**

4.57. GIS is a key component of the departments delivery response and trained operators are now available in all regions. SVS GIS Operators will liaise with the State Veterinary Service Business Development Division (SVS BDD) for IT hardware/software support and configuration.

## **Firearms**

4.58. As result of a review of the use of firearms by all SVS Animal Health Divisional Offices (AHDOs), it has been decided that all AHDO's should take the following actions:

- Dispose of all free bullet weapons within the SVS by making arrangements with or through the Police.
- Review existing stocks of captive bolt and dart guns in order to minimise stocks to meet core requirements only.
- Review and ensure that sufficient contractual arrangements exist to fill any gaps created by the above two actions.
- Deliver a consistent standard of training in the following:
  1. the effective use and management (inc. transportation) of captive bolt and dart guns;
  2. their storage and security.
- Ensure that there is sufficient expertise within Divisions to allow the SVS to meet supervisory obligations in managing any free bullet contractual arrangements.

4.59. A training programme is now being developed for AHDO staff by the State Veterinary Service Contingency Planning Division (SVS CPD), in close liaison with

the Health & Safety and Learning & Development Units, which focuses on effective contract management, health and safety issues associated with the management of slaughter contracts, and the storage, transport and use of captive bolt guns and dart guns as set out in the firearms protocol.

## **Rural Issues**

4.60. During any outbreak of animal disease Defra pays close consideration to the needs of the rural communities affected. Defra's policies to assist rural communities in such situations can be found at <http://www.defra.gov.uk/rural/stress/default.htm>

## **Biosecurity**

4.61. In order to limit the spread of disease, strict biosecurity arrangements must be enforced upon farms where disease control work is taking place. Cleansing and Disinfection is carried out on all affected premises. Defra's policies on Biosecurity can be found at

<http://www.defra.gov.uk/animalh/diseases/control/biosecurity/index.htm>

## **Animal Welfare**

4.62. Defra is committed to ensuring that the welfare of animals is considered at all times in its methods of disease control. For all involved with the keeping of livestock, there is a responsibility to anticipate problems and to take steps to mitigate the effects. Guidance will be issued by Defra to farmers in advance of, or in the early stages of, movement restrictions being put in place. If welfare problems arise, which cannot be alleviated by management or husbandry practices, farmers will be given the opportunity to move their animals under licence. Such movements will include movement to slaughter for the food chain or to more suitable land or buildings. If it is more appropriate fodder may be taken to the stock and Defra will assist in facilitating access to fodder and bedding.

Information on Defra's animal welfare policies can be found at :

<http://www.defra.gov.uk/animalh/welfare/default.htm>

## **5. MAJOR DEVELOPMENTS OVER THE PAST YEAR**

### **The State Veterinary Service, Defra, and its agencies, working in partnership**

#### **Exercises**

##### **National Exercises**

5.1. The EU FMD Directive 9474/03 requires Member States to exercise their FMD contingency plans twice within a five-year period although there is derogation allowing one of these real-time exercises to be for another “major epidemic disease affecting terrestrial animals” (Annex XV11 par. 11.2.3).

5.2. Exercise Hawthorn, a national exercise to test the avian influenza elements of the contingency plan took place in April 2005. Although originally designed as a two-day event, the exercise was aborted at close of play on 5 April because the UK’s Chief Veterinary Officer (CVO) took the decision to end the exercise to ensure all necessary resources were brought to bear on a real Avian Influenza incident.

5.3. The exercise concentrated on a period three days into a confirmed outbreak in order fully to consider the disease control operations and the human health implications.

5.4. The three command and control levels of the contingency plan - strategic, tactical and operational - were exercised including the strategic response of the Devolved Administrations. At the tactical level the Joint Co-ordination Centre and key policy elements of the National Disease Control Centre were established in Defra’s Page Street building and the Emergency Co-ordination Centre Wales was established at the Welsh Assembly Government offices in Cardiff. Local Disease Control Centres were established in three SVS Animal Health Divisional Offices (Bury St Edmunds, Leeds and Cardiff) and a partial Centre was set up in Gloucester.

5.5. The National Disease Control Centre that had been established for the exercise in London immediately switched to deal with the real event and support the operational response in Scotland where a swan was indentified as being infected with Avian Influenza. This follows the established contingency plans of both Defra and SEERAD.

5.6. Feedback from participants and observers of Exercise Hawthorn was very encouraging. There was agreement that it was a well-planned exercise and was successful in meeting its objectives up until the point it was brought to a premature end because of real events in Scotland.

5.7. A report has been produced to summarise the lessons learned from Exercise Hawthorn and can be viewed at:

## **Local Exercises**

5.8. The State Veterinary Service Contingency Planning Division began a programme of coordinated animal disease exercises for the Animal Health Divisional Offices in April 2006 in order to demonstrate the Agency's emergency preparedness to deal effectively with outbreaks of animal disease. The programme requires:

- Full-scale exercises that are :
  - Jointly run, i.e. 2 or more Animal Health Divisional Offices (AHDOs) participating
  - Operational Partners and industry involved
  - With the majority of the AHDO involved
- Each AHDO to take part in at least one full-scale exercise a year.
- The testing of plans for the 8 diseases that are deemed to be a high priority for contingency planning.
- SVSCPD to sign-off the high-level objectives and priorities for each of the full-scale exercises through sight of each Project Initiation Document (PID).
- AHDOs to use a project management approach for each exercise.
- AHDOs to work together with operational partners in their region to plan and execute the exercises.
- AHDOs to liaise with SVSCPD to set lower level objectives.

5.9. Regional Planning Groups send lessons identified from exercises, in the form of an Exercise Evaluation Report to SVSCPD and the National Planning group shares lessons, updates plans and sets best practice.

## **Responding to Outbreaks of Disease**

5.10. Over the past year Defra has successfully deployed its contingency plans and operational instructions in order to respond to minor incidents of avian influenza including a case of H5N1 in Cellardyke, Scotland in April 2006 and the discovery of the H7 virus in poultry flocks in Dereham, Norfolk in May. The lessons learned from these experiences have been incorporated in the continued development of plans and instructions.

## Annex A

### FOOT & MOUTH DISEASE (FMD)- EMERGENCY VACCINATION

1. In accordance with the provisions of EU Foot and Mouth Disease Directive 2003/85/EC, the following sets out plans for an emergency vaccination programme.

2. Genus PLC have been appointed to implement any future vaccination programme under the direction of the SVS. Under the terms of the contract, 50 teams (150 staff) have been trained by Genus to be operationally ready to implement a programme of emergency vaccination within 5 days of an outbreak, if requested. In addition, 61 veterinary surgeons will be provided to support these teams to check for disease prior to vaccination and to direct the work of lay teams in the field. We also have a provision to require Genus to ramp up the level of response to meet any reasonable disease scenario at 4 to 5 days' notice.

3. As part of the management of the FMD vaccination operation the contractor has established a Health and Safety Policy. This policy has been drawn up to cover risk assessments for pre-vaccination visits by vets, for farm vaccinators, on handling facilities and maintain the necessary documentation to accompany this. The contractor will comply with best practice and all relevant provisions, whether statutory or otherwise, relating to health and safety at work. Specific H&S training is provided for all staff.

4. Upon confirmation of FMD the contractor responsible for emergency FMD vaccination will be notified by the Director Contingency Planning Division to set its plans in action to establish the required structures and organisation, numbers of vets and team members within the agreed time.

5. The vaccination contractor will notify its pre-appointed and trained vets, team leaders and vaccination members of the situation, brief them of the current situation, and provide refresher training on bio-security measures and on-farm vaccination. Specialist training covering vaccination, tagging and data recording will also be provided. All external contractors will be required to make themselves familiar with all Health and Safety requirements and will be provided with Biosecurity Protocols. All local recruits to vaccination teams must meet, and confirm in writing that they comply with, specified criteria including no contact with susceptible livestock for 3 days prior to starting the programme, during the programme and for 3 days after completion.

6. For vaccination, the contractor will provide 3 portable forward vaccination centres capable of being relocated to areas of the country where vaccination

services are required, to enable a vaccination programme to commence on day 5 of an outbreak. Each forward vaccination centre comprises of:

- a transportable 'office' equipped to accommodate up to 12 staff to be involved with the control scheduling and reporting of vaccination activity and the provision of necessary supplies;
- a transportable 'mess room' providing basic facilities (rest room and canteen) for staff and for use for meetings. The Mess Room will also be the operational centre for a small team of reserve Vaccinators responsible for control, cleaning, disinfection and distribution of handling equipment;
- a secure equipment storage facility, consisting of hired containers;
- a secure location for clinical waste.

7. Additionally, a range of suitable sites are currently being investigated for use as vaccination centres. In doing so, consideration will be given to the following factors:

- good road access to the target area(s) and to any satellite centres - where possible, within the target area;
- appropriate security systems (day and night);
- parking;
- office accommodation for management and administrative staff;
- appropriate IT and telecoms facilities;
- secure refrigerated storage facilities for vaccine;
- storage facilities for equipment (vaccination kits, personal protection equipment, footbaths, buckets, tagging and inspection equipment, etc.);
- facilities for mixing, storage and safe disposal of disinfectant;
- suitable area for plunge disinfection of Personal Protective Equipment (PPE) and subsequent drying;
- suitable area for vaccination team dispatch.

## **Equipment**

8. The Vaccination Contractor is required to supply, store and distribute the necessary equipment to support a vaccination programme and to replace items as they reach the end of their shelf life or have been found to deteriorate. The Contractor will appoint Stores Managers to maintain these stores - which will hold enough equipment to supply 50 vaccination teams and veterinary surgeons for at



least the first 5 days of a vaccination programme - and will have in place contracts for the replenishment of those stocks within 48 hours.

9. Defra will remain responsible for the maintenance of call -off contracts for disinfectant, ear tags and applicators, mobile handling facilities and vehicles to tow mobile facilities complete with disinfectant containers and power washers and call off contracts are currently being put in place for this purpose.

## **Personnel**

10. The vaccination contractor is in a position of being operationally capable of vaccinating on day 5 following confirmation of disease. To arrive at this state of readiness sufficient vaccinators and support staff have been trained to provide 50 teams and some 60 vets have been recruited to support this first response team. Working under the overall control of the SVS, the role of these vets will be to conduct pre-vaccination farm visits, to check for any overt signs of disease, and also to be responsible for the veterinary direction of vaccination teams in the field. The vaccination contractor also has the capability to ramp up the number of vaccination teams to meet any reasonable disease scenario within 4/5 days of notification.

11. A Health and Safety Team will be established by the vaccination contractor as part of the management of operational aspects. This will consist of a Manager and 2 other trained H&S consultants. This team will produce risk assessments for pre-vaccination visits by vets, for farm vaccinators, on handling facilities and maintain the necessary documentation to accompany this. The vaccination contractor will comply with best practice and all relevant provisions whether statutory or otherwise, relating to health and safety at work and shall ensure that employees and sub-contractors also comply and shall produce evidence of such compliance if asked to do so.

12. All external contractors will be provided with, and will make themselves familiar with, Biosecurity Protocols.

13. To ensure that emergency vaccination could be implemented without delay in any future outbreak, the Veterinary Surgeons Act 1966 and the Medicines Act 1968 have been amended.

14. This allows non-veterinary personnel to handle and administer FMD vaccine and in particular will allow vaccine to be supplied and administered by lay vaccinators who:

- Are 18 years of age or over
- Are acting under the direction of a veterinary surgeon
- Have obtained a certificate of competence from a veterinary surgeon

15. All casual staff recruited by the contractor must meet specified criteria, including no contact with susceptible livestock for 3 days prior to starting the

programme, during the programme and for 3 days after completion. They must sign to say that they comply.

16. Defra will convey the scope and policy of the project to the vaccination contractor, and confirm the approach to be taken. This will involve providing vaccine delivery arrangements. Defra will also keep the vaccination contractor informed of all suspect and confirmed cases as they occur and will keep the vaccination contractor informed of current policy and changes which may affect field operations.

### **Vaccine Supplies and Emergency Vaccination Arrangements**

17. The UK has its own stocks of 9 different strains of FMD antigen, adding up to over 20 million doses held on its behalf by a commercial supplier. In addition, the EU Vaccine Bank holds a wide range of antigens for emergency use. The number of doses available and strains is kept under review, including taking advice from IAH Pirbright on those strains of FMD which present the greatest risk to the UK. As soon as the FMD strain responsible for the outbreak is identified and it has been confirmed that one of the antigens held in the UK bank will afford protection, the supplier will be instructed to formulate vaccine. Vaccine formulation by the designated external contractor takes 4 days.

18. A call-off contract is in place with the external contractor for the delivery of vaccine (stored at the correct temperature) to the vaccination centre.

19. When a vaccination zone is set up, a vaccination surveillance zone of at least 10 km width surrounding the vaccination zone must be designated.

20. Upon establishment of the emergency vaccination zone, the vaccination contractor will then produce a complete list of holdings within selected parishes (or other agreed area to be targeted) in the Vaccination Control Zone and identify those with animals that require vaccination as advised by Defra. This information will be drawn together from the following sources, which Defra will provide access to, where appropriate:-

- Defra Census Data;
- The Rural Payments Agency (RPA);
- Cattle Tracing System (CTS);
- Integrated Administration and Control (IACS) data;
- Defra's Disease Control System (DCS) on Infected Premises and Dangerous Contacts;
- Contextual datasets, such as Ordnance Survey (OS), Boundary Line (to produce parish and county boundaries), and OS raster map products.
- List of holdings containing a breeding nucleus of animal genetic resources (rare breeds).

21. The vaccination contractor will then contact farmers to arrange visits (giving 3 days notice where possible) and check animal handling facilities.
22. Pre-vaccination visits by veterinary surgeons appointed by the vaccination contractor will be arranged to carry out inspections which will detect suspected FMD and to exclude these from the vaccination programme.
23. Teams will be withdrawn from farms where clinical signs of FMD have been discovered. In doing so, biosecurity protocols must be followed (i.e. remove traces of organic matter from clothing, equipment, disinfect and remove any protective clothing at gate, wash wellingtons, waterproofs and equipment (inc. vehicles) with an approved disinfectant, and place all items for disposal into a clinical waste bag, which should then be sealed for disposal. Teams would be redeployed after suitable biosecurity protocols have been followed and a 72 hour break.
24. Where FMD is not found, vaccination teams will be deployed to carry out vaccination, record animal numbers, collect and return records. Vaccinated animals will be ear-tagged in a manner outlined in the FMD (Control of Vaccination) (England) Regulations 2006 and advised by Defra. For identification purposes, vaccinated cattle will also have their details recorded on the cattle passport and, for all animals, on the Defra disease control database. However, in an outbreak situation where the disease has been rapidly brought under control it will not be necessary to administer booster doses.
25. Under the current UK Marketing Authorisation conditions, FMD vaccine is authorised for use as a multi dose vaccine i.e. the initial vaccine is followed by a second 3-4 weeks later, and a further booster after six months (or every 4 weeks after the initial vaccine is administered in the case of pigs.) However in an outbreak situation where the disease has been rapidly brought under control it will not be necessary to administer booster doses.
26. The vaccination contractor will also provide progress reports and ad hoc management information to NDCC at Page Street by 18.00 hours daily.

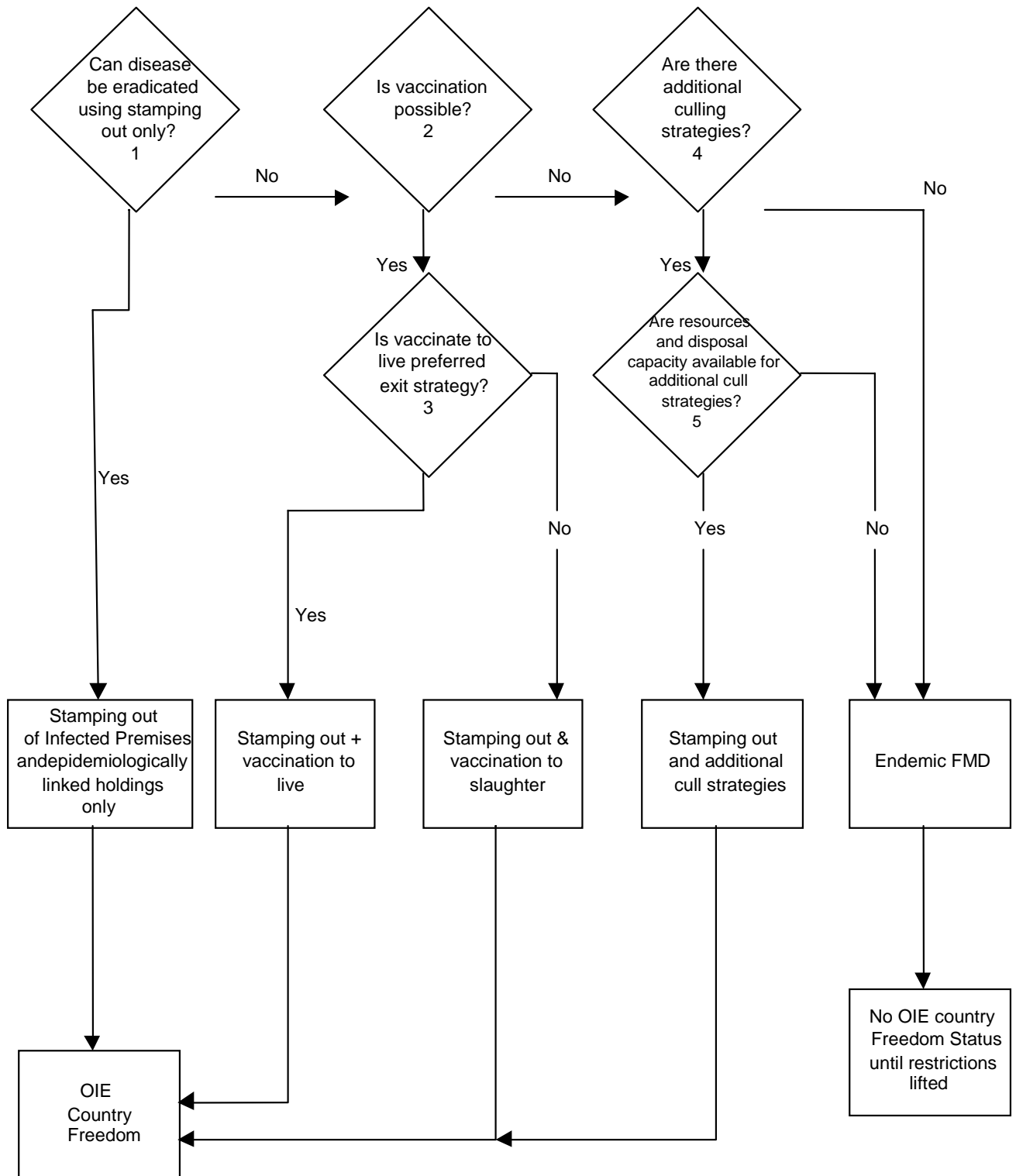
## **Timing**

27. The vaccination contractor is required to be operationally capable of vaccinating on day 5 of an outbreak with at least 17 vets (although a reserve of over 60 vets has been recruited) and sufficient trained vaccinators and support staff for 50 teams. Working under the overall control of the SVS, the role of these vets will be to conduct pre-vaccination farm visits, to check for any overt signs of disease, and also to be responsible for the veterinary direction of vaccination teams in the field. As emergency vaccination is to be considered as an option from the start of any future FMD outbreak, the vaccination contractor will be placed on standby by the Contingency Planning Director as soon as disease is confirmed. The particular strain of the FMD virus would need to be identified and the vaccine would need to be formulated before vaccination could begin.

28. Veterinary advice to Ministers will be based on epidemiological evidence and it is unlikely to be immediately available. It is probable that gathering epidemiological data, veterinary assessment of this epidemiological data, the use of the Decision Tree and the development of advice on the strategic deployment of vaccination make it unlikely that vaccination could begin until more than five days after the first confirmed case.

# DECISION TREE FOR THE USE OF EMERGENCY VACCINATION DURING AN OUTBREAK OF FOOT AND MOUTH DISEASE (FMD)

**Note: Start at top left decision - diamond box**



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## Annex B

### CLASSICAL SWINE FEVER (CSF)- EMERGENCY VACCINATION

1. In accordance with the provisions of EU Classical Swine Fever Directive 2001/89/EC, the following sets out plans for an emergency vaccination programme.
2. Both the EU Directive and our domestic legislation permits the use of vaccination as a disease control measure in certain circumstances. The primary disease control measure that would be adopted would be a slaughter policy of infected and dangerous contact pigs. The option to use vaccination would be considered regularly by the CSF Expert group at its meetings and would take account of Annex VI of Council Directive 2001/89/EC which lists the main criteria and risk factors to be considered for the decision to apply emergency vaccination in pig holdings.
3. A decision to use emergency vaccination would therefore be considered in any of the following circumstances:
  - a) disease had become well established in the country and there were was a dramatic increase in the number of premises being confirmed each day
  - b) disease was established in an area with a high density of pigs e.g. Humberside
  - c) the predictions from disease modellers and epidemiologists suggest that it would take more than 2 months to bring the outbreak under control.
  - d) there was a shortage of rendering or incineration capacity such that infected animals could not be processed after being slaughtered.
4. If emergency vaccination was to be adopted the CSF expert group would consider the extent of the geographical area in which the emergency vaccination is carried out and would make recommendations to the CVO. They would also make recommendations on the categories of pigs to be vaccinated and the duration of the vaccination campaign.

The latter would be affected by the number of premises to be vaccinated, the number of vaccination teams deployed and the availability of vaccine.

5. In evaluating potential vaccines it is imperative that the vaccines used are effective and rapid at stimulating a good protective immunity in the vaccinated animal. It is also important that a vaccinated animal should not become infected when challenged by a field virus as such an animal may not develop clinical signs but be infectious as the field virus replicates and contaminates the environment. It is also essential that a vaccine should prevent congenital infections via the trans-placental infection of field virus which could result in persistently infected carriers and shedders of field virus.
6. There are two types of vaccines currently available – the live attenuated and the sub-unit vaccines. Of these, the live attenuated type is better at stimulating a rapid immune response. The sub-unit vaccines induce a slow immune response and need two vaccinations to produce full protection. This effectively means that the sub-unit vaccines are not suitable for use in emergency conditions due to the slow onset of immunity and the need for two vaccinations to induce full protection. In addition, these vaccines reduce clinical signs and mortality but do not prevent infection. Vaccinated pigs are therefore still capable of shedding infection and, in the case of sows, of producing persistently infected piglets.
7. At the present time the only Classical Swine Fever vaccines which are authorised for use are two sub-unit vaccines. These vaccines were authorised by the European Medicines Agency. There are no live attenuated vaccines approved for use in the UK. In an emergency situation the CVO would therefore need to assess the risks and benefits of using the authorised vaccines for emergency use in relation to the perceived risks of using the unauthorised conventional product which has demonstrated better efficacy in terms of onset of immunity and protection.
8. At the present time it is likely that GB would only use suppressive vaccination to control this disease. This means that vaccinated pigs would be marked and then slaughtered. This is necessary because of the reasons mentioned above.
9. The choice of vaccine to be used would be reviewed regularly by the CSF Expert group as they evaluate any new marker vaccines that are produced and marketed and tests which can effectively differentiate between an infected animal; a vaccinated animal; a vaccinated and infected animal and a non-infected and non-vaccinated animal. At the time of writing Commission Decision 2003/22/EC provides for the setting up of a Commission vaccine bank that should contain 1,000,000 doses of the live attenuated classical swine fever vaccine. This country would be able to call on this vaccine bank.



## **Implementation plans for vaccination**

10. Consideration is being given to the detailed arrangements which would need to be put in place to implement an effective vaccination programme for CSF. In particular in mounting a vaccination programme the duration and scale of operation will determine whether there is a need to augment existing resources with external contractors. There are also issues surrounding the health and safety of vaccinators in the field, equipment, accommodation, vaccine availability and biosecurity which need to be addressed.

## **Training of vaccination teams**

11. We will build on the existing training programme devised for foot and mouth disease vaccination teams to produce training modules for other diseases including CSF.

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## **GLOSSARY**

<b>AHDO</b>	<b>Animal Health Divisional Office</b>
<b>AHO</b>	<b>Animal Health Officer</b>
<b>AI</b>	<b>Avian Influenza</b>
<b>ASF</b>	<b>African Swine Fever</b>
<b>C&amp;D</b>	<b>Cleansing and Disinfection</b>
<b>CLVI</b>	<b>Contingency Local Veterinary Inspector</b>
<b>CSF</b>	<b>Classical Swine Fever</b>
<b>DC</b>	<b>Dangerous Contact – These are animals of susceptible species which are believed to have been exposed to infection.</b>
<b>DCS</b>	<b>Disease Control System</b>
<b>Defra</b>	<b>Department for Environment Food and Rural Affairs</b>
<b>DHSM</b>	<b>Departmental Health and Safety Manager</b>
<b>DHSU</b>	<b>Departmental Health and Safety Unit</b>
<b>DOH</b>	<b>Department of Health</b>
<b>DOM</b>	<b>Divisional Operations Manager</b>
<b>DVM</b>	<b>Divisional Veterinary Manager</b>
<b>EA</b>	<b>Environment Agency</b>
<b>ESA</b>	<b>Environment Services Association</b>
<b>EU</b>	<b>European Union</b>
<b>FMD</b>	<b>Foot and Mouth Disease</b>
<b>FSA</b>	<b>Food Standards Agency</b>
<b>GIS</b>	<b>Geographic Information Systems</b>
<b>H&amp;S</b>	<b>Health and Safety</b>
<b>HASANS</b>	<b>Defra Departmental Health and Safety Notices</b>
<b>HO</b>	<b>Home Office</b>
<b>HPA</b>	<b>Health Protection Agency</b>
<b>HQ</b>	<b>Defra Headquarters</b>
<b>HR</b>	<b>Human Resources</b>
<b>HSE</b>	<b>Health and Safety Executive</b>

<b>IAH Pirbright</b>	<b>Institute for Animal Health, Pirbright</b>
<b>IP</b>	<b>Infected Premises</b>
<b>JCC</b>	<b>Joint Coordination Centre</b>
<b>LA</b>	<b>Local Authority</b>
<b>LACORS</b>	<b>Local Authorities Co-ordinators of Regulatory Services</b>
<b>LASSA</b>	<b>Licensed Animal Slaughterers and Salvage Association</b>
<b>LDCC</b>	<b>Local Disease Control Centre</b>
<b>LVI</b>	<b>Local Veterinary Inspector</b>
<b>MOD</b>	<b>Ministry of Defence</b>
<b>MP</b>	<b>Member of Parliament</b>
<b>NAO</b>	<b>National Audit Office</b>
<b>NCC</b>	<b>News Co-ordination Centre</b>
<b>ND</b>	<b>Newcastle Disease</b>
<b>NDCC</b>	<b>National Disease Control Centre</b>
<b>NEEG</b>	<b>National Emergencies Epidemiology Group</b>
<b>NFU</b>	<b>National Farmers Union</b>
<b>NWMT</b>	<b>National Wildlife Management Team</b>
<b>OD(W)</b>	<b>Operations Director Wales</b>
<b>OGD</b>	<b>Other Government Department</b>
<b>PCD</b>	<b>Procurements and Contracts Division</b>
<b>PERT</b>	<b>Procurement Emergency Response Team</b>

**“Pre-emptive” or “preventative slaughter” “firebreak” cull**

	<b>This involves the culling of animals which are not on infected premises nor are dangerous contacts or necessarily exposed to the disease, in order to prevent the wider spread of disease outwith an area. Use of this power is described by a Disease Control (Slaughter) Protocol as required by the Animal Health Act 1981, as amended.</b>
<b>Preliminary cleansing and disinfection</b>	<b>Biosecurity procedures put in place during the slaughter and disposal of animals and the initial treatment of contaminated areas of a premises with disinfectant.</b>
<b>PZ</b>	<b>Protection Zone</b>
<b>RCU</b>	<b>Regional Co-ordination Unit (Office of the Deputy Prime Minister)</b>
<b>RDS</b>	<b>Rural Development Service</b>
<b>RIDDOR</b>	<b>Reporting of Injuries, Diseases and Dangerous Occurrences Regulations</b>
<b>ROD</b>	<b>Regional Operations Director</b>
<b>RPA</b>	<b>Rural Payments Agency (Defra Agency)</b>
<b>RSAP WG</b>	<b>Rural Stress Action Plan Working Group</b>
<b>SAC</b>	<b>Science Advisory Council (Defra)</b>
<b>SAPER</b>	<b>Science Advisory Panel for Emergency Response</b>
<b>Secondary Cleansing &amp; Disinfection</b>	<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>
<b>SEERAD</b>	<b>Scottish Executive Environment and Rural Affairs Department</b>
<b>SEPA</b>	<b>Scottish Environment Protection Agency</b>
<b>Sitrep</b>	<b>Situation Report</b>
<b>SCOFCAH</b>	<b>Standing Committees on Food Chain and Animal Health</b>
<b>SVD</b>	<b>Swine Vesicular Disease</b>
<b>SVS</b>	<b>State Veterinary Service</b>
<b>SVSCP</b>	<b>State Veterinary Service Contingency Planning Division</b>
<b>TVI</b>	<b>Temporary Veterinary Inspector</b>

<b>VA</b>	<b>Veterinary Adviser</b>
<b>VExDD</b>	<b>Veterinary Exotic Diseases Division</b>
<b>VLA</b>	<b>Veterinary Laboratory Agency, Weybridge</b>
<b>VO</b>	<b>Veterinary Officer</b>
<b>VTVS</b>	<b>Vetnet Tracing Verification System</b>
<b>WAG</b>	<b>Welsh Assembly Government</b>
<b>WAG EPC</b>	<b>Welsh Assembly Government Environment Planning and Countryside Department</b>
<b>WCC</b>	<b>Welsh Co-ordination Centre</b>