FOOT AND MOUTH DISEASE CONTROL STRATEGY FOR NORTHERN IRELAND

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1. Introduction

1.1. Purpose and structure of the document

This document describes how a suspect case and outbreak of Foot and Mouth Disease (FMD) would be managed in Northern Ireland (NI) and the measures to be applied within the framework of European Union (EU) and domestic legislation. It also describes the measures and wider framework in place for reducing the risk of an incursion of FMD.

The strategy aims to provide information on the policies to be applied so all those affected by an outbreak of FMD can be better prepared to respond quickly and effectively to control it, mitigating the likely impact of the control measures.

A glossary of terms and acronyms used in the strategy is contained in Annex 1.

1.2. **Approach**

Northern Ireland is recognised as a separate epidemiological unit from the rest of the UK and would liaise with the Republic of Ireland during an outbreak of FMD in either or both jurisdictions. It is recognised by the Department of Agriculture, Environment and Rural Affairs (DAERA) and the Department of Agriculture, Food and Marine (DAFM) that sustained co-operation between both administrations would be essential to reduce the further spread of FMD.

The strategy reflects existing legislation, setting out control measures to be put in place from the point of suspicion of FMD through to NI/UK regaining disease freedom. The strategy is intended to be a living document. DAERA seeks to ensure that policies and its preparedness to deliver them are regularly reviewed to ensure they remain fit for purpose.

The strategy reflects various pieces of legislation which set out the control measures to be implemented when FMD is suspected or confirmed in NI (see Annex 2).

1.3. Strategic fit

This control strategy is consistent with the following:

- Compliance with European law and international obligations to trading partners.
- Ongoing obligations for the welfare of animals.
- DAERA's epizootic disease contingency plans

1.4. Disease Strategic Control Framework

1.4.1. Disease management principles

Managing epizootic diseases primarily involves managing risk. Epizootic diseases are defined as those not normally present in the country and therefore risk management for FMD consists of:

- reducing the likelihood of an outbreak of FMD by putting in place measures to prevent an incursion, which includes our Portal controls and to detect it quickly if it should occur.
- being prepared to reduce the impact of an outbreak.

1.4.2. Disease control objective

DAERA's primary objective in tackling any outbreak of FMD will be to eradicate the disease as quickly as possible and regain disease-free status. In doing so, DAERA will act swiftly and decisively, in partnership with its operational partners and stakeholders:

- to minimise the overall cost of the outbreak and the burden on the taxpayer and public as well as the economic burden of the outbreak on the food, farming and tourism industries and the wider economy;
- to protect the health and safety of the public and those directly involved in controlling the outbreak.

In delivering this objective, the disease control measures will seek to:

- minimise the number of animals that need to be culled either for disease control purposes or to safeguard animal welfare;
- minimise adverse impacts on animal welfare, the rural and wider economy, the public, rural communities and the environment.

1.4.3. Approach to disease control

- Early detection and prompt reporting of suspicion of FMD to limit the extent to which disease can spread before controls are applied, thereby limiting the size and duration of the outbreak;
- Containing disease at premises where it is detected and eradicating it swiftly and
 effectively through humane culling of susceptible animals on the infected
 premises and animals identified as "dangerous contacts";

- Limiting the risk of any further spread of disease from premises connected with, or in the vicinity of, the infected premises (through movement bans, application of cleansing and disinfection and heightened biosecurity measures);
- Considering from the outset, whether vaccination as an extra control measure would help to control and eradicate the disease in the circumstances relating to the specific outbreak situation;
- Undertaking risk assessments based on epidemiological evidence and modelling before easing restrictions;
- Continuing heightened surveillance on premises in the controlled zones before easing restrictions on a phased basis;
- Taking decisions about control measures with regard to costs and benefits;
- Complying with EU obligations and the World Animal Health Organisation (OIE) Terrestrial Animal Health Code.

2. Foot and Mouth Disease (FMD)

FMD is a highly infectious, notifiable vesicular disease of domestic ruminants (cattle, sheep, goats etc.) and pigs, other farmed cloven-hoofed mammals and wild ruminants. It is a significant economic disease due to its ability to spread very rapidly and its profound effect on productivity. A very small quantity of the virus is capable of infecting an animal, and the disease could spread rapidly throughout the country if it is not controlled quickly.

Seven distinct serotypes of the virus have been identified. The clinical signs of FMD are similar to other vesicular diseases and confirmation of diagnosis can only currently be made following laboratory tests. Affected animals have a high fever, which is followed by the development of blisters mainly in the mouth and on the feet. In some species however (notably sheep and goats), the disease is less severe or occurs as a subclinical infection.

Some strains can give rise to high levels of mortality in young animals. In adult animals the disease is not usually fatal, however it causes severe pain and distress, especially in cattle, and animals may be left permanently lame with reduced productivity following recovery.

Information about clinical signs is available here: www.daera-ni.gov.uk/articles/foot-and-mouth-disease

FMD is not considered a public health threat. The Food Standards Agency advice is that FMD is not transmitted to humans through the food chain.

2.1. **Spread of disease**

The virus is present in great quantity in the fluid from the vesicles, and it can also occur in the saliva, milk and dung. Contamination of any objects with any of these secretions or excretions is a danger to other susceptible animals. Heat and disinfectants will destroy the virus, whereas cold and darkness tend to keep it alive. Survival of the virus in the environment depends on a range of factors and is highly variable. Under field conditions, this can range from days to months.

The virus can be transmitted on formites (an inanimate object capable of transmitting infectious organisms from one individual to another, for example, vehicles and farm equipment), as well as mechanically by animals and other living vectors. Animals can pick up the virus either by direct contact with an infected animal, or by contact with foodstuffs or other things which have been contaminated by an infected animal, or by eating or coming into contact with some part of an infected carcase.

Airborne spread of the virus can also occur and, under favourable climatic conditions, the disease could spread several miles by this route.

2.2. **Tests**

2.2.1. National Reference Laboratory Service

Northern Ireland does not have the facilities to test suspect FMD samples. DAERA's Veterinary Service have an arrangement with AFBI for samples to be packaged and transported to the National Reference Laboratory (NRL) in Pirbright, Surrey for testing.

2.3. Laboratory tests

FMD will be confirmed through the use of internationally recognised and validated tests carried out at the national reference laboratory. There are three types of laboratory test: two detect the presence of virus and one detects the presence of antibody produced by an infected animal in response to infection (antigen ELISA and virus isolation and PCR type tests). The criteria for confirming disease are set out in EU and domestic law.

Initial results can be reported as early as 4 to 6 hours of the samples arriving at the laboratory.

3. Maintaining disease freedom

3.1. **Introduction**

Where appropriate, or required by EU legislation, countermeasures as described below are in place which aim to reduce the risk of the introduction of FMD into NI.

3.2. Vigilance and prompt reporting

Vigilance by livestock owners for clinical signs of FMD in their animals is vital in early detection of disease and limiting spread. Suspicion of notifiable disease must be notified promptly to their local Divisional Veterinary Office (DVO) or their local Private Veterinary Practice (PVP) so that the presence of notifiable disease can either be ruled out or detected quickly.

3.3. Livestock movements, identification and tracings

There are several pieces of legislation that cover animal gatherings, transport and disease control in NI. They are related to livestock movement restrictions and the times required before animals can be moved onto or away from premises in order to eliminate the potential spread of disease.

3.4. **PORTAL Controls**

DAERA portal staff implement the following import controls to prevent the introduction of epizootic disease:

- Documentary, identity and physical checks on imported EU livestock and horses at Larne and Belfast ports;
- Documentary, identity and physical on Products of Animal Origin in line with EU legislation from non-EU countries at Belfast port and Belfast airport border inspection posts;
- Checks on International Catering Waste at NI ports and airports; and
- Checks on passenger luggage at NI airports in compliance with EU regulation 206/2009. To assist in these controls DAERA are now using a food detector dog.

More information is available at: www.daera-ni.gov.uk/articles/introduction-identification-registration-and-movement-animals

3.5. **Biosecurity**

Relevant biosecurity measures should be practised as a matter of routine. Trucks, lorries, market places, and loading ramps - in or over which infected animals may have travelled - are a disease risk until properly cleansed and disinfected. Roads may also become contaminated, and virus may be picked up and carried on the wheels of passing vehicles.

The boots, clothing, and hands of any person who has been in contact with infected animals can spread the disease. Horses, dogs, cats, poultry, wild game and vermin may also carry infection.

There is a range of regulatory measures to help reduce the risk of spread of any notifiable disease before it is detected (silent spread) and to help with tracing of animals if any incursion was to occur. These include requirements for cleansing and disinfecting means of transport under The Transport of Animals and Poultry (Cleansing and Disinfection) Order (Northern Ireland) 2007. The Sales, Market and Lair Order (Northern Ireland) 1975 (as Amended) specifies the requirements for cleansing and disinfecting at markets and lairs.

Guidance on biosecurity is available at: www.daera-ni.gov.uk/articles/biosecurity.

3.6. International surveillance and monitoring

With regards to outbreaks of FMD in other countries, DEFRA monitors the international disease situation and provides this information to DAERA. For outbreaks of FMD in an EU Member State (MS), a country bordering the EU or a trading partner, more in-depth veterinary risk assessments may be carried out by DEFRA and provided to DAERA. These are designed to give a balanced account of the threat of the disease to UK at present and in the future. Both assessments and if necessary, a veterinary risk assessment (VRA) carried out by Veterinary Service (VS) are used to inform DAERA's decision on the risk level of FMD in NI and inform the consideration of preventive controls.

Any changes to the level of risk of the introduction of FMD into NI must be underpinned by risk assessment as set out above. Stakeholders will be updated on such changes.

3.7. **Trade**

Various measures are put in place to ensure that imported animals and products of animal origin do not present unacceptable risks to the health of other animals or to people and thus maintain our animal and public health status. Further information on imports can be found at: www.daera-ni.gov.uk/articles/introduction-importing-animals-and-animal-products

3.7.1. Trade within the European Union (Intra – EU trade)

If a MS experiences an outbreak of FMD, EU legislation sets out the measures that must be adopted by that MS to prevent the spread of the disease, and the EU may impose additional safeguard measures.

Intra-EU trade in livestock and genetic material must be accompanied by veterinary certificates (Intra- Community Trade Animal Health Certificates - ITAHCs) indicating they do not come from holdings that are located within areas under restriction for outbreaks of FMD and other diseases. Meat, dairy products and most other animal by-products from susceptible species may also require ITAHCs under the safeguard measures.

3.7.2. Imports to Northern Ireland from outside the European Union

Imports are only permitted from a restricted list of countries from outside the EU which meet EU standards for the control of FMD. Import of live animals and genetic material are not permitted from countries with FMD. Meat and dairy products are allowed from certain countries outside the EU that have areas of FMD provided that they are listed under EU legislation and the products are treated in such a way to inactivate any FMD virus present. These countries are subject to inspection missions by the Food and Veterinary Office of the European Commission to ensure that these conditions are met.

Livestock, other FMD-susceptible animals, genetic material and animal products (including by-products) imported into the EU must enter at designated Border Inspection Posts, where they are subject to veterinary inspections. All consignments are subject to documentary and identity checks to ensure that the conditions of import, set out by European legislation, are met.

3.7.3. Imports to Northern Ireland from Great Britain

Import licences are used to control imports from GB. These licences state the conditions which must be complied with so that animals can be imported. Livestock imports such as cattle, sheep, goats and pigs can only be imported in accordance with a Specific Import Licence, which is issued to a particular importer for a particular consignment. This licence usually remains valid for 21 days but can only be used for a single consignment. The importer must apply in writing for a licence prior to importing the animals. Upon landing in Northern Ireland, the person responsible for the consignment at the time of importation must report to a DAERA portal inspector at the port of entry. These import licences for FMD susceptible animals and products are suspended immediately if there is an outbreak of FMD in GB.

3.8. Control of pathogens

Movement of samples containing (or which might contain) FMD to laboratories is regulated and controlled under the Specified Animal Pathogens Order (Northern Ireland) 2008 as amended (SAPO) and Importation of Animals Pathogens Order (Northern Ireland) 1999 (IAPO).

4. National Expert Group (NEG) on FMD

A permanently operational NEG on FMD provides specific technical and scientific advice and recommendations on FMD, its transmission and control to inform policy development outside of an outbreak, as well as specific disease control and other measures during an outbreak. The group comprises veterinary and scientific experts from AHVLA and IAH Pirbright, including epidemiologists and virologists. Other experts, for example, on outbreak modelling, meteorologists, economists, other scientific experts may also participate in the group. The group's advice plays a crucial role in the decision making process in the event of an outbreak. Further information about expert groups and the decision making process is set out in contingency plans.

5. Stages of an outbreak: Suspicion phase

5.1. **Suspicion**

Suspicion of FMD or any signs of a notifiable vesicular disease in a susceptible animal must be notified immediately to the local DVO. A Veterinary Officer (VO) will then discuss the clinical signs and health status of the suspect animal over the phone with the person reporting the suspicion. The report will be forwarded to Epizootics DVO and based on these discussions, the Epizootics DVO will assess the information and will either rule out FMD or request an Epizootic VO attend the premises to undertake a full disease investigation.

5.2. Suspect Premises (SP)

After arriving at the premises and carrying out the initial investigation, if the VO is unable to rule out disease, this will be reported to the Epizootics DVO. The Epizootics DVO will report to the CVO who will make the decision if samples are to be taken. The VO will also serve a notice on the occupier of the premises designating it a Suspect Premises (SP) and explaining the legal requirements that will remain in place until either disease has been ruled out or disease is confirmed. The measures include:

- Putting up warning signs at the entrance to the SP 'Foot and Mouth Disease Keep Out';
- Maintaining records of animals (including those that die) and related products, fodder etc on the premises;
- Isolation and detention of animals where the VO asks them to be kept;
- Preventing the movement of any susceptible animals onto or off the premises (although immediate licences may be considered on specific welfare grounds – e.g. cows for milking);
- Providing a method of disinfection at the entrances and exits to the places where the animals are kept;
- Preventing any vehicle, person, equipment or material (feed, slurry etc) liable to spread disease from moving on to or off the farm. Essential movements may be possible under licence issued by the local DVO;
- Control rodents on the premises.

5.3. **Epidemiological inquiry**

Information is gathered so that an epidemiological inquiry can begin. This inquiry will progress if disease is confirmed and will look to determine:

- Period during which FMD may have been present on the premises;
- The origin of disease;
- Any other premises which may have been contaminated from the same origin;
- The extent to which other susceptible animals may have been infected or contaminated;
- Any premises to or from which disease may have been carried;
- Any other premises suspected to be contaminated; and
- Whether any premises under inquiry comprise two or more separate production units to ensure all the animals involved are identified, examined and restricted.

5.4. **Zones on suspicion of disease**

If samples are submitted for laboratory testing because FMD cannot be ruled out then a Temporary Control Zone (TCZ) will be put in place around the SP. The Department will declare an area around those premises of such size as it considers fit to prevent the spread of disease. Within the TCZ, movements of susceptible animals to and from premises (including into or out of the zone) are not allowed except under licence (see Annex 3).

A Supplementary Movement Control Zone (SMCZ) may also be established at suspicion stage, restricting the movement of animals in a wider area. This would include the TCZ and be of such size as the Department considers fit to prevent the spread of disease. We do not currently envisage circumstances where a SMCZ would be put in place.

5.5. **Communication**

There will be public notification (through press release and website) of suspicion of FMD as soon as the TCZ has been declared.

5.6. Suspicion at slaughterhouses

At a slaughterhouse, all animals present will be slaughtered quickly and the meat isolated whilst investigations are undertaken. No meat is allowed to be removed from the premises until the VO is satisfied that meat to be moved is not at risk of spreading FMD virus. Meat and by-products that have come from suspect animals, or may have come into contact with such meat, will be isolated within the slaughterhouse pending the outcome of the investigation. The place of origin of any suspect animals will also be investigated. The Food Business Operator is advised to

maintain the meat in suitable conditions to ensure that the meat remains fit for human consumption if disease is negated and the meat is released for sale.

If FMD is confirmed, this meat and any other by-product from the animal will be disposed of.

5.7. Suspicion at temporary residences

If disease is suspected at an animal gathering (e.g. livestock market or show), it will be treated in the same way as any other suspect premises and restrictions will be put in place (see paragraph 5.2).

If disease is suspected at a veterinary practice or other place where animals have been sent on a temporary basis, proportionate measures will apply according to the risk.

In all cases, the place of origin of the suspect animals would also be investigated.

5.8. **Negative Test Results to disease investigations**

If laboratory tests and veterinary investigations do not indicate the presence of FMD any longer (or the virus of any other notifiable vesicular disease), restrictions on the premises will be lifted.

6. Stages of an outbreak: Confirmation

6.1. **Confirmation**

If the laboratory tests indicate the presence of FMD virus, the Chief Veterinary Officer (CVO) will confirm an outbreak of FMD.

6.2. International notification obligations

The CVO notifies the CVO in DEFRA and the CVO in DAFM. The CVO in DEFRA will notify the European Commission (EC) and the World Organisation for Animal Health (OIE). Regular reports are submitted to the EC and the OIE as the outbreak progresses. On notification of disease to the EC and OIE, the UK will lose its disease-free status for FMD and EU safeguard measures will be put in place.

6.3. Exports to other European Union countries

As a general rule, exports of all live animals, genetic material, meat and dairy products (including personal exports), and animal by-products will be prohibited from the restricted areas by the EU safeguard measures. Meat, milk, genetic material and animal by-products produced at least 21 days prior to incursion of virus, or such commodities produced outside the restricted area, or treated to inactivate the virus may continue to be traded - subject to additional official certification or endorsements of commercial documentation, as required by the safeguard measures. Special marks may need to be applied to packaging. Government will provide guidance to industry on how to comply with the requirements.

6.4. Exports to Great Britain from Northern Ireland

As a general rule health certification is required for susceptible species and their germplasm. Meat and milk can be moved to GB on a commercial document. It is expected that GB would ask for guarantees from NI similar to those required if the outbreak was in any other Member State.

6.5. Exports to countries outside the European Union

Export health certificates agreed with countries outside the EU vary and reflect the destination country's import conditions. Some countries may suspend imports from the UK even though export health certificates could in theory be signed.

6.6. **Zones**

The following zones will be put in place on confirmation of disease at an Infected Premises (IP) to limit spread of disease. A summary of the restrictions on the movement of animals, animal products and anything else which can spread disease is at Annex 3 and 4. The restrictions are stricter close to infected premises:

- A Protection Zone (PZ) mandatory on confirmation of disease unless the premises are a slaughterhouse or premises where animals have been directed following suspicion in an animal in transit, will cover a minimum of 3km radius from the IP.
- A Surveillance Zone (SZ) mandatory on confirmation of disease unless the premises is a slaughterhouse or premises where animals have been directed following suspicion in an animal in transit, will cover a minimum of 10km in radius from the IP.
- Restricted Zone (RZ) may be declared to implement a movement ban in NI at the beginning of any FMD outbreak.

6.7. Confirmation of FMD in the Rol

Where disease has been confirmed in the RoI and the IP is located near the border with Northern Ireland, the Department will declare zones as applicable. These zones (whether protection or surveillance) will extend from the border to the required distance and size as measured from the IP.

6.8. Infected Premises (IP)

On the premises where disease is confirmed, restrictions already imposed on the premises will remain in force. Susceptible animals will be humanely culled. Their carcases will be disposed of and preliminary disinfection will be carried out on the farm. The epidemiological investigation will continue to seek to establish where the disease came from and where it may have spread.

6.9. **Culling of animals**

There are a number of considerations taken into account when culling animals for disease control purposes, these include:

- Human health and safety considerations for those involved in the operation on the IP:
- Rapid response animals need to be culled as soon as possible to reduce the risk of spread of disease;
- Animal welfare is subject to strict legal controls;
- The risk of spread of disease to other premises must be minimised during the culling on farm;
- The risk of spread through the wild animal population

EU law permits DAERA to consider sparing certain limited categories of animal from culling, if it can be proven that doing so will not increase the risk of spread of disease. DAERA maintains the Northern Ireland Breeds at Risk Register (NIBARR) for this reason. The NIBARR can identify any rare breeds during a disease outbreak. These categories are limited to susceptible animals kept for scientific or conservation purposes in specific types of premises, for example, laboratories, zoos, wildlife parks. The decision to exempt animals from culling will be based on the outcome of a VRA which will consider the situation on individual premises as well as other factors such as wider disease control measures and impact on trade.

6.10. **Disposal of carcases**

Carcases will normally be disposed of by commercial incineration, rendering or licensed commercial landfill. Every effort will be made to ensure that on-farm pyres or mass burial are not used in the future but this cannot be completely ruled out if demand exceeds the capacity of the preferred disposal options. Disposal will follow the hierarchy of disposal in the DAERA contingency plan.

6.11. Compensation and valuation

Compensation provisions for animals culled for disease control purposes are set out in the Diseases of Animals Order (Northern Ireland) 1981. This provides that:

- where the animal slaughtered was affected with FMD, the compensation will be the value of the animal immediately before it became affected;
- in every other case, the compensation will be the value of the animal immediately before it was slaughtered.

Compensation will be paid for anything that has to be seized and destroyed by DAERA because it poses a risk of transmitting disease and cannot be cleansed and disinfected. This will be at the value of the item at the time of seizure (that is in its contaminated state, which often means the item has no value).

Compensation is not paid for any meat, milk or by-product that is required to be disposed of following trace investigations of potential sources of disease spread (see 6.13).

6.12. **Preliminary cleansing and disinfection**

After the carcases have been disposed of, preliminary disinfection of the premises is carried out by DAERA and at DAERA's expense. This involves a full cleansing and spray down with approved disinfectant of the areas in which infected animals have been and the areas used for culling.

6.13. Contact Premises

As a result of the epidemiological inquiry, other premises are often identified where the infection may have come from or spread to. These are regarded as contact premises. The spread to or from the IP can arise through many different methods including movement of live animals, people, farm equipment, vehicles, slurry/manure etc and geographical location of the farm (e.g. an adjacent farm where stock have nose to nose contact or under a virus plume from infected pigs).

When a contact premises is identified though tracings from the IP, an assessment will be made about the level of risk that any susceptible animals may have been exposed to. If susceptible animals may have been exposed, restrictions will be served on the premises:

- i) If the risk of exposure is very high the premises would be considered a dangerous contact and the animals culled;
- ii) However, if the level of exposure is not deemed high enough to warrant culling, the premises and animals will remain under restriction and their health status will be monitored (regularly inspected for signs of disease) for 3 to 4 weeks from the last known contact with the IP and may also be sampled on an epidemiological basis.

6.14. Tracing of potentially infected material from an IP

Milk and milk products, meat and meat products, carcases, hides, skins, wool, and genetic material derived or collected from susceptible animals from the IP will be traced. Once traced the owner will be required to either dispose of them, or treat them as directed to kill any virus that may be present. This includes meat, milk or other products at the IP that were produced from susceptible animals originating from the IP or in some cases originating from other farms where the infected premises product has been in contact with such products. Compensation is not paid.

6.15. Access to the Countryside

In the event of a disease outbreak there will be a presumption in favour of access to the countryside. Rights of way or land to which the public have a right of access will be closed on IPs and access to IPs would be limited to essential visitors and vehicles, observing strict disease prevention (biosecurity) measures. Access to all other businesses, premises and transport networks within the zones would remain open with appropriate biosecurity measures in force. Access will also be limited on any other premises where restrictions are in place.

Rights of way in the PZ would only be closed with the permission of the Department and following the advice from a veterinary risk assessment.

7. Stakeholder awareness and communication

A range of information is already available on the DAERA website about the signs and symptoms of FMD and appropriate biosecurity measures: www.daera-ni.gov.uk/articles/foot-and-mouth-disease

During an outbreak, information will be made widely available to all livestock owners, PVP's and other stakeholders about the disease control measures in place, for example, movement restrictions and licensing. A letter will be sent to herdkeepers in the zones. Livestock keepers have a responsibility to stay informed during an outbreak. Information will be available through a range of different channels, but in particular, the DAERA website www.daera-ni.gov.uk.

Additional information setting out clearly the responsibilities and restrictions applicable to IPs and those within the zones will be provided to owners/occupiers. Owners will be advised of the results of any FMD tests performed on their animals and what the results mean.

General information will also be made available to members of the public concerned, for example, about access to the countryside, preventing spread etc.

8. Vaccination

8.1. **Introduction**

Routine, preventative vaccination is banned under EU law, allowing the EU to maintain the highest FMD status under international trade rules of "countries free from foot-and-mouth disease without vaccination". However, DAERA is legally obliged to consider whether vaccination would assist disease control and activate arrangements to implement vaccination from the outset of an FMD outbreak.

Consideration of vaccination and activating delivery arrangements does not mean it will be appropriate to implement an emergency vaccination campaign. Vaccination would not replace the policy of stamping out disease on infected farms and their dangerous contacts. A decision to vaccinate is a very complex one and is likely to be finely balanced. It will be based on a combination of expert veterinary and scientific advice, as well as the results of modelling, and economic analysis and stakeholder views. A very wide range of factors will be taken into account in assessing whether vaccination would have a beneficial impact on disease control, including the availability and efficacy of a suitable vaccine. If a decision were to be taken to carry out emergency vaccination, this is most likely to be on the basis of protective vaccination i.e. vaccination to live. There are major negative trade implications in the event of a decision to vaccinate.

8.2. Why vaccinate?

In certain circumstances, vaccination can play a major role in controlling FMD by:

- Inducing immunity and protecting animals against infection with FMD;
- preventing or reducing the amount of virus produced by infected animal, thereby reducing the likelihood of spread to other animals.

This may contribute to:

- reducing the overall impact of the outbreak (the combined impact and costs of the disease and control measures on everyone affected);
- reducing the number of animals required to be killed during an outbreak.

8.3. Capability to deliver an emergency vaccination campaign

The European Commission (EC) has recently substantially increased antigen stock levels in the EU FMD vaccine bank, based on recommendations from the World Reference Laboratory, the IAH. This means it is no longer necessary for the UK to maintain its own stocks of antigen.

In the event of an outbreak and following detailed analysis of the circulating virus, IAH will advise whether there is suitable antigen in the EU FMD vaccine bank that could prove effective against the field strain.

Access to the EU bank would be through a request to the EC from any MS. The reasons for a decision on vaccination would be published along with details any proposed campaign.

In the extremely unlikely event that there was no suitable antigen available through the EU vaccine bank, additional vaccine could be requested from FMD vaccine banks in other countries.

8.4. When to vaccinate

It is vital that, if a decision to vaccinate were taken, that vaccine is deployed at the right time. For a highly contagious disease like FMD, it is essential that the vaccination campaign is completed quickly after it is started so that the vaccinated animals in the Vaccination Zone (VZ) develop an effective immunity. In cattle, there is good immunity 4 days after being vaccinated and this rises to very good levels of immunity after 7 days.

If deployed **too soon** it is possible that vaccine is used in an area where the benefits are less than those in an area where disease is becoming established but has yet to be diagnosed.

If deployed **too late** it is possible that disease becomes established within the VZ at the time of vaccination and hence all the benefits from vaccinating are lost.

8.5. Where and how to vaccinate

Geographical spread and rate of transmission will need to be considered as well as the population density of susceptible livestock and a range of other factors.

Depending on the nature of the outbreak, experts will advise on the number of, location and size of the VZs, as well as the delivery strategy to be deployed within those zones.

8.6. Controls and restrictions in an emergency vaccination campaign

These are summarised at Annex 3. Any decision to vaccinate will be published and will set out the conditions under which the vaccination campaign will be undertaken. Any such decision will include:

- details of the vaccination zone(s) within which the campaign is to be carried out; the species and age of animals to be vaccinated;
- the proposed duration of the campaign; and
- details of how vaccinated animals will be identified as well as outlining how the specific controls listed below will be implemented.

A vaccination surveillance zone of at least 10 km in width will also be put in place around a vaccination zone. This zone and its restrictions remain until FMD- free status is achieved.

Once vaccinated, live animals cannot be traded either within the EU or Internationally. EU safeguard measures will be in place restricting non-heat treated meat and meat products to the domestic market for most of the duration of an outbreak.

9. Pre-emptive culling

FMD is a highly contagious disease that is easily transmitted through contact or by wind, and may spread rapidly in a susceptible population. During an outbreak, susceptible species exposed to, or in contact with, infected animals are at significant risk and infected animals may excrete virus before symptoms are obvious. Pre-emptive culling is a means to prevent spread under such circumstances.

Pre-emptive culling will be used on livestock in proximity to, or having potential contact with infected animals. This may include animals on neighbouring premises, in a designated zone, or those identified as dangerous contacts.

Where possible, a risk assessment will be undertaken by a VO on each premises highlighted for possible culling.

The decision to pre-emptively cull livestock will be authorised by the CVO.

Vaccination is preferred to pre-emptive culling of animals. We do not currently envisage seeking to use pre-emptive culling powers.

10. Stages of an outbreak: Exit strategy

10.1. **Premises**

IP restrictions will remain in place until final cleansing and disinfection is completed in accordance with the directions of DAERA inspectors. Final cleansing and disinfection is the responsibility the Department.

10.2. **Zones**

The restrictions on other premises in PZs and SZs cannot be lifted until an epidemiological survey has been concluded with negative results in all holdings keeping animals of susceptible species and situated within the PZ. Regular inspections will take place from the time the disease is suspected. Specifically:

- The PZ cannot be merged with the surveillance zone until at least 15 days after preliminary cleansing and disinfection of the IP and then only if no disease is suspected or confirmed and the results of any samples taken are all negative;
- The SZ must remain in force for at least another 15 days although again it will remain in force if further disease is suspected or confirmed in the area;
- Note: meat and milk produced from animals originating in the zones remains restricted until such time as the required treatments have been applied.

10.3. Welfare of animals

All keepers of livestock have a duty of care to their animals. They should anticipate problems (including those associated with disease control movement restriction measures) and make appropriate plans to mitigate the effects. This should form a routine part of their business planning processes. This could, for example, include arrangements relating to extra accommodation or feed.

In the normal course of business, a farmer would expect to assume responsibility where it becomes necessary to cull stock for welfare reasons. The introduction of disease control measures does not alter this obligation and normal business planning should cover action necessary to protect the welfare of animals in the event of an emergency.

There will be an initial period during any disease outbreak where the movement of all susceptible animals is prohibited. This may give rise to the risk of welfare problems and farmers should have their own contingency plan for mitigating such problems through management or husbandry practices. These might include building or utilising temporary housing or taking additional fodder to the stock.

When the disease risk permits, farmers will be allowed to move their animals under license requiring strict biosecurity to slaughter or possibly to other farm premises.

If all other options are exhausted and welfare problems are still a risk, farmers should be prepared to undertake welfare culling on farm. This should only be carried out by an appropriately trained and qualified person holding the appropriate slaughterman's licence by an approved method and using suitable equipment. Guidance will be provided on the most appropriate route for disposal of such carcasses and licenses issued if necessary.

Farmers will still need to make arrangements for dealing with fallen stock and in the event of a disease outbreak guidance will be issued through the National Fallen Stock Co. (http://www.nfsco.co.uk/). However, If the animal was suspected of being infected or died from a notifiable disease the local DVO office must be notified.

Government would only consider introducing a Livestock Welfare Disposal Scheme to facilitate slaughter and disposal of animals as an absolute last resort when all other options have been exhausted, and only if necessary to prevent an unacceptable deterioration in welfare standards. If introduced, a disposal scheme would only apply to animals that cannot be moved under license to a slaughterhouse. It is likely that no payment will be made to farmers for animals slaughtered under such a scheme. The conditions of the scheme will be determined at the time.

10.4. Licensing

At the start of any outbreak, there will be a high degree of uncertainty about where FMD may exist. The position will start to become clearer as tracings, surveillance and the epidemiological investigation progress. Changes will be informed by veterinary risk assessment and the advice of the NEG on FMD, will depend on the disease situation and will be subject to adherence to strict conditions. Decisions on changes can only be made when the epidemiological position for any particular outbreak indicates that the risk of spread can be adequately mitigated by biosecurity conditions. It is essential that restrictions remain in place as long as necessary to ensure the disease can be controlled and eradicated as quickly as possible.

Changes in movement restrictions can be expected to be phased. The first phase will be limited to those activities which need to happen at the beginning of any outbreak to address immediate animal welfare needs, for example, movement of dairy cows for milking, transport of feed to animals within zones or very low risk activities, collection and processing of milk.

Restrictions can be expected to be eased incrementally as certainty about the outbreak increases. Low risk movements will be considered, for example, movements direct to slaughter within a short distance, before higher risk movements to live.

Government will address issues relating to ensuring what operations industry can reasonably continue to carry out during an outbreak through discussion with the stakeholders in N.I.

11. Resumption of Exports

11.1. Exports to other European Union countries

While some products may be placed on the Internal EU market under certain conditions during the initial phases of an outbreak, the Commission is likely to take safeguard measures banning trade in live FMD susceptible animals from the whole of GB. Once disease control zones are lifted, and provided that any additional safeguard measures imposed on the UK during an outbreak have also been lifted, exports can resume.

11.2. Exports to countries outside of the EU

Export health certificates agreed with countries outside of the EU vary and reflect the destination country's import conditions. Some countries will suspend UK imports even though export health certificates can be signed. During outbreaks of FMD, Government will liaise with exporters, British Embassies overseas and veterinary authorities of the relevant countries to keep export markets open and facilitate exports as far as possible. Experience has shown that getting an FMD-related ban lifted requires a lot of effort and resource for certain countries outside the EU. Priority will be given to those markets most important to exporters, as decided by a government-industry partnership called UK Export Certification Partnership (UKECP) which was founded in October 2008 following the 2001 and 2007 FMD outbreaks in the UK. Customer Information Notes are issued on Government websites to inform exporters about trade restrictions. Government's role in such discussions with these countries will continue for a significant period of time following an outbreak of FMD.

11.3. Regaining disease freedom

The OIE sets out requirements which determine whether a country is regarded as disease free: OIE Terrestrial Animal Health Code – FMD Chapter. www.oie.int/index.php?id=169&L=0&htmfile=chapitre fmd.htm.

How quickly a country regains its FMD free status depends upon how long it takes to eradicate the disease and also on the disease control strategies used. International disease free status can be recovered:

- three months after the last case where culling of animals on infected premises and dangerous contacts ("stamping out") and surveillance are applied;
- three months after the slaughter of the last vaccinated animal where stamping out, serological surveillance and emergency ("suppressive") vaccination is used;
- six months after the last case or the last vaccination (whichever is latest) where stamping out and "protective vaccination" to live is used, provided that serological surveillance based on the detection of FMD non-structural proteins demonstrates the absence of infection in the remaining vaccinated population.

12. FMD in Wild Animals

Under current wildlife disease surveillance arrangements, any unusual mortality or disease observed in a wild animal would be investigated. During an outbreak of FMD the presence of susceptible wild animals will be taken into account in considering appropriate control measures and possible spread of disease.

If it is suspected that wild or feral animals may be infected with FMD, surveillance will be carried out on susceptible species hunted or found dead, for example, from road traffic accidents, to confirm or rule out infection. If FMD were to be confirmed in a wild animal, a Wild Animal Infected Zone will be declared. This will be of an appropriate size to prevent the spread of disease. Controls to be applied in the zone are summarised in Annex 3.

Experts will advise on the most appropriate disease eradication methods for the species involved and the geographical location.

Annex 1: Glossary of terms

CVO	Chief Veterinary Officer. Head of Veterinary Service and is responsible for veterinary advice to ministers and policy colleagues on all aspects of animal health and welfare
СР	Contact Premises. Premises where the infection may have come from or spread to.
DAERA	Department of Agriculture, Environment and Rural Affairs
DAFM	Department of Agriculture, Food and Marine (Rol)
DEFRA	Department for Environment, Food and Rural Affairs
Designated (e.g. slaughterhouse)	During an outbreak, such premises can be designated by DAERA only if they meet high standards of biosecurity and traceability. If the relevant movements are licensed by DAERA, premises in disease control zones may only send animals/products to a designated place (e.g. slaughterhouse).
DVO	Divisional Veterinary Office
EC	European Commission. An executive of the European Union with responsibilities including proposing legislation and implementing decisions.
EU	European Union
FVO	Food and Veterinary Office of the European Union
FMD	Foot and Mouth Disease
FSANI	Food Standards' Agency Northern Ireland. An independent government department set up to protect the public's health and consumer interests in relation to food.
GB	Great Britain: England, Scotland and Wales.
Index case	The index case is the first case detected, but it may not necessarily be the one that introduced disease into the population which is the primary case.
ITAHCs	Intra-Community Trade Animal Health Certificates
IP	Infected premises. Premises where FMD virus has been confirmed.
LWDS	Livestock Welfare Disposal Scheme
MS	Member State
NEG	National Expert Group
NRL	National Reference Laboratory
OIE	World Organisation for Animal Health
OV	Official Veterinarian
Primary case	The case that introduces the disease into the

	population described.
PVP	Private Veterinary Practice
PZ	Protection zone
Rol	Republic of Ireland
RZ	Restricted zone
Sentinel	An individual or part of a population potentially susceptible to infection that is monitored for the appearance or recurrence of the causative pathogen.
Slaughterhouse	An establishment used for slaughtering animals, the meat of which is intended for human consumption
SMCZ	Supplementary Movement Control Zone
USPCA	Ulster Society for the Prevention of Cruelty to Animals
SP	Suspect Premises
SZ	Surveillance zone
TCZ	Temporary control zone(s)
UK	United Kingdom (England, Scotland, Wales and Northern Ireland)
UKECP	UK Export Certification Partnership
VZ	Vaccination zone
VO	Veterinary Officer – a member of the RCVS appointed by Department. Most VOs will also be veterinary inspectors.
VRA	Veterinary risk assessment

Annex 2: Legislation

EU Legislation

Council Directive 2003/85/EC sets out minimum control measures Member States must take against FMD and allows stricter measures to be taken if the disease situation requires it.

NI Primary Legislation

The Disease of Animals Order (Northern Ireland) 1981 and the European Communities Act 1972 provides the enabling powers for the legislation that deals with the control of FMD.

Secondary Legislation

Council Directive 2003/85 is transposed into domestic legislation by the following:

- The Foot and Mouth Disease Regulations (Northern Ireland) 2006
- The Foot and Mouth Disease (Control of Vaccination) Regulations 2006

Control of FMD is also supported through the following Orders:

- The Transport of Animals and Poultry (Cleansing and Disinfection) Order (Northern Ireland) 2007
- Diseases of Animals (Approval of Disinfectants) Order (Northern Ireland) 2008

Disease Control & Animal By products legislation

The Animal By-Products (Enforcement) Regulations (Northern Ireland) 2011

Annex 3: FMD Main Movement Controls

Note: This table is not a definitive summary of the requirements of the FMD legislation and should therefore be read as only a guide to the main features relating to the movement of susceptible animals Further controls may be declared if necessary including, but not limited to, controlling movement of non-susceptible animals.

Control zones	Movement controls on susceptible animals	
Temporary Control Zone (TCZ):	Ban on movements of susceptible animals into and out of TCZ except:	
Around suspect premises. Can be such size as considered fit. It can later form part of the protection or surveillance zone.	 through the zone without stopping; to complete a journey started before the creation of the zone. 	
Controls can be placed on the movement of animal products, things, people, vehicles and non-susceptible animals.	Ban on movement from and between premises within TCZ except under licence.	
·	Stray or feral susceptible animals may be detained.	
Supplementary Movement Control Zone (SMCZ):	Ban on movements into or out of an SMCZ or on to or off premises in an SMCZ	
Around TCZ of such size as needed to prevent disease spread.	except:through the zone without stopping;	
Could impose a Northern Ireland wide animal movement ban when an outbreak	to complete a journey started before the creation of the zone;	
is suspected. Can be used to control movement of susceptible animals and specified non-susceptible animals for up to 72 hours.	 movement of a horse for veterinary treatment under licence 	
Restricted Zone (RZ):	Ban on movement of susceptible animals from premises, or into or out of an RZ	
Following confirmation of FMD.	except under licence.	
Of such size as needed to prevent disease spread.	Ban on animal gatherings (which include susceptible animals) and gatherings of	
Used to maintain the Northern Ireland wide animal movement ban following	people in connection with sale of susceptible animals except under licence.	
onfirmation.	Ban on stalking and shooting deer except under licence.	
	Ban on shearing and dipping of sheep except under licence.	
	Ban on ultrasound scanning of susceptible animals except under licence.	

Control on slaughter of susceptible animals and on products from slaughterhouses.

C&D requirements on vehicles used to transport susceptible animals, carcasses or animal products.

Stray, feral susceptible animals may be detained.

Protection Zone (PZ):

Around Infected Premises.

Cover a minimum of a 3km radius or more if necessary to control disease.

Ban on susceptible animal movements between premises in a PZ except:

- movement for emergency slaughter under licence;
- movements from one part of a premises to another part of the same premises using a public highway (under licence).

Ban on animal movements into/out of zone except:

- transport through the zone without stopping;
- transport from outside zone for immediate slaughter (under licence);
- pets (if non susceptible species);
- horses (under licence).

Ban on movement of non-susceptible animals from or to premises with susceptible animals except:

- pets (if non susceptible species);
- horses (under licence);
- movements between parts of the same premises using a pubic highway (under licence).

Ban on animal gatherings.

Ban on certain gatherings of people (e.g. hunting, stalking).

Movement of vehicles used to transport susceptible animals (except under licence).

Ban on movement of vehicles used in the transport of animals from premises with susceptible animals except under licence.

Controls (under licence) for the collection, transport and processing of milk and milk products.

Controls on the transport, treatment and spreading of dung, manure or slurry produced in the protection zone.

Specific requirements to keep dogs and poultry under control.

Ban on shearing, dipping, or other livestock services except by licence or where specific exemptions apply.

Ban on sale of hides and skins of susceptible animals (some specific exemptions apply).

Surveillance Zone (SZ):

Around a PZ.

Cover a minimum of a 10km radius from the Infected Premises or more if necessary to control disease. Ban on movements from premises except:

- movement to slaughter (under licence and following satisfactory clinical examination) to an abattoir;
- movement to pasture in SZ (under licence and following satisfactory clinical and serological surveillance testing) and greater 15 days after last case in associated PZ.

Specific requirements to keep dogs and poultry under control.

Ban on shearing, dipping, or other livestock services except by licence or where specific exemptions apply.

Ban on sale of hides and skins of susceptible animals (some specific exemptions apply).

Persons in charge of vehicles used to move susceptible animals under licence must adhere to the required cleansing and disinfection instructions for that vehicle.

Ban on animal gatherings with susceptible animals; certain gatherings of people (incl.

	hunting, stalking); movement of vehicles
	used to transport susceptible animals except under licence.
	Controls (under licence) for the collection, transport and processing of raw milk produced in a surveillance zone.
Vaccination Zone (VZ):	Ban on movements of all susceptible
Following a decision to vaccinate	animals (whether or not they have been vaccinated) between premises within and
Can be of such size as needed.	out of VZ except movement (under licence
Phase 1:	following satisfactory clinical examination)
From start of vaccination	direct for immediate slaughter within, or in exceptional cases close to, VZ.
until at least 30 days after vaccination is completed in the VZ at the Department's discretion.	•
Vaccination Zone (VZ):	Ban on movements of all susceptible
Phase 2:	animals (whether or not they have been vaccinated) between premises within and
Up to when clinical and serological survey and classification of holdings complete.	out of VZ except movements under license to slaughter within or outside VZ.
Vaccination Zone (VZ):	Ban on movements of all susceptible
Phase 3:	animals (whether or not they have been vaccinated) between premises within and
After completion of survey and classification of holdings until UK has	out of VZ except:
infection free status recovered.	 movements between premises allowed under licence:
	 movements between premises allowed under licence; movements under license direct to slaughter within or outside VZ.
	allowed under licence;movements under license direct to
infection free status recovered.	 allowed under licence; movements under license direct to slaughter within or outside VZ.
Vaccination Surveillance Zone (VSZ): Minimum of 10km around a VZ or further if	 allowed under licence; movements under license direct to slaughter within or outside VZ. Ban on movements between premises within and out of VSZ except within the
Vaccination Surveillance Zone (VSZ): Minimum of 10km around a VZ or further if needed.	 allowed under licence; movements under license direct to slaughter within or outside VZ. Ban on movements between premises within and out of VSZ except within the
Vaccination Surveillance Zone (VSZ): Minimum of 10km around a VZ or further if needed.	allowed under licence; movements under license direct to slaughter within or outside VZ. Ban on movements between premises within and out of VSZ except within the premises they are kept or under licence. Ban on movements onto or off premises
Vaccination Surveillance Zone (VSZ): Minimum of 10km around a VZ or further if needed. No vaccination permitted.	allowed under licence; movements under license direct to slaughter within or outside VZ. Ban on movements between premises within and out of VSZ except within the premises they are kept or under licence.
Vaccination Surveillance Zone (VSZ): Minimum of 10km around a VZ or further if needed. No vaccination permitted. Wild Animal Infected Zone (WAIZ):	allowed under licence; movements under license direct to slaughter within or outside VZ. Ban on movements between premises within and out of VSZ except within the premises they are kept or under licence. Ban on movements onto or off premises

from wild animals.	

Annex 4: Conditions for marketing meat and milk

Control zones	Conditions for marketing meat and milk
Temporary Control Zone (TCZ):	N/A, unless premises are also within
Around suspect premises.	another zone, in which case the conditions for that zone apply.
Can be such size as considered fit. It can later form part of the protection or surveillance zone.	conditions for trial 2011c apply.
Controls can be placed on the movement of animal products, things, people, vehicles and non-susceptible animals.	
Supplementary Movement Control Zone (SMCZ):	N/A, unless premises are also within another zone, in which case the
Around TCZ of such size as needed to prevent disease spread.	conditions for that zone apply.
Could impose a Northern Ireland wide animal movement ban when an outbreak is suspected.	
Can be used to control movement of susceptible animals and specified non-susceptible animals for up to 72 hours.	
Restricted Zone (RZ):	N/A, unless premises are also within
Following confirmation of FMD.	another zone, in which case the conditions for that zone apply.
Of such size as needed to prevent disease spread.	conditions for that zone apply.
Used to maintain the Northern Ireland wide animal movement ban following confirmation.	
Protection Zone (PZ):	Fresh meat can be marketed if either:
Around Infected Premises.	 it was produced more than 21
Cover a minimum of a 3km radius or more if necessary to control disease.	days before the earliest infection date and stored and transported separately from meat produced 21 days or more before the earliest infection date; and it is health marked; or a treatment is applied before being marketed
	Meat requiring treatment requires:
	 separation of animals and product required in abattoirs, transport and

- storage and subsequent premises until treatment complete;
- meat to be cross-stamped until treated:
- main treatment allowed for meat and offal is heat treatment (cooking);
- DAERA will consider applying for possible derogation which provides for exemption from treatments 30 days after establishment of the latest PZ applying to each premises;
- slaughterhouses handling animals originating from farms in the zone must be designated (licensed);
- any commercial premises located the zone which handles meat must the licensed under FMD Directive. For slaughterhouses this will require formal application, others will be under general licence conditions.

Milk produced from animals in the zone can only be marketed pasteurised.

Surveillance Zone (SZ):

Around a PZ.

Cover a minimum of a 10km radius from the Infected Premises or more if necessary to control disease. Fresh meat can be marketed if either:

- the animals were on the same premises for at least 21 days before slaughter and were identified so as to allow tracing of the premises; and the meat has been detained under supervision for at least 7 days and until any suspicion of infection on the premises of origin has been ruled out; or
- the animals were on the same premises for at least 21 days before slaughter during which no susceptible animals were brought onto the premises; samples taken within the 48 hours before loading have tested negative; and meat has been detained under supervision for 24 hours and not released until after a repeat inspection of animals on the premises of origin has ruled out on

clinical grounds the presence of infected or suspect animals.

Treatments required for meat before being marketed:

- separation required in abattoirs, transport and storage and subsequent premises until treatment complete;
- beef and sheep meat to be heat treated (cooked) or matured and deboned to specific standards;
- pig and sheep meat to be heat treated (cooked);
- UK will consider applying for possible derogation which provides for exemption from treatments 30 days after establishment of the latest SZ applying to each premises.

Treatments required for milk before it is marketed:

milk to be pasteurised.

Vaccination Zone (VZ):

Following a decision to vaccinate.

Can be of such size as needed.

Phase 1:

From start of vaccination

until at least 30 days after vaccination is completed in the VZ at the Department's discretion.

Fresh meat (including offal) cannot be marketed. Treatments required for meat and other products from vaccinated animals before being marketed:

- separation required in abattoirs, transport and storage and subsequent premises until treatment complete;
- meat to be marked with a crossstamp until treated;
- meat to be heat treated (cooked);
- milk to be pasteurised;
- any meat produced during Phase
 1 is subject to these rules even after subsequent phases start.

Products from unvaccinated animals may be marketed without treatment unless premises are also within another zone, in which case the conditions for that zone apply.

Vaccination Zone (VZ):

Phase 2:

Offal cannot be marketed. Treatments required for meat and other products from

Up to when clinical and serological survey and classification of holdings complete.

vaccinated animals before being marketed:

- separation required in abattoirs, transport and storage and subsequent premises until treatment complete;
- beef meat to be heat treated (cooked) or matured and deboned to specific standards;
- pig and sheep meat to be heat treated;
- milk to be pasteurised.

Products from unvaccinated animals may be marketed without treatment unless premises are also within another zone, in which case the conditions for that zone apply.

Vaccination Zone (VZ):

Phase 3:

After completion of survey and classification of holdings until UK/NI has infection free status recovered.

Offal cannot be marketed. Treatments required for meat and other products from vaccinated animals before being marketed:

- separation required in abattoirs, transport and storage and subsequent premises until treatment complete;
- beef meat from vaccinated animals (and seropositive offspring of vaccinated dams) to be heat treated (cooked) or matured and deboned:
- sheep meat from vaccinated (and seropositive offspring of vaccinated dams) to be heat treated:
- fresh meat from vaccinated pigs (and seropositive offspring) can be marketed provided it has been produced at an authorised establishment, which only processes meat originating from premises declared free of disease or from animals reared and slaughtered outside the VZ, has been stored and transported separately from meat not eligible for marketing, and is health stamped accordingly. All other meat from vaccinated pigs must be

	processed into a meat product before marketing; • UK may apply for possible derogation which provides for exemption from treatments for beef and sheep meat. Fresh meat from unvaccinated animals from the VZ can be marketed if animals
	are transported correctly, all test negative for FMD and are processed in an authorised establishment or all susceptible animals on all reactor holdings in the VZ have been slaughtered.
Vaccination Surveillance Zone (VSZ):	N/A, unless premises are also within
Minimum of 10km around a VZ or further if needed.	another zone, in which case the conditions for that zone apply.
No vaccination permitted.	
Intense surveillance.	
Wild Animal Infected Zone (WAIZ):	N/A, unless premises are also within
If disease is confirmed in a wild animal.	another zone, in which case the conditions for that zone apply.
Of such size as needed to control disease spread.	ooriginorio for that zono appry.
Susceptible animals should be isolated from wild animals.	