FALKLAND ISLANDS GOVERNMENT

NATIONAL CONTINGENCY PLAN FOR EMERGENCY ANIMAL DISEASE

This document was laid before Legislative Assembly in on 26th January 2023 in accordance with section 14A of the Animal Health Act as adopted in the Falkland Islands

Version 1

Veterinary Service, Natural Resources Directorate

Contents

PART A

1. INTRODUCTION

1.1. Structure of document

- This National Contingency Plan for Emergency Animal Disease is divided into two main parts. **Part A** describes how the government will manage an outbreak or incident of animal disease in the Falkland Islands and provides a strategic overview of the principles of disease management and control objectives that will be followed in response to an animal disease outbreak, and in restoration of disease freedom.

- **Part B** provides more detailed plans including general and disease-specific protocols and standardised operating procedures. This Part provides an operational and reference manual for use by the Falkland Islands Government Veterinary Service in the event of an Emergency Animal Disease outbreak or incident.

- **Appendices** providing further information are provided.

- An **Annex** provides a Summary for Animal Keepers. This explains how animal keepers can help prevent diseases in animals, what they must do if they suspect disease and what response they can expect to happen in the event of an outbreak. This summary can be circulated and promoted as a stand-alone document to stakeholders and the public for information and educational purposes. The Summary for Animal Keepers will be publicly available on the Veterinary Service website Veterinary Service (falklands.gov.fk).

1.2. Emergency Animal Disease (EAD)

- An Emergency Animal Disease (EAD) can be defined as:
  - a disease exotic to the Falkland Islands (i.e. not normally present);
  - a new, more virulent, strain of an endemic disease;
  - a disease of unknown or uncertain cause,

    that it is in the national interest to be free from, or which may be an entirely new disease, and is considered of national impact or significance.

- An EAD may affect only animals, or be a potential zoonosis (transmissible from animals to humans). Many are notifiable (see **Appendix 1**), requiring them by law to be reported to government authorities and, via the United Kingdom (UK), to the WOAH (World Animal Health Organisation) within 24 hours of confirmation. WOAH-listed diseases are notifiable diseases with the potential for international

spread, significant mortality or morbidity and/or potential for zoonotic spread to humans.

- An EAD outbreak or incident can have significant impact on animal health and welfare, human health and welfare, livelihoods and the local economy, and international trade. This may result in the Falkland Islands losing its international disease-free status, trade restrictions, and some countries no longer accepting animals or their products from the Falkland Islands.

- Responsibility for preventing EAD outbreaks or incidents, reporting suspicion, and dealing with them when they occur, is shared between government and stakeholders. Stakeholders include all those who may be affected by an outbreak, such as the farming industry and associated businesses, and those keeping animals for any purpose, for example as companion animals/pets. EADs may also occur in wild animals and suspicion may be raised by anyone working with or encountering wild species.

1.3. Purpose and Scope of the National Contingency Plan for Emergency Animal Disease

- The purpose of the National Contingency Plan for Emergency Animal Disease (NCPEAD, 'the Plan') is to describe how the Falkland Islands Government (FIG) will manage an outbreak or incident of an EAD that occurs in kept animals (livestock, horses, poultry and domestic pets). It explains the roles and responsibilities of all parties involved in preparing for, responding to and recovering from outbreaks of emergency animal diseases. The same principles will also be followed for certain diseases in wild animals, for example some strains of avian influenza in wild birds, and diseases of fish or other marine animals harvested or farmed for food.

  The Plan sets out the over-arching framework, which maximises flexibility and can be adjusted to take account of the scale and nature of any EAD.

- The Plan will align with, and make reference to, the Falkland Islands Government Major Incident Plan in situations where an EAD is assessed to have significant potential or real impact on the Islands' resilience and/or its people.

- The Plan follows international best practice for EAD, that has been tailored to the local legal and regulatory framework, governmental and agency structure and resources, geography, ecology, and the agricultural and animal husbandry practices of the Falkland Islands.

- Given the limited veterinary resources on the Falkland Islands (three Government veterinary officers (VO) in total), large EAD outbreaks or incidents may require rapid external assistance and advice.

- The Plan does not describe the response to reportable or notifiable endemic diseases, unless a new or more virulent strain/form emerges.

1.4. Legal background

- The Falkland Islands are a British Overseas Territory. The laws of the Falkland Islands comprise United Kingdom (UK) legislation that applies directly within the Falkland Islands or is applied by Order in Council, and local legislation. Local legislation comprises primary legislation (Ordinances) passed by the Legislative Assembly, and subordinate legislation (Orders and Regulations) made by the Governor. Much of the local law applicable to animal health and welfare, and public health, is modelled or adopted on UK legislation, but often with modifications to make it appropriate for local application.

- The Plan reflects various pieces of legislation and fulfils legal requirements for a National Contingency Plan as specified in the Animal Health Acts 1981 and 2002, as adopted into Falkland Islands Law under the Animal Health Ordinance 1998 and the Law and Provision Ordinance 2017. This legislation includes powers of entry, inspection, compulsory slaughter and enforcement. The Plan also fulfils the European Union (EU) requirements of Regulation (EU)2016/428 for the implementation of power for compulsory control and eradication of disease and specific, detailed and rapid procedures and contingency plans for management of disease emergencies. A summary of relevant key legislation is provided at **Appendix 2**.

- Alongside existing control strategies for specific diseases, the Plan fulfils the Falkland Islands' obligations to our international trading partners in animals and animal products and to the World Organisation for Animal Health (WOAH, formerly known as the OIE). The WOAH produces the Terrestrial Animal Health Code and the Aquatic Animal Health Code, which are formally adopted by all delegates of WOAH member countries. The delegate WOAH member for the UK and British Overseas Territories is the UK CVO. The Falkland Islands also report to the WOAH as a 'Focal Point' under the delegate authority. The aim of the WOAH animal health codes is to assure the sanitary safety of international trade in animals and their products. FIG, the UK and the EU base their import and export health measures on the WOAH standards. The codes set out detailed requirements for the Falkland Islands to claim country freedom from particular animal diseases.

- The Department of Natural Resources (DNR) is responsible for the Plan. The Veterinary Service (VS) within the DNR is the lead FIG Department for planning, preparedness and response to outbreaks or incidents of EAD. The VS, headed by the Senior Veterinary Officer (SVO), is the delegated competent authority for export of meat and fish into the EU and other countries, and is responsible for regulation of public health in food producing establishments, animal health and the welfare under which animals and fish are farmed, caught and processed.

- The DNR has sought comments and input from other FIG Directorates and stakeholders, including the UK's Department of Environment, Food and Rural Affairs (DEFRA), in the development of this Plan.

- By law, the Plan must be reviewed at least once a year and revised if appropriate.

- By law, all owners/keepers of animals must report any signs or suspicion of notifiable or reportable disease to the Veterinary Service or the Police. The list of notifiable diseases in the Falkland Islands is provided at Appendix 1.

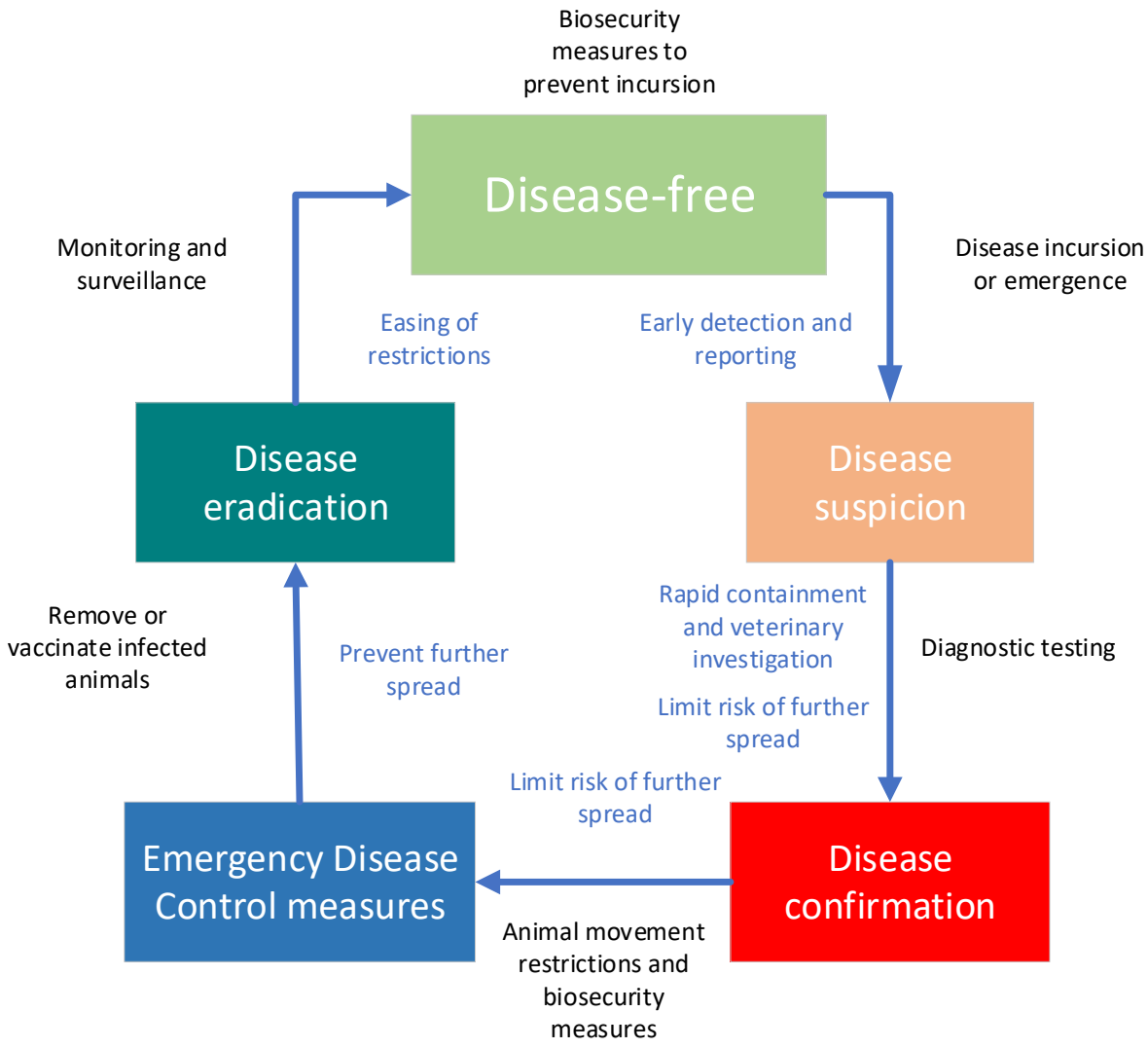
2. PRINCIPLES OF DISEASE MANAGEMENT AND CONTROL OBJECTIVES

2.1. Strategy and priorities

- In the event of confirmation of an EAD in the Falkland Islands, FIG will act swiftly and decisively, in partnership with operational partners and stakeholders, aiming to:
    - Eradicate the disease and regain disease-free status (notifiable disease) (**Figure A1**);
    - Protect the health and safety of the public and those directly involved in controlling the outbreak;
    - Minimise the burden on the taxpayer and public as well as the economic impact of the outbreak on industry.
    - Minimise damage to the natural environment

- Within the objective of disease control, FIG will endeavour to:
    - Minimise the number of animals that die or require humane destruction, either for disease control or animal welfare purposes;
    - Balance adverse impacts on animal welfare, human health, the local and wider economy, communities and the environment.

Figure A1. Cycle of disease incursion and control to maintain disease-free status in the Falkland Islands



2.2. Approach to disease control

- The approach to control of any Emergency Animal Disease uses the key principles of:
    - Early detection and reporting of suspicion to limit the extent to which disease can spread before controls are brought into force
    - Containing disease at premises where it is detected and eradicating it swiftly and effectively
    - Limiting the risk of further spread of disease from premises connected with the infected premises
    - Limiting the risk of any further spread of disease to other premises in the vicinity of the infected premises
    - Undertaking evidence-based risk assessments before easing restrictions
    - Continuing heightened surveillance before easing restrictions
    - Complying with legislative obligations

2.3. International controls and trade implications

- A confirmed outbreak or incident of a disease in the Falkland Islands may result in the Falklands and/or the UK losing its WOAH international disease-free status, and some countries no longer accepting our animal products. Export certificates may need to be withdrawn while conditions to allow trade to continue are reached with importing countries. Trade restrictions can remain in place for lengthy periods even after disease-free status has been re-established.

- The SVO will work closely with the UK's Department of Environment, Food and Rural Affairs (DEFRA)and its Animal and Plant Health Agency (APHA), and the UK's Chief Veterinary Officer (CVO), from the suspicion stage or confirmed start of an outbreak, and throughout the outbreak, on communicating with trading partners to minimise the impact on trade. This may include utilising the concepts of zoning and compartmentalisation as described by the WOAH Terrestrial Animal Health Code, and/or provision of additional guarantees to importing countries.

- In the case of a confirmed animal disease outbreak outside the Falkland Islands that is perceived as a threat to our disease-free status, such as in a neighbouring country or one that trades with the Falklands, the SVO will undertake a risk assessment and advise FIG on any additional biosecurity measures or import restrictions deemed necessary to mitigate the risk of disease incursion.

3. COMMAND AND CONTROL

- The VS is the lead agency for the response to an EAD. Most EAD scenarios will activate the FIG Major Incident Plan, which describes the arrangements for responding to a major incident, using a joint decision model, to ensure a co-ordinated response from all agencies.

- The FIG Major Incident Plan (FIG MIP) uses the Gold (Strategic), Silver (Tactical), Bronze (Operational) command model.

- The primary contact for activation of the FIG MIP is the Director of Emergency Services and Islands Security (DESIS). The DESIS Chairs the Silver Tactical Co-ordinating Group (TCG), and the SVO will act as the Deputy Chair of the Silver TCG. The TCG will also fulfil the required role of Disease Control Centre (crisis centre) for contingency planning under the WOAH codes.

- If, after a veterinary investigation and the Silver TCG meeting, there is not considered to be a major incident, standard operating procedures for disease investigation and control will be followed by the VS. There will be continued

review of disease progression, with escalation to a major incident if necessary, as more information is acquired.

4. SUSPICION AND CONFIRMATION OF AN EMERGENCY ANIMAL DISEASE

4.1. Suspicion of disease

- Any animal keeper or owner who suspects that an animal might have a notifiable disease has a legal duty to report their suspicion to the Veterinary Service (VS), directly or via the Police. Causes of suspicion include unexpected death in one or more animals, clinical signs known to be linked to specific notifiable diseases, unexpected or unusual clinical signs, or changes in production. These causes of suspicion are applicable to all EAD and must be reported. The same causes of suspicion are applicable to wildlife, and reporting is strongly encouraged.

- If the initial report leads the VS to suspect an EAD they will immediately institute a veterinary investigation. For notifiable diseases in livestock, the premises where disease is suspected will be placed under restrictions prohibiting movement on and off. Where the suspicion of disease is in domestic pets or wild animals, restrictions may also apply.

- When suspicion of an EAD occurs, the SVO will determine, in consultation with the Director of Natural Resources (DoNR), if there is sufficient concern to activate the FIG MIP. This may occur either on receipt of the report of suspicion, or immediately following the veterinary investigation.

- An investigating veterinary officer (VO) will examine animals at the premises and decide on further action. If an EAD is ruled out, restrictions can be removed. If an EAD cannot be ruled out, samples may be taken for laboratory testing and the premises will remain under restrictions with ongoing monitoring until disease is either ruled out or confirmed. This is most applicable to livestock and horses; similar measures may be taken for domestic pets or wild animals.

- Depending on the location of the suspected EAD incident/outbreak, and whether at a single or multiple location(s), emergency transportation arrangements (e.g. FIGAS flights) and/or additional investigating VOs may need to be rapidly arranged in order to conduct a timely veterinary investigation.

- Where there is suspicion of a notifiable disease, the SVO will inform the UK CVO.

4.2. Animal, premises and area restrictions

- The level of restrictions, and the place or zone to which they apply, is dependent on the disease. Restrictions can include:
    - **Individual animal restrictions:** restrictions placed on individual animals to restrict their movement pending the outcome of further tests.
    - **Premises restrictions:** restrictions to prohibit the movement of animals susceptible to the particular disease onto and off the premises. Premises generally refers to farms (or parts of farms) and the abattoir, but may include domestic premises, wild or other areas such as beaches and shoreline, depending on the species and disease of concern. Depending on the disease, the movement of people, non-susceptible animals, animal products, feed and fodder, vehicles, manure and anything else potentially contaminated with infectious material may also be restricted. Public roads and common ground may be closed by FIG.
    - **Area restrictions:** In an EAD outbreak or incident there will likely be initial uncertainty about the origin of disease, how long it has been present and how far it may have spread. Therefore, for many diseases, area restrictions (control zones) will be imposed to stop the movement of susceptible animals into, from and within the restricted area. Control zones may need to encompass the entire Falkland Islands (e.g. for Foot and Mouth Disease (FMD)), and a national 'standstill' on livestock movement while the outbreak is being investigated and controlled.

- When a report of a suspected disease is assessed by the SVO to warrant an investigation, temporary restrictions on behalf of FIG will be put in place as soon as practicable. The aim of restrictions is to prevent spread of disease. There will inevitably be some disruption to normal business patterns and processes for people affected by restrictions.

- Restrictions are notified orally and confirmed in writing on arrival by the VO. The veterinary officer then undertakes a veterinary investigation which includes a clinical and/or post-mortem examination of the animals, and an inspection of production records. If disease cannot be ruled out the veterinarian will take samples for laboratory testing, which may involve humane destruction of the animal.

- Restrictions will remain in place until the investigation is complete and notifiable disease is either ruled out or confirmed. Laboratory samples will likely need to be sent to the UK or other international laboratories and a period to confirmation of disease of at least 1 week should be expected, or longer. Special

arrangements to transport emergency samples rapidly to external laboratories may be required.

- During the suspicion phase a temporary control zone (TCZ) may be declared around the premises. This is dependent on the disease under suspicion and most relevant for Foot and Mouth Disease (FMD) and highly pathogenic Avian Influenza (AI).

4.3. Alert status (notifiable disease) and actions during suspicion phase

- The VS will use a standard alert system to describe the current status of a specific disease outbreak or incident of exotic notifiable disease. This is aligned to the UK disease alert system (White/Black/Amber/Red), due to the WOAH delegate status under the UK. Disease alert status is mapped to the correspondent FIG MIP escalation level (**Table A1**). The primary decision to change disease alert status will be made by the SVO.

- If the alert status is increased, the SVO will alert the Director of Emergency Services and Islands Security (DESIS) to consider declaration of a **critical or major incident** and convene the Silver TCG (see **Table A1, Table A2, Figure A2**).

Table A1:

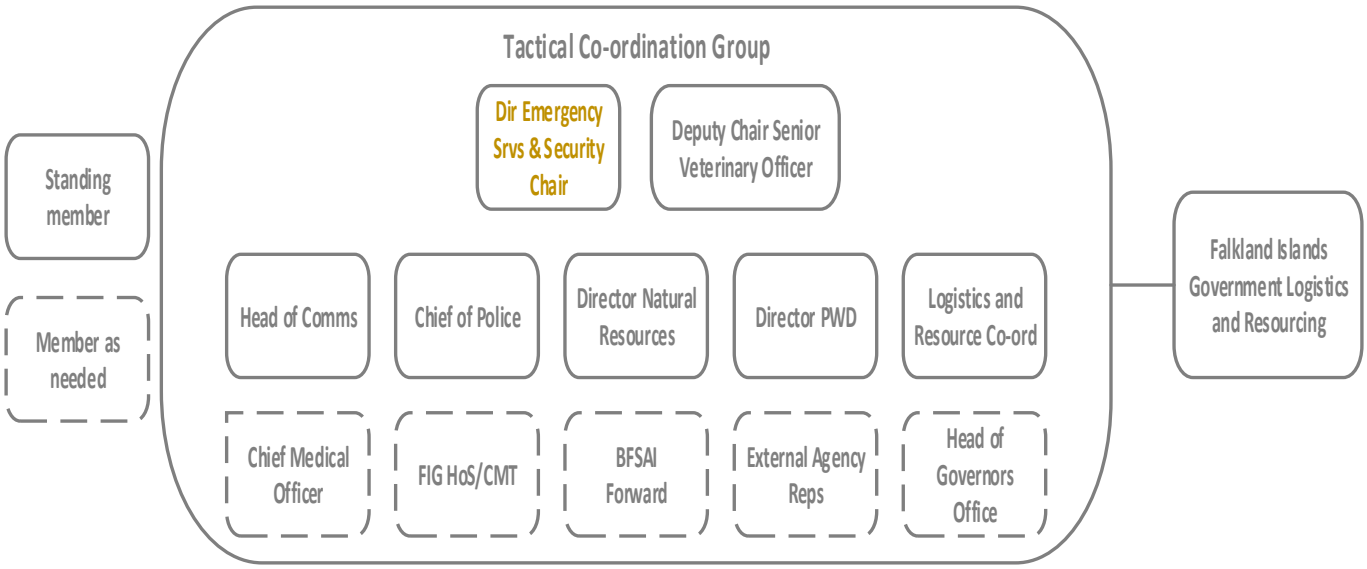
Disease alert status	Disease status	FIG Major Incident Plan escalation level
WHITE alert	Disease is not present or suspected in the Falkland Islands and will be the state of alert under normal circumstances	**CONTINUE** Business as Usual
BLACK alert	Risk of disease is higher than normal. For example, disease may be suspected or confirmed in a nearby country or trading partner. This would warrant a higher level of vigilance. Import prohibitions may be required	**CONTINUE** Business as Usual
AMBER alert	Strong suspicion of the presence of the disease on a particular premises based on clinical picture following a veterinary investigation, or via routine surveillance. Samples submitted for laboratory analysis	**DECLARE** Critical Incident
RED alert	Disease has been confirmed or an operational response has been initiated	**DECLARE** Major Incident

- The level of suspicion is case-specific and must be assessed each time disease is suspected; each state of alert may cater for more than one possible disease scenario within its corresponding level(s) of suspicion (**Table A2**).

Table A2: Level of suspicion and possible scenarios for each alert state.

Alert status	Level of suspicion (Case specific)	Possible scenarios
White/ Black	**0** Disease not suspected following veterinary investigation	No further action. Any restrictions on premises lifted
	1 Lesions and clinical disease not typical - but disease cannot be ruled out entirely on clinical grounds.	Suspect animal/s left alive and observed. Samples taken for laboratory diagnosis.
Amber	**2** Lesions and clinical disease suggestive of the notifiable disease but not entirely convincing.	Suspect animal(s) showing lesions may be culled as a preventative measure (excluding those culled for post-mortem examination and collection of tissue samples). Samples taken and submitted for laboratory diagnosis.
	3 Veterinary staff on premises and the SVO believe from investigation on clinical grounds that disease exists	
Red	**4** As a level 3 plus disease already confirmed in the Falkland Islands or substantial evidence that disease may have entered the country. For example, disease in imported animals originating from a region with confirmed disease.	All susceptible animals on the premises culled on suspicion and disease confirmed on clinical grounds only, without awaiting laboratory results. Samples will be submitted for laboratory diagnosis. First reported case where disease is confirmed. Disease is already in the Falkland Islands and further cases have been confirmed.

Figure A2. Silver Tactical Co-ordination Group (TCG) for EAD incident



- At the Silver TCG meeting the SVO may negate disease, decide there is sufficient evidence to confirm disease (raising the alert status to Red and the declaration of a **major incident**), or specify what further evidence (laboratory test results, deteriorating clinical situation in animals) is required (**Figure A3**).

- If the SVO's veterinary risk assessment indicates an unacceptable risk in waiting for laboratory test results which could contribute to onwards disease spread, the SVO may take the decision to humanely destroy animals on suspicion of disease, raising the alert status to Red and the declaration of a **major incident** and disease-specific response, without waiting for results of laboratory tests.

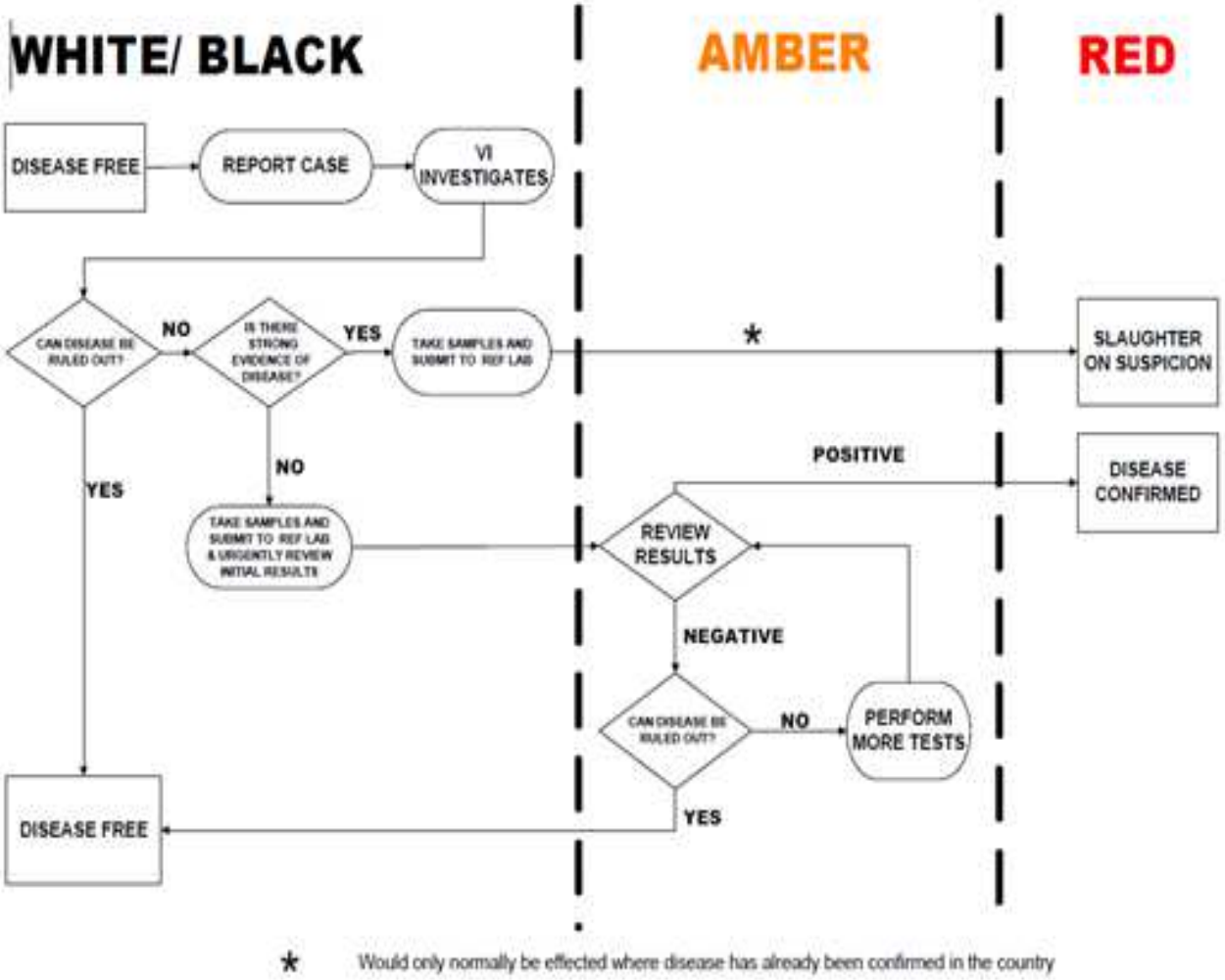
- While the disease alert level is at Amber additional (e.g. daily) TCG meetings may be required until a resolution is achieved (disease alert level reversion to White/Black or escalation to Red).

- A summary of key decisions to be made by the Silver TCG is in **Table A3.**

Table A3. Key decisions for Silver Tactical Control Group

Decision	Potential Options
Disease-specific control strategy	Contain, depopulate, vaccinate, treat, none
Size and scope of control, protection and surveillance zones	Individual animal, premises, area
Requirements for implementing movement restrictions on animals, animal products, vehicles, people (national, international)	Roadblocks, farmgate controls, border/import controls, disinfection stations, record systems (traceability), licences for essential movements
Requirements for public health measures (zoonotic disease)	Hygiene, disinfection, PPE, vaccination, treatment, surveillance, public information/ communications
Requirements for external assistance - conveyance of diagnostic samples, personnel, modelling/epidemiology	MOD, UK Govt (DEFRA), Meteorological Office (local and UK), private/academic
Personnel and equipment deployment to affected premises	Road, air, sea; public/private assets
Method of depopulation, and required logistics	Shoot, humane killer, veterinary euthanasia, none (natural death); farm facilities; competent person/VS
Method of carcase disposal, and required logistics	Burial, incineration/burning, disposal at sea, leave in situ; public/private assets

Figure A3. Actions performed between white and red alert status



CONTINUE
Business as Usual

DECLARE
Critical Incident

DECLARE
Major Incident

4.4. Confirmation of disease

- Confirmation of an emergency animal disease is the responsibility of the SVO, and usually on receipt of laboratory test results. During the Silver TCG the SVO may, on balance of evidence, decide to confirm disease, raising the disease alert status to Red, declaring a major incident and disease-specific operational responses. This may be before laboratory test results verifying the confirmation of disease are received (e.g. for Foot and Mouth Disease). For a notifiable disease the UK CVO must be consulted.

- Affected animal keepers, FIG operational partners and local stakeholders will be notified of disease confirmation by the VS or the Silver Command Support Team. Throughout an outbreak, on advice from the SVO, communications with animal keepers, pet owners, the public, local and international media will be co-ordinated by the FIG Communications and Media Office, to ensure that they are effective, timely and accurate.

- For a notifiable disease it is the responsibility of the UK CVO to notify the European Commission and WOAH.

- Once disease is confirmed, further positive cases and infected premises are declared by the VS. This may be on the basis of clinical signs alone, and/or laboratory testing and/or epidemiological investigations.

4.5. Controls and restrictions

- If an EAD is confirmed, premises are designated as infected premises (IP) and appropriate actions, including ongoing restrictions, will be taken to prevent the spread of disease by:
    - taking action on the IP and other premises (contact premises) where disease is most likely to have spread from and to, for example where there have been recent animal or other movements between premises.
    - imposing wider area-based controls, including risk-assessed animal movement controls and controls on animal products. In the case of FMD in particular, FIG will impose immediate national movement restrictions on susceptible animals.
    - restricting activities that might increase the risk of spread. For example, there might be a ban on shooting or fishing.
    - considering banning gatherings of animals including shows or sales.
    - considering export bans.
    - considering compulsory housing of animals.

    - investigating the origin of the disease and determining whether there has been further spread of disease from that source (tracing).
    - undertaking other surveillance to investigate possible further spread of disease.
    - considering vaccination to prevent further spread of disease.

- On confirmation of most notifiable diseases, FIG policy will be to impose a protection zone (PZ) around an IP. This may be surrounded by, or adjacent to, a larger surveillance zone (SZ). Controls within the PZ are more stringent than those in the SZ to reflect the increased risk of disease transmission. Zones will be based appropriately on island geography and may include other factors such as existing farm boundaries and meteorological conditions.

- In general, controls within zones are primarily focused on the movement of animals. FIG may also invoke legislation to include controls on vehicles, fomites (anything that may physically carry the disease agent), meat, animal products (including meat products, eggs, hides, milk and milk products), manure and animal carcases.

- Animal keepers within the control zones may be required to carry out additional biosecurity measures.

- The VS will carry out any necessary surveillance when control zones are in place. This may involve clinical inspection, examination and sampling for laboratory testing within these areas to identify infected animals and demonstrate that disease has not spread.

- All stakeholders and animal keepers will be kept informed of the disease situation, minimum duration of zones and controls, and timings of changes to restrictions within zones, by the Silver Command Support Team (if major incident), or via the VS.

- As investigations into an outbreak or incident progress and it becomes clearer where risks of disease spread lie, the VS may advise that exemptions to controls may be granted for specific limited individual movements using specific licences issued by the DOA. These licences will set out the criteria that must be met before, during and after the movement (such as veterinary inspection, cleansing and disinfection, monitoring etc.). Compliance with restrictions and exemptions is essential in order to minimise the risk of onward spread of undisclosed or inapparent disease.

- Appropriate attempts to monitor the impact of restrictions on the community and rural economy will be made.

4.6. Animal welfare

- Where movement controls have an adverse effect on animal welfare, the VS may grant licences to permit certain essential movements for welfare purposes (such as to permit veterinary treatment), subject to a risk assessment. Strict conditions will apply to these licences ensuring that such movements take place under suitable biosecurity arrangements. Responses to such requests for welfare moves will be timely, and decisions on licensed moves explained openly and transparently.

4.7. Enforcement

- The VS enforces routine national and international animal disease control and animal welfare legislation. The Police will support any legal powers of entry to premises. In the event of an EAD outbreak incident where Emergency Orders or Regulations are issued, the Police can enforce such Orders and Regulations.

TABLE A4. Key Roles and responsibilities of Directorates and other stakeholders

FIG Directorate	Department	Responsibility
Natural Resources	Veterinary Services (VS)	Lead agency for national EAD planning and response, and maintains the NCPEAD. The SVO is responsible for liaison with the UK's Chief Veterinary Officer UK and international notifications of notifiable diseases, and restrictions on meat/animal product trade. VS leads the operational response to EAD. The DoNR has legal responsibility for determining valuation and compensation payments in the event of compulsory livestock destruction.
	Department of Agriculture	Assistance with farm stakeholder engagement and communication, farm animal records and maps, farm contingency planning; personnel to assist with operational response
Emergency Services and Islands Security	Police	Enforcement of Emergency Orders for the purposes of controlling an EAD outbreak or incident, e.g. movement restrictions of animals or vehicles.
	Fire and Rescue	Advice and assistance with in situ incineration of animal carcases. Water pumping capability for assistance with cleansing or disinfection of premises.

	Defence Force	Assistance with enforcing movement restrictions/infected premises gate controls; access to transport if widespread vet/livestock personnel deployment required.
	Customs and Immigration	Enforcement of new or existing prohibitions on animals, animal products or equipment relevant to prevention of EAD incursion. Immigration of external assistance personnel.
Public Works	Plant and Vehicle	Supply of civil plant, personnel, and transport to assist with disease outbreak management including carcase burial and waste management
Development and Commercial Services	Falkland Islands Government Air Service (FIGAS)	Air transport of veterinary and other personnel to affected and surveillance premises
Health and Social Services Directorate	Health	Where an EAD outbreak or incident is of zoonotic concern the CMO will provide advice on any response under the NCPEAD regarding protection of public health
Policy and Economic Development	Communications and Media Office	Lead and coordinate FIG Press releases and public communications
	Department of Environment	Wildlife disease response co-coordination, under the direction of the SVO if notifiable
Law and Regulation	Legal Services	Details and advice on current legal framework regarding EAD response, including invocation and enforcement of Emergency Orders and licensing. Support the Finance and Administration section during a response, for example regarding compensation payments and emergency personnel
Treasury		Financial requirements for statutory compensation payments, emergency personnel (e.g. external veterinary, abattoir, livestock valuation staff).
Other partners and stakeholders		
	Meteorological Office, MPC	Advice on weather/wind patterns relevant to spread of disease (airborne)
	BFSAI	Personnel movement restrictions/biosecurity across affected land/premises. Response to FIG requests (local and to UK (FCDO, MOD)) for assistance in executing emergency disease response.
	Department of Environment, Food and Rural Affairs (DEFRA), UK	Strategic advice and assistance with provision of additional skilled personnel (e.g. veterinary staff, epidemiologists, livestock officers) if required in major outbreak. Statutory reporting to the WOAH
	Animal and Plant	Technical advice (Veterinary Exotic Notifiable

	Health Agency (APHA), UK	Diseases Unit VENDU); Diagnostic testing and surveillance (International Reference laboratory), epidemiological advice (National Emergency Epidemiology Group)
	Pirbright Institute, UK	Diagnostic testing and surveillance (viruses) (International Reference Laboratory)
	Falklands Conservation	Wildlife disease response assistance (must be under the direction of the SVO)
	SAERI	Wildlife disease response assistance (must be under the direction of the SVO)

5. OPERATIONS AND LOGISTICS

5.1. Depopulation (culling)

- For many diseases (e.g. FMD, AI) the control policy is to destroy affected animals rapidly, to halt the production or transmission of the disease-causing agent. For livestock diseases this may involve the depopulation (culling) of whole herds of animals. For other diseases only single animals may need to be humanely destroyed.

- Depopulation as a disease control measure will be supervised by the VS. It is vital that animal welfare is protected at all stages in a depopulation process. Animals must be killed in an appropriate and humane manner by competent personnel. Depopulation operations are controlled by the Livestock and Meat Products (Protection of Animals at Time of Slaughter or Killing) Regulations 2015 and the Codes of Practice for the Welfare of Sheep, Cattle, Pigs, and Horses

- Carcases and other potentially infectious items (such as milk, eggs) are required to be disposed of in a biosecure manner and in compliance with the Livestock and Meat Products (Animal By-Products) Regulations 2015 and Livestock and Meat Products (Animal By-Products) (Amendment) Regulations 2018.

- While speed of depopulation and disposal is important, health and safety of personnel, keepers and owners is paramount and FIG will ensure that this is not compromised at any point. This is especially important where the disease is zoonotic.

- The depopulation method will be determined by the VS. The depopulation method deployed will depend on the type of incident and disease agent, species, age, number of animals and any other site-specific conditions or resource constraints.

- Exemptions for certain categories of animals from depopulation, for example a rare breed or species where depopulation would compromise the existence of that breed/species, may be considered for sparing from culling, provided that disease control is not compromised. Such exemptions are not guaranteed and will be considered on a case by case basis by the VS following a full veterinary risk assessment and consideration of wider issues and impacts.

- FIG may also use its legal powers to require the pre-emptive depopulation of animals in order to prevent the spread of certain diseases (including FMD, AI and Newcastle disease (ND)). Before such powers are used FIG must make a statement explaining the situation and why it is necessary to resort to using them. Such powers would only be considered in exceptional circumstances. Compensation will be paid for any animals depopulated under these powers.

- Culling of protected wildlife species for disease control purposes would only be carried out under exceptional circumstances, but humane destruction of individuals may be necessary for welfare reasons.

5.2. Disposal policy and arrangements

- The VS will determine the most appropriate disposal option for carcases. This will take into consideration the nature of the disease, available facilities and their capacity, logistical, geographical and seasonal issues, amount (tonnage) of carcase material and any epidemiological data relevant to nature and scale of the outbreak. Full consideration will be made of the legal requirements under the Hydatid Eradication (Dogs) Order 1981 to prevent access to livestock carcases by dogs, cats and birds. Full consideration will also be given to the risks associated with scavenging wild birds and other wildlife in terms of disease spread to other livestock and/or wildlife, and mitigation measures taken wherever possible.

- For domestic/companion animals, appropriate disposal arrangements will be discussed with owners. For wildlife, the Environment Officer and Falklands Conservation will be consulted

- Disposal options for carcases in the Falkland Islands are currently limited to:
    - Commercial fixed plant incineration (Sand Bay abattoir) – very limited capacity
    - Burial: existing borrow pits or new purpose-built pits; above ground burial
    - Burning: pyres
    - Disposal at sea

All these disposal options have potentially severe constraints and feasibility issues in the Falkland Islands, such as ground/soil type and site availability (burial), lack of fuel materials and burning risk of peat (incineration), availability and access of machinery (excavators), and large populations of scavenging wild birds.

Disposal at sea requires a licence under the Maritime Ordinance 2017 issued by the DESIS. In the event of the need for such a licence for dealing with an EAD outbreak, or alteration of an existing licence, the VS will advise the DESIS on the necessary licence conditions to mitigate disease risk.

- Local (on-farm) options will usually be preferable in a disease outbreak due to the remote, island and private nature of premises and the ability, through this option, to minimise or prevent animal, carcase, personnel and equipment movements between premises that might spread disease.

- FIG recognises that other factors may impact disposal options in the future, therefore new environmental or waste legislation and new technologies will be regularly reviewed.

- For all options, it is important that full biosecurity procedures are followed and, as such, animal waste will be disposed of under supervision of the VS. For zoonotic diseases, the Department of Health (CMO) will be involved in assessing the potential exposure of workers and in issuing guidance and prophylaxis as appropriate. For on-farm burial and incineration options, consultation with landowners and appropriate environmental and public health assessments will be made at each location.

- Where disposal involves the transportation of animals or carcases, the VS will assess and approve appropriate leakproof vehicles, conditions of carriage, biosecurity procedures and animal welfare requirements.

5.3. Valuation and compensation

- When an animal is destroyed for the purposes of control of disease, the legislation makes provision for FIG to pay compensation to the owner. The DoNR is responsible for determining the animal valuation and compensation procedures and will consult with the Head of Agriculture and Senior Veterinary Officer and other relevant stakeholders including the FIDC (Falkland Islands Development Corporation), to formulate and communicate compensation payment arrangements.

5.4. Cleansing and disinfection

- Once infected or susceptible animals have been destroyed and the carcases securely disposed of, the premises and potentially contaminated transport and equipment will need to be cleansed and disinfected to prevent spread of disease from the premises and potential re-emergence of disease when the premises are restocked. Animal feedstuffs and items which may have been contaminated and which cannot be cleansed and disinfected may need to be destroyed.

- The VS is responsible for advising on and providing appropriate protocols for cleansing and disinfection. Pollution control as well as potential disease risk will be considered in these protocols.

- Potentially contaminated areas must first be cleansed to remove organic material and then disinfected with an approved disinfectant or biocide at the recommended concentration and rate. Advice will be sought from the Department of Environment to minimise environmental impacts of chemical agents.

- Cleansing and disinfection consists of two phases, preliminary (primary) and final (secondary).

- Preliminary (primary) disinfection is carried out immediately after depopulation and removal of carcases has been completed. It is carried out under the direction of the VS and at FIG's expense. It consists of spraying contaminated and potentially contaminated areas where the animals were culled, and where they were housed (pens/yards/sheds) immediately before culling, with an approved disinfectant or biocide.

- Preliminary disinfection is considered to be completed 24 hours after the last application of the approved disinfectant or biocide. Generally, the merging of the PZ and SZ (if applicable) can only take place after a defined number of days following completion of preliminary disinfection on the last IP within the zone. This period may vary depending on the disease.

- Depending on the disease, final (secondary) cleansing and disinfection can only commence after a certain period has elapsed since preliminary disinfection. It is carried out under the direction of the VS and at FIG's expense. Restocking will not be allowed until final cleansing and disinfection has been completed.

- Where final cleansing and disinfection cannot be safely completed (e.g. dangerous structures), depending on the disease, the premises may remain restricted and unable to restock until the VS is satisfied that sufficient time has elapsed for the infectious agent to have become inactivated naturally. Where a keeper or owner, for whatever reason, chooses not to undertake final cleansing and disinfection, the VS will serve a notice prohibiting the keeping of livestock susceptible to the disease in question and the entry onto the premises, or parts of premises, unless permitted subject to licensing and biosecurity conditions.

5.5. Vaccination

- In general, vaccination may be considered as a control tool as part of wider disease control strategies. It can assist in moving towards the overall goal of disease eradication, where it is practical to do so and the benefits outweigh the costs. In the short term, vaccination can help slow down, reduce and potentially prevent disease spread.

- Vaccination can also carry significant costs for industry and government and have wider implications for trade and movements of animals, and for monitoring disease spread.

- Vaccination options are disease specific and may not be available for all diseases. There are a wide range of technical and practical issues to balance the costs and benefits of deploying vaccination.

- From the outset of any disease outbreak, the VS will carefully consider emergency vaccination options on a disease-specific basis, taking into consideration published strategies and plans from other countries including the UK and Australia, and how these might apply to the different livestock practices and animal densities in the Falkland Islands, implications for international trade and disease-free status (in consultation with the UK CVO), other expert advice and a wide range of other practical, logistical and financial factors.

6. RESTORATION OF DISEASE FREEDOM AND RECOVERY

6.1. Restocking

- Controlled restocking of animals onto premises which have had affected animals depopulated and disposed of is an integral part of the recovery phase. Depending on the disease, restocking is not permitted until a defined number of days have elapsed following final cleansing and disinfection. For certain diseases there is controlled restocking where limited numbers of animals are allowed on to the premises (sentinel animals) and observed to ensure that disease is no longer present. Samples may be taken from these animals for laboratory testing

to ensure they have not developed disease and confirm that disease/infectious agent is no longer present on the premises before all restrictions are lifted and full restocking allowed. For some disease and situations, full restocking may ne be possible for twelve months.

6.2. Restoration of trade

- The VS will expedite the recognition of disease-free status after recovery from an outbreak. Declaration of disease-free status does not automatically mean that trade and import requirements of trading countries will revert to those that existed before the disease outbreak.

- For EU trade, once disease control zones around an IP have been lifted, enhanced surveillance will be carried out to prove that disease is no longer present. Trade can resume once this surveillance has been completed with favourable results and any additional safeguard measures imposed by the EU during the outbreak have been lifted.

- For trade with non-EU countries, exports may be adversely affected after the disease outbreak has been tackled and disease freedom declared. Securing the resumption of exports may involve detailed technical and political negotiations and inspection visits to agree revised certification rules.

6.3. Scaling down, debriefing and lessons identified

- Scaling down of resources, once certain parts of the outbreak or incident management response are completed, is an important part of the recovery phase. Where a Major Incident has been declared, the DESIS, in consultation with the SVO and DoNR, will decide when it is appropriate to de-escalate the outbreak or incident response and agree the timing of the closure of outbreak response structures. When ongoing VS disease response operations are then at a sufficiently low level, the SVO will agree the timing of the closure of outbreak response structures.

- The DESIS and VS will conduct debriefings with these involved to identify and evaluate where improvements can be made to disease response capability, processes and organisational structures for managing an EAD outbreak or incident. The feedback from operational partners and stakeholders will be collated into a ‘lessons identified’ report, which will provide the framework for improvements and the review of the NCPEAD and operational instructions.

6.4. Rural and wider economic recovery

- During the early stages of an outbreak, FIG will consider the establishment of a Board to specifically consider the wider impacts of disease control measures on the agricultural sector, the Islands' communities, individuals and businesses, environment, and tourism. Board membership will be tailored to the nature of the outbreak and will include representatives from relevant FIF departments and will consult with and take advice from other stakeholders and partners.

- Depending on the nature and scale of the outbreak, any recovery and support measures need to be identified at as early a stage as possible and continually assessed and reviewed as the outbreak progresses, so that appropriate support can be targeted.

- Recovery can take years, depending on the disease outbreak. In addition to financial support it can involve social and developmental recovery in addition to returning individual farms and trade back to a sustainable position.

7. EMERGENCY PREPAREDNESS

- The VS will work in partnership with other FIG departments and external stakeholders, including international partners, to maintain its resilience and prepare its response to EAD outbreaks or incidents. This includes continual work to:
    - identify and manage new and existing potential pathways for introduction of animal diseases (e.g. through control of animal and animal product imports, border biosecurity and quarantine practices)
    - monitor disease status and outbreaks in other countries and the international animal health situation
    - make advance arrangements and agreements for provision of external assistance to aid an EAD response
    - adopt updates in best practice for the management of EAD.

- The VS and DOA will undertake extension initiatives to raise awareness and improve the reporting of suspicion of disease, and to issue advice and training on biosecurity and husbandry practices to prevent disease.

- The VS and DOA will work with farms to develop local contingency plans for depopulation and disposal arrangements in the event of disease on that farm.

- The VS will design and deliver appropriate training for veterinary, scientific and technical staff, including a regular program of coordinated animal disease and FIG Major Incident Plan exercises, with at least one every 3 years for Foot and

Mouth Disease, or within one year of appointment of a new VO, whichever is sooner.

- The VS will ensure it has stores of, or ready access to, equipment and materials to enable it to respond rapidly to an initial outbreak of an EAD, within the limitations of the Islands' resupply time limits. Liaison with the international diagnostic laboratories and other partners may be necessary to expedite rapid supply of emergency supplies, such as sampling equipment and disinfectants, especially in a large outbreak.

- The VS will review the NCPEAD annually, record any updates and ensure the latest version is available to all partners and stakeholders.

END OF PART A

FALKLAND ISLANDS GOVERNMENT

NATIONAL CONTINGENCY PLAN FOR EMERGENCY ANIMAL DISEASE

PART B

OPERATIONAL RESPONSES

Veterinary Service, Natural Resources Directorate

PART B

1. INTRODUCTION

- Part B of the National Contingency Plan for Emergency Animal Disease (NCPEAD) describes the operational responses for an EAD incident or outbreak at a general level, and, for some diseases, on a disease-specific basis. It draws on and refers to the wealth of existing protocols and information available internationally for emergency and notifiable diseases, including from the WOAH (World Organisation for Animal Health), DEFRA (e.g. the UK Contingency Plan for Exotic Notifiable Diseases of Animals in England), the APHA, and the Australian Veterinary Emergency Plan (AUSVETPLAN). It is not the intention of this Part B alone to provide or replicate all the detailed information required.

- All Veterinary Service (VS) staff must be familiar with and follow the guidance provided in Part B, as well as familiarise themselves with Part A of the NCPEAD and the FIG Major Incident Plan.

- The initial response to suspicion of an EAD will be similar in most circumstances, and can then be tailored to the unique situation or specific disease once this is confirmed. This Standard Initial Response will be followed by the Veterinary Officer (VO) in all situations after receipt of a report of disease suspicion.

- The disease-specific response strategy and response actions will depend on the nature of the disease, including
    - Notification status and implications for trade
    - Aetiology
    - Host range, including zoonotic implications
    - Geographic distribution
    - Incubation period
    - Transmission routes
    - Clinical signs
    - Diagnostic methods and availability of testing
    - Development of immunity
    - Availability of vaccination and treatment

2. PREPAREDNESS

- It is vital that all VS staff are familiar with and practiced in the Standard Initial Response actions (section 3) to suspicion of an EAD. Rapid and coordinated action at the earliest stage gives the greatest opportunity to prevent further disease spread and minimise disease impacts.

- The SVO is responsible for keeping up to date with WOAH disease status information that is relevant to the Falkland Islands, and acting on this as necessary.

- The VS must ensure at all times that the protocols, equipment and resources required for the standard initial response are readily available, easily accessible, and up to date, for immediate deployment by the VO. Accurate and contemporaneous records must be kept.

- Disease-specific information and requirements (such as sampling protocols, laboratory submission forms, etc.) are provided in Part B, and will be supplemented and updated regularly as new information and resources are acquired.

- Additional supplementary information relevant to the NCPEAD will be collated and stored in a centralised VS database, and will be reviewed at least once annually to ensure it remains current and valid. Significant updates will be actively signposted and communicated to VS staff.

3. EAD STANDARD INITIAL RESPONSE BY VETERINARY OFFICER

- Receipt of a report of suspicion of an EAD incident will usually occur by telephone (direct to VS or via Police), or in person from a farmer, conservation scientist, or member of the public. Digital photographic images may accompany the report or be requested for urgent assessment (recommended). The VO may themselves also be in a situation that raises suspicion, for example at the abattoir or during a farm visit.

  The following steps must then be taken:

1. The VO will make an initial assessment, by discussion with the reportee and in consultation with the SVO wherever possible, of the potential causes and consequences of the report, and the likelihood of a notifiable disease. This will be based on information received about the species and number of animals affected, clinical signs, timelines, recent animal/equipment/visitor movements and any other relevant factors. This initial assessment is recorded on the APHA form EXD40 Disease Report Form- Veterinary Inquiry Part 1 (A and B). Note: this UK-based interactive form has not been adapted to be specific to FIG, therefore some parts are not directly relevant. The form must only be submitted to the APHA in the UK by the SVO and after discussion with APHA.

2. If disease is suspected at the abattoir, the SVO will initiate a veterinary investigation at the premises of origin.

3. If there is certainty that the report does not relate to an EAD incident/outbreak, no further action is taken.

4. If there is any concern of an EAD (i.e. disease cannot be ruled out), a designated VO will be assigned to attend the site of the suspicious incident and undertake a veterinary investigation. Ideally, this should not be the SVO. The investigation must take place as soon as practically possible, urgently and prioritised above all other veterinary work.

5. Wherever possible, an assistant should accompany the VO, to assist with biosecurity procedures, record-keeping, external contacting, and sample labelling and packing.

6. Depending on the location of the suspected EAD incident/outbreak, and whether at a single or multiple location/s, emergency transportation arrangements (e.g. FIGAS flights) and additional investigating VOs may need to be rapidly arranged in order to conduct a timely veterinary investigation (See EAD Contact List **Appendix 3**). The SVO will maintain an up to date contact list of all known suitably qualified veterinary surgeons on the Falkland Islands that can be called upon in the event of an emergency.

7. The owner of the premises and/or animal keeper will be identified and contacted (if not the reportee), to communicate the requirement for an investigation and agree attendance arrangements and meeting point.

8. The owner will be instructed verbally that the VS is imposing temporary movement restrictions on animals and equipment /vehicles on or off the suspect premises (SP) pending the investigation. Movement of vehicles, people and equipment from the premises must be either completely prevented, or strictly controlled and monitored for subsequent tracing if required. The owner will be instructed to:

    - confine affected animals and in-contact animals to a determined location within the premises if possible, and prevent access of other animals to that location (e.g by shutting gates or blocking with vehicles etc). If such confinement requires movement of the animals within the premises (e.g. gathering into a fenced paddock/yard or building), no other animals must be allowed access to the original site or travel route.
    - Have ready all record of stock movements, medicines and production

    For livestock, given the remote and extensive nature of farms on the Falklands, the boundaries of the suspect premises (SP) and associated temporary movement

restrictions are likely to constitute the entire farm. Given the nature of the road network in some areas of the Falkland Islands, these temporary movement restrictions and closure of the main farm gate/s may necessitate the prevention of through road traffic until the investigation outcome is determined.

For wildlife, locations within a premises boundary such as a beach, breeding area, may be more appropriate to designate as the affected area to which temporary movement restrictions are applied, and to which public access is restricted. People must be instructed not to touch or handle sick or dead wild birds until the veterinary inquiry is concluded. Liaison with the FIG Environmental Unit (Environment Officer), and the other wildlife stakeholders, Falklands Conservation and SAERI, through the Wildlife Disease Group (VS is a member of this group) is required.

9. If the owner is not contactable, or non-co-operative, the investigating VO has the legal authority to attend and enter any place for the purposes of a veterinary disease investigation. In this situation the Police will be informed (28100) and any necessary assistance requested. The Police can also enforce movement restrictions (see point 6 above).

10. The designated VO will immediately prepare to attend, ideally in a DOA pool vehicle (not the Veterinary Clinic vehicle) and within one hour of report receipt. If the location is not accessible directly by road the SVO will undertake a risk assessment based on the nature of the suspicion and impacts of any delay in conducting an investigation. Attendance may require the SVO to make an urgent request for air or boat transportation.

11. Only minimum equipment required to undertake the investigation must be taken onto the premises and must be either:
    - Capable of being cleansed and disinfected
    - Disposable
    - Suitably protected from contamination

12. Required EAD investigation equipment is:
    - The three blue pre-packed emergency animal disease investigation boxes (Laboratory Chemical Store) See **Appendix 4** for contents
    - All items listed on the EAD Grab and Go checklist (**Appendix 5**)
    - For notifiable disease suspicion (e.g. FMD), appropriate sample medium and containers. This may need to be prepared urgently by the DoA laboratory. **See disease specific protocols below.**
    - Desirable: Change of clothing (VO and any assistant attending)

13. DoA vehicles should not be taken onto the premises unless absolutely necessary. On arrival at the premises boundary (e.g. farm gate), it is preferable to leave the DoA vehicle and transfer equipment into a farm vehicle inside the boundary. This will minimise risk of DoA vehicle contamination.

14. The VO will confirm the incident location/s and the temporary movement restrictions or controls on animals, people and equipment (see step 6), using the biosecurity signs (in Emergency Box 3) as a visual control measure at the boundary/ies.

15. The VO (or assistant) will take a GPS location recording of the incident location and record the location on a map. Farm maps can be located at Y:\10 Farm Files. Location of susceptible unaffected animals should also be marked, and of the farm's identified site/contingency plan for animal disposal if determined and relevant to the disease under suspicion.

16. Full Personal Protective Equipment (PPE) must be worn by the VO and any assistant before entry into the incident location, as this may be contaminated with the pathogen/s under suspicion. This may need to occur at the premises boundary, or at a defined location within the premises (see 11 above). The VO must be familiar and rehearsed in application and removal procedures for full PPE and decontamination of materials to be removed from the premises (See **Appendix 6**). Different decontamination and disinfection procedures will be necessary depending on the disease agent under suspicion, noting that most EADs likely in the Falkland Islands are caused by viral agents and are not vector-borne. Location of application and removal of PPE, and location of vehicle, will be site specific and at the discretion of the VO. The VO must establish and communicate clear delineation of 'clean' and 'dirty' areas for the initial clinical investigation. Ideally, the assistant should remain in the 'clean' area.

17. The VO must conduct a clinical investigation by examining the animal/s or a representative sample of affected and in-contact animals, and animal production and movement records (last 14 days minimum). All other susceptible stock on the premises should be inspected if practical, this may not be possible in very extensive camp systems. Information must be recorded by completing the APHA form EXD40 Disease Report Form- Veterinary Inquiry Part 2: Veterinary Investigation referring to the associated guidance document EDO294- Clinical Investigation Guidance. Note that this UK-based interactive form has not been

made specific to FIG and therefore some parts may not apply. The form must not be submitted to the APHA in the UK other than by the SVO and after discussion with APHA.

18. Telephone consultation with the SVO or other veterinary staff may be required to determine appropriate diagnostic sampling, and/or whether immediate culling is necessary. Details of any diagnostic samples taken must be recorded using the EADISAMPLELIST form (in Emergency Box 3). See document EDO237 for specific details of samples required for each disease and Sections 8 and 9 below (for further details of procedures for FMD and AI; if samples are submitted to APHA or Pirbright Institute in the UK these details must be entered on form Sample Submission - Diagnostic form EXD36. Where the VO is already at the site or has initiated the suspicion themselves, Form EXD40 Parts 1 and 2 may be completed together.

19. Exit of the VO from the incident location and the premises after the clinical investigation must follow biosecure principles to ensure the VO, materials, equipment and vehicle are not contaminated. Follow **Appendix 6 (PPE)** . If the VO's vehicle has entered the premises it must be washed before departure at the boundary with soap/detergent and scrubbing brush to remove organic matter. Do not use a plain water power hose as this will aerosolise pathogens. Then spray all surfaces including wheels and wheel arches with disinfectant.

20. If an EAD event is likely or confirmed, the VO must immediately contact the SVO, who will activate the major incident plan (NCPEAD Part A). Written notice of restrictions must be served to the owner, detailing the nature of the restrictions, and initial control zones. **See Appendix 8 (Restrictions Notice Template).**

21. Until confirmation of disease, the temporary movement restrictions on the suspect premises (SP) initially identified will remain, and may be modified by the VO according to the results of the investigation. Depending on the disease, the SVO may also declare a temporary control zone (TCZ) around the suspect premises controlling the movement of animals, animal products, people, vehicles and equipment. This may extend to the whole of the Falkland Islands (i.e. a national livestock movement 'standstill').

22. Once disease is confirmed, or on strong suspicion, a Protection Zone (PZ) may be put in place around the IP, where movement of livestock, equipment and vehicles will be stopped, and susceptible animals checked by veterinary officers. The size will be determined by the SVO and is disease-dependent. For example, for FMD and HPAI the PZ is usually a minimum of 3km radius from the boundary of the IP.

23. A surveillance zone (SZ) may also be placed around the PZ; the size will be determined by the SVO and is disease -dependent. The SZ is subject to movement restrictions but livestock checks may not be required. For example, for FMD and HPAI the SZ is usually a minimum of 10km radius from the IP (**Figure B1**).

24. In the Falklands, given the very large and contiguous nature of all farms across the entire landmass, for most livestock diseases the PZ and SZ are likely to be merged/superimposed and a pragmatic approach will be taken based on local geography and road access. This would result in the placement of a single control zone, with **a default of at least 10km** extending from the IP farm boundary, that includes all adjacent farms and any other farms within the defined distance from the IP boundary. Farm maps can be located at Y:\10 Farm Files.

    An example is provided in **Figure B2**. If the IP is an island, this zone would encompass the entire island. If the IP is the abattoir this may vary or not apply.

25. Size, nature and duration of control zones may also be subject to international requirements for animal trade and disease-free status, and expert advice will be sought by the SVO (via the UK CVO and WOAH).

26. Conclusion of the investigation will result in a determination of either (**Table B1**):
    - EAD ruled out
    - EAD unlikely but cannot be ruled out
    - EAD likely
    - EAD confirmed

Table B1. Summary of Veterinary Investigation outcomes

Veterinary Investigation Outcome	Immediate Actions	Alert Status and suspicion level (see Table A2)
EAD ruled out	Temporary restrictions removed. No further emergency action. Routine diagnostic procedures followed if necessary. Leave the premises	White/Black 0
EAD unlikely on basis of clinical signs but cannot be ruled out	Temporary restrictions removed. Animals may still be confined and observed, or culled (for welfare or post mortem examination), and diagnostic samples taken to eliminate EAD	White/Black 1
EAD likely	Diagnostic samples taken. Restrictions remain and control zones implemented, written notice to owner served. SVO informed, critical incident declared (FIG MIP). Animals may be culled on suspicion. Biosecurity and tracing measures implemented.	Amber/Red 2,3
EAD confirmed	Infected Premises (IP). Confirmatory test results obtained. Restrictions remain and control zones implemented, written notice to owner served. SVO informed, major incident declared (FIG MIP). Animals culled. Biosecurity and tracing measures implemented	Red 4

Figure B1. Schematic example of control zones for a confirmed disease outbreak (minimum radius), suitable for Foot and Mouth Disease (FMD) and Highly Pathogenic Avian Influenza (HPAI) H5N1

IP = Infected Premises ★
PZ = Protection Zone
SZ = Surveillance Zone
RZ = Restricted Zone. Extends as far as necessary to prevent disease spread; may extend to whole of Falkland Islands

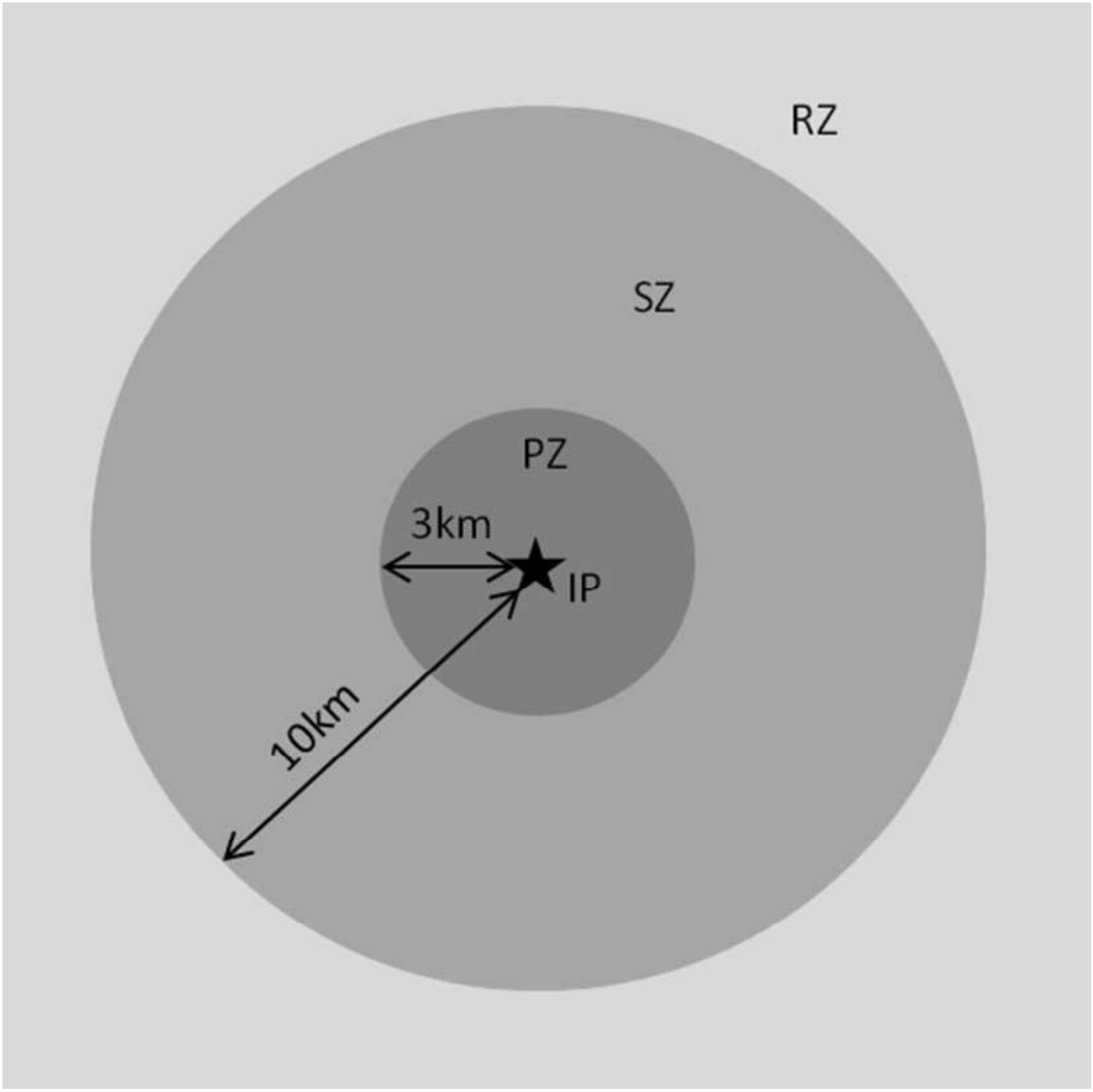
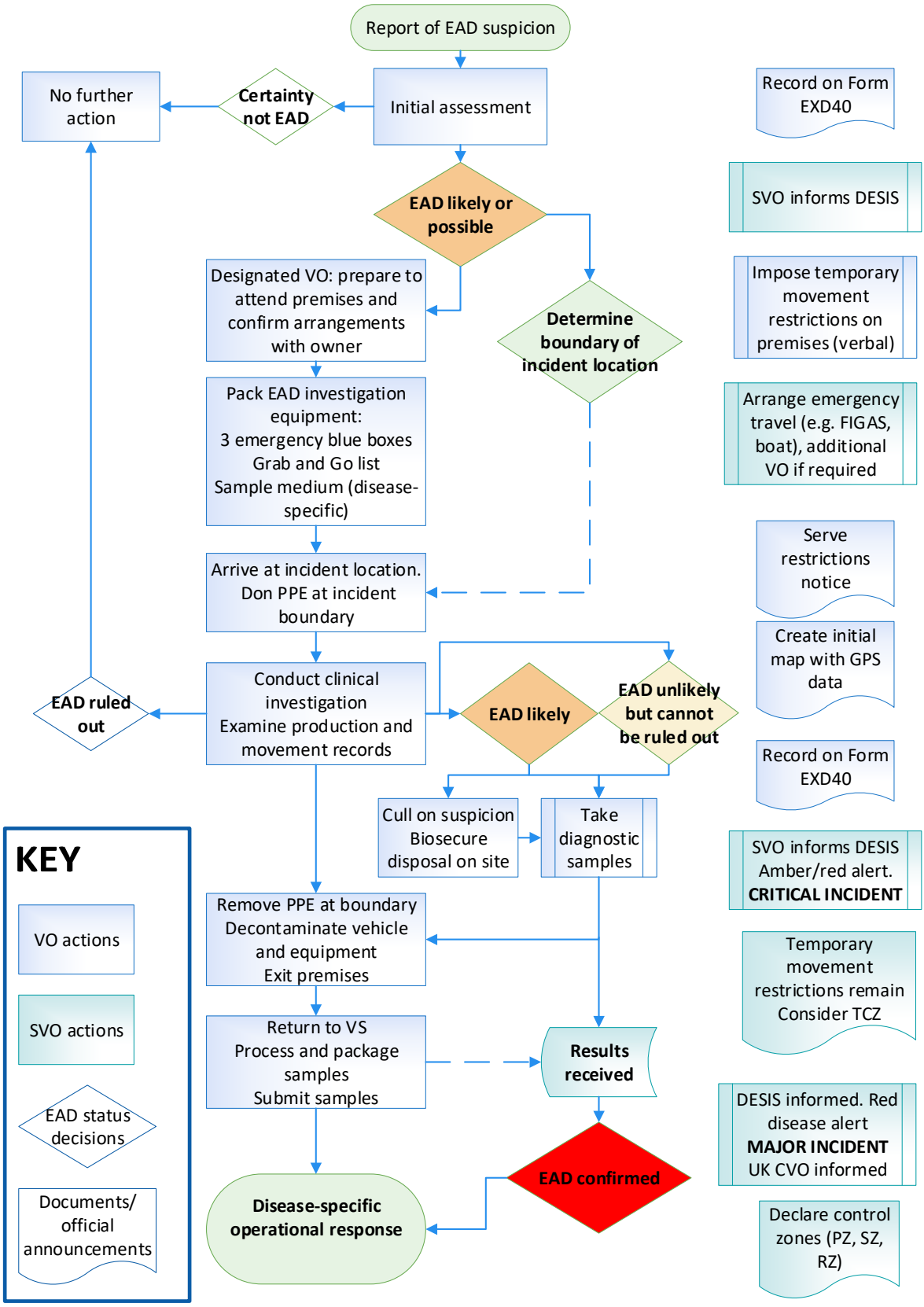


Figure B2 Map indicating extent of a single initial control zone (grey line) for FMD of a

minimum of 10km (merged PZ and SZ) placed around IP at North Arm farm. Adjacent farms (Goose Green, Walker Creek) and islands within 10km of these are included. Saladero (north of Goose Green) is included because the only road access is through Goose Green.

The Standard Initial Response procedures and actions are summarised in **Figure B3:**

Figure B3. Standard Initial Response summary actions



27. Control zones and intelligence gathering to identify contact premises (CP) where the infection may have come from or spread to, and additional suspect premises (SP) must consider the potential means of disease spread, such as:
    - movement of animals, people and machinery between or within farms
    - farm visitors - people and vehicles
    - introduction of new animals
    - contact with neighbours' livestock
    - shared farm equipment, for example during sheep shearing season
    - contamination by vermin and wild birds
    - animals drinking from contaminated ponds, rivers and streams
    - windborne spread of disease (e.g. FMDV): The local MPA Met Office (Tel 73575) can be contacted for immediate assistance with wind speed and direction. Note: Longer term forecasting would require assistance from the Atmospheric, Dispersion and Air Quality Meteorological Office team in Exeter along with DEFRA, to create an atmospheric dispersion model.

28. After identification of the first IP, identified CP and SP will be high priorities for follow-up veterinary investigations to assess whether they are negative or positive (a further IP), and movement control zones placed as required. VOs may therefore be required to visit premises for the purpose of tracing, patrol, monitoring, prior to revocation of restrictions, prior to licensing (e.g. for exemptions to restrictions), or for other reasons appropriate to the outbreak. For these subsequent investigations the APHA Form EXD44 Report Form-Clinical Investigation must be used. This form includes a Disease Exposure Risk Assessment for premises identified as potential CP.

4. EAD STANDARD OPERATIONAL RESPONSE

- The Operations base will be located at the VS offices and will implement the disease control operational response and field activities, following the tactical direction and guidance of the SVO and FIG MIP Silver Tactical Control Group, in accordance with disease-specific requirements.

- In the event of a large and/or ongoing EAD outbreak the VS will designate or appoint an Operations Base manager. The manager will liaise closely with the Silver TCG to ensure delivery of the main functions of the Operations Base, which are to:
    - Ensure jobs are prioritised, allocated on time, fully completed and accurately recorded.
    - Ensure jobs being allocated have the appropriate documents, forms and mapping.

- Provide materials, personnel and information to reduce the risk of spread of disease from infected to uninfected animals.
- Establish an effective records control system to manage official records and any other media which conveys information.
- Maintain sufficient supplies to allow for field operations activities and for surveillance.
- Advise on sampling and testing requirements and coordinate the packing and dispatch of samples to, and liaison with, diagnostic laboratories.
- Co-ordinate and supervise culling activities and ensure that fair and accurate valuations of all livestock being depopulated for disease control purposes are carried out.
- Co-ordinate and supervise the disposal of carcases from premises where animals are depopulated.
- Assess requirements for preliminary and final cleansing and disinfection and provide advice on how it should be done.
- Liaise closely with the FIG media and communications team to provide integrated communications.
- Contribute to the understanding and control of disease by gathering, collating and interpreting field and epidemiological information, considering patterns of disease, assessing risk factors and disseminating this information.
- Provide advice and assistance for all aspects of staff health and safety.
- Maintain close liaison with all stakeholder groups and operational partners.

- If appropriate to the disease incident/outbreak, a case officer may be allocated to the premises where disease control activity is taking place, e.g. at the FIMCO abattoir. This case officer is responsible for overseeing all activities including veterinary staff, police officers deployed to the site, other official, stock valuers, slaughtermen, contractors etc to ensure a co-ordinated, well-directed operation, compliance with health and safety protocols, minimise the risk of disease spread from the premises and achieve rapid and effective completion of disease control measures. Allocation of a case officer may also be appropriate for a wild area in the event of a wildlife disease outbreak.

5. ANIMAL DESTRUCTION AND DEPOPULATION

- In an EAD situation it may be necessary to destroy a large number of animals quickly. It is vital that destruction is humane, swift and that animals are confirmed as dead before disposal processes commence.

- Under this Plan, the VS will determine and supervise and be present at all destruction processes for the purpose of disease control. All destruction methods

must be carried out by a competent person experienced in the methods employed and appropriately trained in animal welfare. Animal welfare, human safety and biosecurity are of paramount importance.

- The VS will follow the detailed guidance provided in the Humane Slaughter Association On-farm killing of livestock for disease control purposes: and website: Introduction - Humane Slaughter Association (hsa.org.uk)

  Other references:
  AUSVETPLAN Operational Manual: Destruction of animals
  Code of Practice for the Welfare of Cattle
  Code of Practice for the Welfare of Sheep
  Code of Practice for the Welfare of Pigs
  Code of Practice for the Welfare of Horses
  COUNCIL REGULATION (EC) No 1099/2009 on the protection of animals at the time of killing (see Chapter IV Article 18) and website EUR-Lex - 02009R1099-20191214 - EN - EUR-Lex (europa.eu)
  Slaughter poultry, livestock and rabbits for home consumption - GOV.UK (www.gov.uk)

- Mass destruction of animals carries significant physical and mental health and safety risks. Even if competent and experienced, personnel involved in undertaking the mass destruction process may not be able to cope with the mental and physical stress involved, particularly if operations are prolonged. The animal owner, their family and staff may be present during the process and may experience considerable distress. Unless unavoidable, animal owners and keepers should not be involved in mass destruction of their own animals. FIG must consider the provision of expert counselling and welfare assessment and assistance before, during and after the process to all personnel involved.

- Planning is essential to ensure that destruction is carried out efficiently and effectively on each premises. The destruction process must not commence before all aspects of the depopulation procedure, including animal disposal and decontamination processes, have been planned and resourced in order that they are co-ordinated and to minimise risk of further disease spread. The VS shall draw up an action plan for the depopulation process in consultation with the animal owner and appropriate farm staff. A checklist for Action Plan considerations is provided at Appendix 7**.**

- The final choice of destruction method will depend on many factors, including:
  - the animal species and the age grouping

- the number of animals (individuals versus large numbers)
- the state of domestication (tame, handled animals versus wild animals)
- the status of the animal (pet versus production farm animal)
- the type of facilities available, including occupational health and safety aspects
- firearm safety — proximity of people and infrastructure
- the efficiency and acceptability of the method
- the practicality of the method, including the availability of competent operators
- the training required by operators to reach competence
- the overall level of stress on the animal, including whether it is fit or unwell
- the future use of the carcase and any risk to consumers (including people and non-target scavengers).

After safety, animal welfare is the main consideration. Within these constraints, the best euthanasia method for the species and the circumstances must be selected.

- FIG Codes of Practice describe the recommended methods for humane destruction of livestock. In summary:
  - Cattle, Sheep, Pigs: Shooting using a free bullet; captive bolt pistol followed within 60 seconds by chest stick or throat cut.
  - Horses: Lethal injection by VO or free bullet
  - Poultry: Non-penetrative captive bolt/ electrical stunning (tongs/waterbath) followed immediately by bleeding or cervical dislocation; cervical dislocation (manual) alone.
  - Other birds (wild): Culling of wild birds is rarely indicated, although legal powers under the Animal Health Ordinance exist to do this for the purposes of disease control. Where moribund wild birds require destruction on humane grounds, cervical dislocation or lethal injection is recommended. In some instances, destruction of scavenger species many be necessary. Shooting of wild birds risks further dispersion.

6. ANIMAL DISPOSAL

Key references:
AUSVETPLAN Operational Manual: Disposal

- In the absence of commercial rendering facilities and only small-scale incineration facilities at the FIMCO abattoir, options for large-scale carcase disposal on the Falkland Islands are limited and carry significant challenges. Farms are strongly encouraged to work with the VS to develop local contingency plans to identify the most suitable local option.

A. Burning

Burning carcases presents a logistical challenge requiring excavations and substantial quantities of solid and liquid fuels, manpower and equipment. As an example, a single bovine carcase (500kg) requires 1.5 tons of dry timber to be completely consumed. Burning poses a significant risk to human health, air quality and the water environment. Various pollutants emitted by pyres, inhaled particles and sulphur dioxide are likely to pose an immediate threat to public health, particularly for people with certain medical conditions who live or work close to the pyres. Risks to the water environment arise from the use of hydrocarbon oils as fire accelerants; and the potential for contamination of groundwater with heavy metals and dioxins resulting from the infiltration of rain water through the ash.

Where no other option is suitable, pyres should be built on level ground as far as possible from, and downwind of, public highways and residential areas. Other considerations include vehicle access to deliver carcases from culling site, access for carrying combustion materials, proximity to habitation, other buildings and combustible materials, and other livestock.

Location of pyres in areas where peat is present carries the significant risk of peat combustion and uncontrolled spread.

Detailed instructions on pyre size and construction are available. However, for all the reasons stated above burning is not considered a viable option in the Falkland Islands.

B. Burial

Burial is a biosecure disposal method for most EADs, however environmental considerations are potentially significant, principally from leachate, the liquid released during carcase decomposition. Burial presents significant logistical challenges in terms of equipment/machinery to dig burial pits in a timely fashion to cope with rapid depopulation, and availability of suitable sites and soil types. Unlined burial pits can be used when soil types or local geology can control the risk of leachate leakage, whereas lined burial pits must be used when there are risks of leachate into the subsoil or water table. Means of mitigating leachates include using clay from excavations or nearby sources to create a compacted and channelled clay base, use of high-density polyethylene liners (availability unlikely) and placement of absorbent layers of wood chips or hay (availability unlikely). Sites should therefore preferably be of low soil permeability with significant clay content and the bottom of the pit should be above the maximum groundwater level. Borrow pits for road construction (PWD) are generally unsuitable due to main roadside location and porosity of local rock; lining of large borrow pits to counter this is likely to be

unfeasible. Sites must be away from water sources and sufficient soil must be available to cover the carcases (at least 1 metre depth, preferably 2 metres).

Detailed instructions on burial pit constriction and size are available. As an example, a straight-lined pit 3 m wide x 5 metres deep filled with carcases to within 2 metres of ground level can accommodate 30 sheep or 6 cattle per linear metre. Size and logistics of digging burial pits for mass depopulation may therefore limit feasibility of this option.

C. Disposal at sea

The Falkland Islands is signatory to the London Convention and Protocol on the Prevention of Marine Pollution and this is reflected in the Maritime Ordinance 2017 Part 14 and the requirement for licensing of disposal of animal carcases at sea (Marine Disposal licence application). Considerations for this option in the event of large-scale culling include:

- Island geography and lack of other disposal options
- Marine disposal could be a practical solution with fewer environmental impacts than other disposal methods. Although marine disposal poses a pollution problem, this needs to be balanced against the pollution and environmental impacts of other disposal options.
- A lack of research means that there is little hard evidence to support this option.
- Marine disposal could provide a positive contribution to the ocean food chain.
- Disposal of animal carcasses near land may promote the presence of scavengers which could interfere with human activities or disrupt local ecology
- This option would need to have industry, stakeholder and community support.
- Effects on markets and international support would need to be carefully assessed.

7. DECONTAMINATION PROCEDURES

Key reference:

AUSVETPLAN Operational Manual: Decontamination. This document contains detailed information on all disinfection agents, concentrations required and suitability for different types of pathogens. It includes reference tables describing requirements for each pathogen and details of all essential decontamination processes, including equipment lists.

Other reference: Defra-approved disinfectants

- Decontamination is the combination of physical and chemical processes that removes or kills pathogenic microorganisms and is a vital part of disease control and eradication. It is rare that 100% decontamination can occur or be proved in field situations, but all practicable means to achieve this must be employed in EAD management.

- A presumptive identification of the disease agent/s is required to design an appropriate strategy and decontamination plan, but many common principles and procedures can be applied. Essential principles of any decontamination plan are:
    - Isolation of source of infection (e.g. the animal)
    - Decontamination of personnel and their clothing
    - Decontamination of equipment
    - Decontamination of vehicles
    - Decontamination of sites

- Preliminary cleaning (water, soaps, detergents) to remove gross contamination with organic material, dirt, grease is invariably needed before chemical disinfection can be effective. Simple cleaning of surfaces by brushing with a detergent solution is effective at removing viruses and bacteria and is fundamental for then achieving chemical disinfection.

- Natural processes of time, dehydration, warmth and sunlight (UV) will greatly assist in the inactivation of most pathogens and the decontamination operation.

- Chemical disinfectants of most relevance to this plan (i.e. effective against most notifiable viruses including FMDV and influenza virus) are:

    - Oxidising agents:
        - **Sodium hypochlorite (bleach)**: (5000ppm available chlorine) - 1 litre 50,000ppm concentrate diluted in 10 litres water, contact time 10-30 minutes.
        - **Virkon S ®**: 20g/litre (2% w/v), contact time 10 minutes. Comes in powder and tablet form. Can be sprinkled as a powder over wet or boggy areas. Mildly corrosive for some metals. Expensive
        - Products containing Virkon for both cleaning and disinfection are available (e.g. Rely+On™Virkon™ for use at 1:100 dilution)
    - Alkalis:
        - **Sodium hydroxide (caustic soda)**: 10g/litre (1% w/v), contact time 10 minutes. Corrosive to aluminium. Active in presence of organic matter. Efficacy enhanced by addition of detergent. Cheap

        - **Sodium carbonate (washing soda)**. 100g/litre (10% w/v). Contact time 20 minutes. Active in presence of organic matter. Cheap
    - Acids:
        - **Citric acid**: (0.2%) 2g/litre water, contact time 15 minutes
        - **Hydrochloric acid:** 2% (v/v) , dilute 10molar solution 1:50, contact time 10 mins. Corrosive to metal and concrete
    - Note that quaternary ammonium compounds, phenolics and iodophors are not effective against FMDV. However **FAM 30®** is a Defra-approved cleansing and disinfecting product (Foot & Mouth, Swine Vesicular, Poultry, TB & General Orders) for FMD and poultry diseases (1:550 dilution)

- All disinfectants are hazardous chemicals and must be used with care, particularly when undiluted, and following manufacturer's instructions. Direct skin contact and inhalation must be avoided and personnel engaged in mixing or applying disinfectants must wear appropriate PPE and have first aid equipment available, including eye irrigation.

- Small amounts of disinfectants such as Virkon® and sodium hydroxide are kept in stock at VS for initial use at the start of a disease outbreak. In the event of a large-scale outbreak APHA should be contacted to request assistance in calculating additional disinfectant quantities needed and with requisition.

- The extensive nature of farming in the Falklands means that housing of animals (and associated accumulation of bedding and sewage/slurry) is rarely practiced, but shearing sheds, pens and races, milking parlours and any buildings used in the depopulation (culling) process on the IP will need to be decontaminated.

- DESIS may need to call upon FIG Fire and Rescue and PWD for assistance with water pumping operations for decontamination of premises.

8. DISEASE SUMMARY: FOOT AND MOUTH DISEASE (FMD)

Key references:
OIE Technical Disease Card: Foot and mouth disease - OIE - World Organisation for Animal Health
Foot and mouth disease: how to spot and report it - GOV.UK (www.gov.uk)
FMD control strategy for Great Britain
AUSVETPLAN: Disease Strategy Foot-and-Mouth disease. Version 3.4 2014 – to be updated in 2022

Foot and mouth disease (FMD) is the most contagious disease of mammals and has a great potential for causing severe economic loss in susceptible cloven-hoofed animals. FMD cannot be differentiated clinically from other vesicular diseases, such as swine vesicular disease, vesicular stomatitis and vesicular exanthema. Laboratory diagnosis of any suspected FMD case is therefore a matter of urgency.

Causal agent	Foot and mouth disease virus (FMDV), an RNA virus. Family Picornaviridae, genus Aphthovirus. Seven immunologically distinct serotypes: A, O, C, SAT1, SAT2, SAT3, and Asia1, which do not confer cross immunity. New FMD virus (FMDV) variants arise due to constant mutation during error-prone viral RNA replication, recombination, and host selection.
Distribution	Endemic throughout the Middle East, Africa, Asia and most of South America. Has been eradicated from North America and western Europe. Never reported in Falkland Islands
Physical and chemical resistance	Temperature: Preserved by refrigeration and freezing. Progressively inactivated by temperatures above 50°C. Heating meat to a minimum core temperature of 70°C for at least 30 minutes inactivates the virus. pH: Quickly inactivated by pH <6.0 or >9.0. Disinfectants: Inactivated by sodium hydroxide (2%), sodium carbonate (4%), citric acid (0.2%), acetic acid (2%), sodium hypochlorite (3%), potassium peroxymonosulphate/sodium chloride (1%), and chlorine dioxide. Resistant to iodophores, quaternary ammonium compounds, and phenol, especially in the presence of organic matter. Survival: Destroyed in muscle tissue at pH <6.0 i.e. after rigor mortis but survives in other tissues that remain at neutral pH, including lymph nodes and bone marrow and after freezing. Residual virus may survive in milk and milk products after a single cycle of pasteurisation (72°C), but is inactivated by ultra high-temperature pasteurisation. Survives drying and may persist for days to weeks in organic matter under moist and cool

	temperatures. Can persist in contaminated fodder and the environment for up to 1 month, depending on the temperature and pH conditions. Survival in dry manure 14 days. FMDV has been recovered from wool from infected sheep Approximate survival times in wool, hides and skin are 7 weeks at 4°C, 2 weeks at 18°C 2 days at 37°C. Factors influencing survival on wool and fibre include presence of organic material (faeces), temperature and RH
Principal hosts	Cattle (usually main host), sheep, pigs, goats, other cloven-hoofed animals.
Transmission	• Highly contagious • Direct contact between infected and susceptible animals, especially by inhalation of infectious aerosols • Direct contact of susceptible animals with fomites (hands, footwear, clothing, vehicles, etc.) • Consumption (primarily by pigs) of untreated contaminated meat products (swill feeding). • Ingestion of contaminated milk (by calves) • Artificial insemination with contaminated semen • Long distance airborne spread, especially in temperate zones (up to 60 km overland and 300 km over water) • Humans can harbour FMDV in their respiratory tract for 24–48 hours, leading to the common practice of 3–5 days of personal quarantine for personnel exposed in research facilities. During an active outbreak, this may be reduced to an overnight period of time after thorough shower and shampoo, change of clothing, and expectoration.
Sources of virus	• Incubating and clinically affected animals • All secretions and excretions from acutely infected animals, including expired air, saliva, milk, urine, faeces and semen, as well as large quantities in the fluid from FMD-associated vesicles. Also present in amniotic fluid and aborted foetuses in sheep (up to 4 days before clinical signs). Peak virus production usually occurs around the time vesicles rupture and most clinical signs appear. • Meat and by-products in which pH has remained above 6.0 • Carriers: recovered or vaccinated and exposed animals in which FMDV persists in the oropharynx for more than 28 days. The rates of carriers in cattle vary from 15–50% but the carrier state in cattle usually does not persist for more than 6 months, although in a small proportion it may last up to 3 years. Circumstantial field evidence indicates that on rare occasions carriers may transmit infection to susceptible animals of close contact, but the mechanism involved is unknown and direct evidence of transmission from carrier domestic species is lacking.
Incubation period	• Generally considered as **14 days** (WOAH) for the purposes of

	disease control • 1–12 days in sheep, with most infections appearing in 2–8 days • 2–14 days in cattle • Usually 2 days or more in pigs (with some experiments reporting clinical signs in as little as 18– 24 hours).
Clinical diagnosis	General: Signs can range from mild or inapparent to severe, where the severity of clinical signs varies with the strain of virus, exposure dose, age and breed of animal, host species, and degree of host immunity. Deaths are uncommon except in young animals, which may die from multifocal myocarditis or starvation. Most adults recover in 2–3 weeks, although secondary infections may slow recovery. Morbidity may approach 100%. Mortality in general is low in adult animals (1–5%) but higher in young calves, lambs and piglets (20% or higher). Recovery in uncomplicated cases usually takes about 2 weeks. Lesions: • Vesicles or blisters on the tongue, dental pad, gums, cheek, hard and soft palate, lips, nostrils, muzzle, coronary bands, teats, udder, snout of pigs, corium of dewclaws and interdigital spaces • Erosions on rumen pillars at post mortem. Gray or yellow streaking in the heart from degeneration and necrosis of the myocardium in young animals of all species ('tiger heart') <u>Cattle:</u> • The highly productive dairy breeds found in developed countries have the most severe clinical signs. Pyrexia, anorexia, shivering, reduction in milk production for 2–3 days, then o smacking of the lips, grinding of the teeth, drooling, lameness, stamping or kicking of the feet: caused by vesicles (aphthae) on buccal and nasal mucous membranes and/or between the claws and coronary band o after 24 hours: rupture of vesicles leaving erosions o vesicles can also occur on the mammary glands • Recovery generally occurs within 8–15 days • Complications: tongue erosions, superinfection of lesions, hoof deformation, mastitis and permanent impairment of milk production, myocarditis, infertility, abortion, permanent loss of weight, and loss of heat control ('panters'). • Death of young animals from myocarditis <u>Sheep and goats:</u> • A significant number of infected animals may be asymptomatic or have lesions only at one site. Common signs are fever and mild to severe lameness of one or more legs • Vesicles occur on the feet, in the coronary band and interdigital

	spaces, but they may rupture and be hidden by foot lesions from other causes • Mouth lesions are often not noticeable or severe, and generally appear as shallow erosions • Pyrexia • Agalactia in milking sheep and goats is a feature. Significant numbers of ewes abort in some outbreaks • Death of young stock may occur without clinical signs <u>Pigs</u> • Pyrexia • May develop severe foot lesions and lameness with detachment of the claw horn, particularly when housed on concrete • Vesicles often occur at pressure points on the limbs, especially along the carpus ('knuckling') • Vesicular lesions on the snout and dry lesions on the tongue may occur • Young pigs up to 14 weeks of age may die suddenly from heart failure; piglets less than 8 weeks of age are particularly susceptible
Estimating age of lesions	Day 1: Blanching of epithelium, followed by formation of fluid-filled vesicles Day 2: Freshly ruptured vesicles, characterised by raw epithelium, a clear edge to the lesion and no deposition of fibrin Day 3: Lesions start to lose their sharp demarcation and bright red colour; deposition of fibrin starts to occur Day 4: Considerable fibrin deposition has occurred, and regrowth of epithelium is evident at the periphery of the lesion Day 7: Extensive scar tissue formation and healing have occurred; some fibrin deposition is visible See: https://www.fao.org/ag/againfo/commissions/docs/training/material/Ageing_lesions/DEFRA.pdf
Differential diagnosis	Clinically indistinguishable: • Vesicular stomatitis • Swine vesicular disease • Vesicular exanthema of swine Other differentials: • Rinderpest (globally eradicated) • Bovine viral diarrhoea and Mucosal disease

	• Infectious bovine rhinotracheitis • Bluetongue • Epizootic haemorrhagic disease • Bovine mammillitis • Bovine papular stomatitis; Contagious ecthyma • Malignant catarrhal fever • Non-infectious causes, such as trauma or chemical burns
Laboratory diagnosis	Virus detection: rRT-PCR, virus isolation Serological surveillance: Non Structural Protein (NSP) Antibody ELISA; Virus Neutralisation Test See WOAH Terrestrial Manual for further details: fmd with viaa test incl. (woah.org)
Samples to be submitted	Fresh samples are required for virus detection and characterisation: • **Two clotted blood samples** (red-top tube) from each of up to ten different animals within the same epidemiological group. Target sick/pyrexic animals • **One EDTA blood sample** (purple-top tube) from the ten sampled animals • Live animals: **Up to six epithelial samples +/- vesicular fluid.** At least 1g of epithelial tissue should be collected from an unruptured or recently ruptured vesicle, usually the tongue, buccal mucosa or feet. Animals should be sedated for welfare reasons and to avoid injury. Epithelial samples +/- vesicular fluid are placed in a sample pot with FMD Transport medium: o Transport medium composed of equal amounts of glycerol and 0.04 M phosphate buffer, pH 7.2–7.6, preferably (but not essential) with added antibiotics (penicillin [1000 IU], neomycin sulphate [100 IU], polymyxin B sulphate [50 IU], mycostatin [100 IU]). o If 0.04 M phosphate buffer is not available, tissue culture medium or phosphate-buffered saline (PBS) can be used instead, but it is important that the final pH of the glycerol/buffer mixture be in the range pH 7.2–7.6. (See recipe) o FMDV is extremely labile in low pH and buffering of the transport media is critical for successful sample collection. o Samples should not be frozen, and kept refrigerated or held and submitted on frozen gel packs or dry ice until received by the laboratory. • Where epithelial tissue is not available, samples of oropharyngeal fluid can be collected in pigs by swabbing the throat, or in ruminants using a probang. However, this is unlikely to be practical as samples need to be submitted

	frozen to the laboratory and materials for the required transport medium are not readily available in the Falklands. Collection methods are described in fmd with viaa test incl. (woah.org) • Dead animals: (in addition to samples from live animals, if available), tissue samples in FMS transport medium, including lymph nodes (especially those around the head), thyroid, adrenals, kidney, spleen and heart, and any other observed lesions. *For histopathology* (for differential diagnosis) — samples in formalin of lesion tissue (as above), including lesions of the upper gastrointestinal tract. • For the index case/s **DUPLICATE** samples must be taken and retained at the FIG VS offices in case further investigation is required. These samples should be clearly labelled as biosecurity risk, double bagged and stored in the freezer.
Packing of samples	• Diagnostic samples collected on a suspect premises should be labelled, checked, packed, sealed and disinfected in such a way that they do not present a risk of spreading disease on leaving the premises. • This will require partially packed material to be passed from a 'dirty' area for final packing in a 'clean' area, preferably by the assistant, before the VO undergoes the biosecurity measures to leave the contaminated area. • In 'dirty' area, wipe the outside of the sample container, ensuring no disinfectant comes into contact with the sample material. • Place the sample into an individual sealable (mini grip) plastic bag, wipe the outside of the bag and seal. • Place the sealed sample bags in a bio-bottle with sufficient absorbent material to soak up any spillages and prevent contents moving. Secure the lid of the bio-bottle • Fully complete the EXD36 form (Sample submission _Diagnostic) and seal in a separate mini-grip plastic bag and put in a seal-easy bag. • Dunk/wipe the bio-bottle and bagged paperwork in an approved disinfectant (e.g. Virkon) and place in a large clear plastic bag held by a 'clean' assistant outside the 'dirty' area. • In the clean area, the bag is sealed by tying a knot on the top or with tape • Where blood samples are collected using the Field Vacutainer kits these can be secured in the original polystyrene box. (Care must be taken not to contaminate the outer cardboard box, this should be left in the clean area). The polystyrene box is closed, sealed and wiped with disinfectant. Place the box in a clear bag and seal. Place the completed paperwork inside a clear bag, seal, wipe with

	disinfectant and attach to the polystyrene box. Dunk/wipe the package in an approved disinfectant (e.g. Virkon®), place in a large clean plastic bag held by a 'clean' assistant outside the dirty area • In the clean area place the sealed polystyrene box in the Vacutainer outer cardboard box and seal. • From clean area (e.g back at VS offices), place all samples in an insulated polystyrene box, on frozen gel packs or dry ice, using adequate packing material around it to prevent items moving. Seal this box and place in a clean cardboard outer box and seal. • Samples are to be sent to The Pirbright Institute Reference Laboratories Ash Road Pirbright Woking Surrey GU24 0NF • Follow packing, labelling and dispatch guidance at: Sample Submission Guidelines | The Pirbright Institute and Pirbright packing instructions and IATA guidelines for UN 3373 • Complete and include the Customs invoice example -Blank • Include a copy of the SAPO licence 53 2018 Pirbright • Include a copy of the iv69 SAPO general licence
Submission procedure	1. Silver TCG contacts CMLO for next available MOD flight to UK 2. Contact APHA – 0044 (0)20 822 57611 if not already done. Inform re suspicion and that you are sending samples to Pirbright Institute **3.** Contact Pirbright Institute UK 00 44 (0)1483 232441 incoming.samples@pirbright.ac.uk. **Shipment details must be agreed before dispatch** 4. Contact Topspeed Couriers in UK for receipt at RAF Brize Norton and transport to Pirbright: Tel: 0800 856 2464 (Freephone) or 00 44 (0)1565 631840; Email**:** info@topspeedcouriers.co.uk
Decontamination summary	Critical requirement for inactivation is pH<3 or ph11. Live animals: humane destruction Carcases: bury, burn, dispose at sea Animal housing/equipment: Soap/detergent, then Virkon®, sodium hydroxide or sodium carbonate. Environment: sodium hydroxide, sodium carbonate, hydrochloric acid, citric acid Water: sodium hydroxide, sodium carbonate Feed: burn, bury (formalin)

	Effluent/manure: Bury or sodium hydroxide, sodium carbonate Human housing: soap/detergent, then Virkon®, sodium hydroxide, sodium carbonate, citric acid Machinery, vehicles: soap, detergent then Virkon®, sodium hydroxide, sodium carbonate, hydrochloric acid, hydrochloric acid, citric acid Wool bales: (only if sheared prior to contamination): spray with disinfectant (e.g. Virkon®), then store for 4 months at 4 degrees or at 18 degrees for 4 weeks to achieve acceptable inactivation of the virus See AUSVETPLAN Operational Manual: Decontamination
Vaccination potential	UK (and therefore FI) and the EU have the highest FMD status under international trade rules as ' countries free from foot and mouth disease without vaccination' . Routine preventive vaccination is not practiced in the UK and is banned in the EU. Emergency vaccination in the event of an outbreak would need to be considered in full consultation with the UK CVO and would require complex scientific and economic analysis, modelling and stakeholder views. Although FMD vaccination is a well-established strategy to control disease in some parts of the world, including in South America, for many reasons it is unlikely to be an appropriate strategy in the Falkland Islands, and would not replace the policy of eradicating disease on infected premises and their dangerous contacts. See: fmd-control-strategy111128.pdf (publishing.service.gov.uk)
Exit strategy	IP restrictions remain in place until either: a) The premises have undergone secondary cleansing and disinfection as directed by the VS, and sentinel animals have been placed on the premises under licence from the VS and shown no sigs of disease on clinical inspections and from laboratory tests of samples taken from them (Pirbright Institute). Sentinel restocking cannot take place until at least 21 days after secondary cleansing and disinfection is confirmed by the VS to have been undertaken to the required standard. OR: b) A period of time has elapsed for virus to decay naturally and no longer pose any threat of infecting animals. This is usually one year for FMD virus. Restrictions on other premises in PZ/SZ cannot be lifted until an epidemiologic survey undertaken by the VS has been concluded with negative results in all premises keeping animals of susceptible species in the PZ. The PZ cannot be merged with the SZ until at least 15 days after preliminary cleansing and disinfection of the IP, and then only if no disease is suspected/confirmed and all samples are negative. The SZ must then remain in force for at last another 15 days (dependent on no disease suspected or confirmed). Resumption of exports: For exports to the EU exports can usually

	resume once disease control zones have been lifted and any additional safeguard measures imposed by the EC during an outbreak have also been lifted. Export health certificates with on non-EU countries vary and will reflect the destination country's import conditions. Individual negotiations will determine requirements. The WOAH sets out requirements to recover disease-free status: Terrestrial Code Online Access - WOAH - World Organisation for Animal Health

9. DISEASE SUMMARY: AVIAN INFLUENZA

Avian influenza (bird flu) is a notifiable disease of most concern to the commercial poultry industry, but also a global public health concern due to its zoonotic potential

Most avian influenza A viruses are low pathogenic (LPAI) and cause few signs of disease in infected wild birds. In poultry, some low-pathogenic viruses can mutate into highly pathogenic avian influenza viruses.

Highly pathogenic avian influenza (HPAI) viruses cause severe disease and high mortality in infected poultry and some wild birds

In the absence of a commercial poultry industry in the Falkland Islands, this disease is most likely to be encountered in wild seabirds, and outdoor backyard/pet domestic poultry. A 2021 SAERI Review of wildlife disease in the Falkland Islands (Baylis and Randhawa) indicates the lack of knowledge and surveillance of avian wildlife diseases, and that only one report exists, to date, of low pathogenic avian influenza in Rockhopper penguins (2003, unpublished WCS), in the Falkland Islands. A review by Uhart (2018) found a number of studies demonstrating evidence of infection with Influenza A virus in Antarctic Southern Giant Petrels (Uhart 2018).

Response for Domestic birds: For outbreaks in domestic birds the general EAD policy described in the NCPEAD will be followed, including culling of affected birds and use of control zones. However, national movement bans are usually **not** required and control zones on suspicion of disease do not usually need to implemented on areas beyond the suspect premises. See Notifiable avian disease control strategy for GB (publishing.service.gov.uk) and Avian influenza (bird flu) - GOV.UK (www.gov.uk) for further information. Note that there are no legal requirements in the Falkland Islands to keep records of poultry kept or movement records, which may impact tracing investigations.

Response for Wild birds: For primary outbreaks of HPAI in wild birds, the general EAD policy will also be followed in order to limit disease spread, especially into domestic

birds, and protect human health. However, it is not FIG policy to cull wild birds, other than on individual animal welfare grounds if they are suffering. See Notifiable avian disease control strategy for GB (publishing.service.gov.uk) section 214-227 for specific guidance on managing HPAI outbreaks in wild birds. The control of AI infection in wild bird populations is not feasible from a logistical, environmental and biodiversity perspective. Culling of wild birds is unlikely to be effective in preventing further spread and hunting would likely cause further dispersion. Changes to this policy would be assessed on a case by case basis.

Biosecurity advice for owners to protect their domestic birds from disease incursion from wild birds can be found at: avian-influenza-aipz-poster.pdf (publishing.service.gov.uk)

Causal agent	Influenza A viruses (RNA viruses), family Orthomyxoviridae genus Alphainfluenzavirus (Influenzavirus A or influenza A virus). 16 haemagglutinin (H1–16) and 9 neuraminidase (N1–9) subtypes of influenza A virus. Influenza A viruses are further designated as highly pathogenic avian influenza (HPAI) or low pathogenicity avian influenza (LPAI) based on the molecular sequence of the haemagglutinin protein and the ability to cause disease in poultry. . 'Fowl plague' and 'highly pathogenic avian influenza' refer to infection with high pathogenicity strains, all of which to date have been either of the H5 or H7 subtype. Subtypes H5 and H7 have the capacity to mutate from LPAI into HPAI forms when introduced into poultry
Distribution	Worldwide including Antarctica
Physical and chemical resistance	Resistant in moist cool environments, can survive up to 200 days between 4 and 37C. Susceptible to dehydration but can persist for extended periods in water (200 days at 17C, >1300 days at 4C) and faeces, depending on ambient temperatures, pH and salinity and UV exposure. Virus can penetrate intact egg shells. Category A virus (enveloped): Sensitive to detergents, soaps, and most disinfectants including oxidising agents (e.g.Virkon®), alkalis, aldehydes
Principal hosts	Aquatic wild birds are the major reservoir. Potential for spread via migratory pathways over long distances. The main wild species involved in the viral cycle of avian influenza are waterfowls, gulls, and shorebirds, however the virus seems to pass easily between different bird species. Although adapted to birds it can affect humans, stably adapt and sustain human-human transmission.
Transmission	Ingestion/inhalation - direct or indirect contact with respiratory secretions, faeces. Spread between farms usually by movement of infected birds or contaminated fomites such as clothing,

	equipment. Can get airborne spread over a limited distance. Direct exposure of farmed birds to wild birds is a likely transmission route. Humans usually infected by direct contact with infected poultry or captive birds. Sporadic infections in other species e.g. cats, dogs, rodents, pigs, horses
Sources of virus	Saliva, nasal secretions, faeces. Duration of shedding varies with host species. Can be shed in poultry and wild bird faeces for 30 days or longer.
Incubation period	14 days (poultry flock level). HPAI incubation in wild birds a few hours up to 7 days.
Clinical diagnosis	LPAI: either no signs of disease or mild disease in chickens/poultry (such as ruffled feathers and a drop in egg production). HPAI: • sudden death (up to 100% mortality) • depression • reduced feed/water intake • Reduced egg production • Respiratory signs (coughing, sneezing, ocular and nasal discharge, sinusitis) • Nervous signs (incoordination, twisted neck, drooping wings • Diarrhoea - greenish • Swelling of head • Blue discolouration (ischaemic necrosis) wattles and comb • Oedema and red discolouration of the legs and feet (ecchymotic haemorrhages) Ducks can be affected without exhibiting clinical signs ZOONOSIS: Can cause severe respiratory disease and death in humans
Differential diagnosis	HPAI: • Newcastle disease (avian paramyxovirus 1) • Fowl cholera (*Pasteurella multocida*) (peracute septicaemic form) • Chlamydiosis • Heat exhaustion • Poisoning • Water deprivation LPAI: • infectious bronchitis, • infectious laryngotracheitis, • low virulent Newcastle disease, and infections by other

	paramyxoviruses • bacterial diseases e.g. mycoplasmosis, infectious coryza, ornithobacteriosis, turkey coryza, and the respiratory form of fowl cholera • fungal diseases e.g. aspergillosis
Laboratory diagnosis	RT-PCR and /or virus isolation
Samples to be submitted	Note: This applies to both Avian Influenza and Newcastle Disease Both live and dead birds may be sampled. **Blood sample**: one clotted sample (red-top tube), minimum 1 ml **Cloacal swab:** Aluminium or plastic-handled swabs (NOT wooden) without transport medium **Oropharyngeal swab:** Aluminium or plastic-handled swabs (NOT wooden) without transport medium If clinical signs present, sample 20 birds in each epidemiological group (i.e. 20 bloods, 20, cloacal swabs, 20 OP swabs) If no clinical signs present sample 60 birds, or all if <60. Carcases can also be submitted to APHA but logistics of submitting to the UK may be prohibitive. Contact APHA for further advice on sampling from carcases.
Packing of samples	• Diagnostic samples collected on a suspect premises should be labelled, checked, packed, sealed and disinfected in such a way that they do not present a risk of spreading disease on leaving the premises. • This will require partially packed material to be passed from a 'dirty' area for final packing in a 'clean' area, preferably by the assistant, before the VO undergoes the biosecurity measures to leave the contaminated area. • Place the group of samples (bloods, cloacal swabs, OP swabs) into an individual self-sealable plastic bag, wipe the outside of the bag and seal. • Place the 3 sealed sample bags in a bio-bottle with sufficient absorbent material to soak up any spillages and prevent contents moving. Secure the lid of the bio-bottle • Fully complete the EXD36 form (Sample submission _ Diagnostic) . **Take a photo** of the EXD36 completed form for submission by email to APHA, then seal in a separate mini-grip plastic bag and put in a seal-easy bag. • Dunk/wipe the bio-bottle and bagged paperwork in an approved disinfectant (e.g. Virkon) and place in a large clear plastic bag held by a 'clean' assistant outside the 'dirty' area. • In the clean area, the bag is sealed by tying a knot on the top or with tape • Where blood samples are collected using the Field

	Vacutainer kits these can be secured in the original polystyrene box. (Care must be taken not to contaminate the outer cardboard box, this should be left in the clean area). The polystyrene box is closed, sealed and wiped with disinfectant. Place the box in a clear bag and seal. Place the completed paperwork inside a clear bag, seal, wipe with disinfectant and attach to the polystyrene box. Dunk/wipe the package in an approved disinfectant (e.g. Virkon), place in a large clean plastic bag held by a 'clean' assistant outside the dirty area • In the clean area place the sealed polystyrene box in the Vacutainer outer cardboard box and seal. • From clean area (this can be back at VS offices), place all samples in an insulated polystyrene box, on frozen gel packs or dry ice, using adequate packing material around it to prevent items moving. Seal this box and place in a clean cardboard outer box and seal. • Samples are to be submitted to : APHA Veterinary Investigation Centre Woodham Lane New Haw Addlestone Surrey KT15 3NB Tel 0044 (0)1932 357335 • Follow packing, labelling and dispatch guidance at EDO237 , guid-sub-sample-packing.pdf (defra.gov.uk)and IATA guidelines for UN 3373 • Complete and include the Customs invoice example -Blank • Include a copy of the iv69 SAPO general licence
Submission procedure	1. Silver TCG contacts CMLO for next available MOD flight to UK 2. Contact APHA 00 44 (0)3000 600022 or lab.services@apha.gov.uk for any advice and to inform them that you are sending avian virology notifiable disease samples **3.** Email the completed EXD36 form to virologyoffice@apha.gov.uk 4. Contact Topspeed Couriers in UK for receipt at RAF Brize Norton and transport to APHA: Tel: 0800 856 2464 (Freephone) or 00 44 (0)1565 631840; Email**:** info@topspeedcouriers.co.uk
Decontamination summary	Live birds: humane destruction. Once infected birds at the IP have been culled , production of virus ceases but can remain viable for several months in water, faecal material and on hard surfaces

	Carcases: dispose in biosecure manner (Livestock and Meat Products (Animal By-Products) Regulations) e.g. bury, burn, Eggs: dispose in biosecure manner (Livestock and Meat Products (Animal By-Products) Regulations) e.g. bury, burn Animal housing/equipment: Soap/detergent, then Virkon®, sodium hydroxide or sodium carbonate. Environment: sodium hydroxide, sodium carbonate, hydrochloric acid, citric acid Water: drain to pasture Feed: bury Effluent/manure: Bury, burn, sodium hydroxide, sodium carbonate, hydrochloric acid, citric acid Human housing: soap/detergent, then Virkon®, sodium hydroxide, sodium carbonate, citric acid Machinery, vehicles: soap, detergent then Virkon®, sodium hydroxide, sodium carbonate, hydrochloric acid, citric acid
Vaccination potential	Vaccination of valuable captive birds may be considered in the event of an HPAI outbreak
Exit strategy	IP restrictions remain in place until either: a) The premises have undergone secondary cleansing and disinfection as directed by the VS. Restocking cannot take place until at least 21 days after secondary cleansing and disinfection is confirmed by the VS to have been undertaken to the required standard. OR: b) The owner opts not to undertake secondary cleansing and disinfection and ceases all poultry keeping on the premises for at least 12 months – this allows the virus to decay naturally and no longer pose any threat of infecting animals. WOAH(OIE) requirements to regain disease-free status are a minimum of 3 months after an eradication policy has been completed with includes disinfection of all IPs. For wild birds, in some circumstances control zones may not be required (e.g. if there are no poultry within 3 or 10km from the infected wild birds. If used, control zones are usually in place for at least 21 days following the date of collection of samples from infected birds. Duration is at the discretion of the SVO and will take into account surveillance for disease in poultry.

APPENDICES

APPENDIX 1. NOTIFIABLE DISEASES IN THE FALKLAND ISLANDS

Based on FIG Animal Health Ordinance 1998*, DEFRA/APHA list 2022 and WOAH list 2022

$$ diseases added to notifiable list by Animal Health (Definitions Extended and Duties of Keepers of Poultry) Order 2022

FORMAL COMMON NAME	CAUSATIVE AGENT (and primary vector if appropriate)	ZOONOTIC IMPLICATIONS (NO = none; LO = Negligible/ Low Risk; HI = High Risk)	Likelihood for introduction and spread in FI (NO = none; LO = Low Risk; HI = High Risk)
African Horse Sickness*	Orbivirus (biting insects)	NO	LO
African Swine Fever*	African Swine Fever virus	NO	LO
Anthrax*	*Bacillus anthracis*	HI	HI
Aujesky's Disease*	Suid alphaherpesvirus 1	NO	LO
Avian chlamydiosis	$$		
Avian Influenza ("Fowl plague"*) (high or low pathogenicity)	Influenza A virus	HI	HI
Avian mycoplasmosis (M.gallisepticum M.synoviae)	$$		
Batrachochytrium salamandrivorans	Batrachochytrium salamandrivorans	NO	NO
Bluetongue*	Orbivirus (culicoides midge)	NO	NO (?)
Bovine anaplasmosis	$$		
Bovine babesiosis	$$		
Bovine genital campylobacteriosis	$$		
Bovine Spongiform Encephalopathy*	Prion proteins	HI	LO
Bovine Tuberculosis*	*Mycobacterium bovis*	HI	LO
Bovine viral diarrhoea	*$$*		
Brucellosis*	*Brucella abortus, B. mellitensis, B. suis*	HI	LO
Caprine arthritis/encephalitis	*$$*		
Chronic Wasting Disease of Deer	Prion protein	HI	LO
Classical Swine Fever*	Pestivirus C	NO	LO
Contagious agalactia of sheep and goats	*Mycoplasma* spp	LO	LO
Contagious Bovine Pleuropneumonia*	*Mycoplasma mycoides*	NO	LO
Contagious Caprine Pleuropneumonia	*Mycoplasma capricolum subsp capripneumoniae*	NO	LO
Contagious epididymitis *	*Brucella ovis, Actinobacillus*	NO	LO

	seminis and others		
Contagious Equine Metritis*	*Taylorella equigenitalis*	NO	LO
Cysticercus bovis*	*Taenia saginata*		
Crimean Congo Haemorrhagic fever	$$		
Dourine	*Trypanosoma equiperdum*	NO	LO
Duck virus hepatitis	$$		
Hydatid infestation*/Echinococcosis	*Echinococcus multilocularis* (canids / rodents) *Echinococcus granulosu* (canids)	HI	HI
Ebola disease virus	$$		
Enzootic abortion of ewes (ovine chlamydiosis)	$$		
Enzootic Bovine Leukosis*	Bovine leukaemia virus (deltaretrovirus)	UNCLEAR	LO
Epizootic haemorrhagic disease	Orbivirus (biting insects)	NO	LO
Epizootic lymphangitis	*Histoplasma farciminosum*	NO	LO
Equid herpesvirus 1	$$		
Equine Infectious Anaemia*	Lentivirus (biting insects)	NO	LO
Equine influenza	$$		
Equine piriplasmosis	$$		
Equine Viral Arteritis	Alphaarterivirus	NO	LO
Equine Viral Encephalomyelitis*	West Nile, Venezuelan, Eastern, Western encephalitis viruses (biting insects)	HI	LO
Foot and Mouth Disease*	Aphthovirus	LO	HI
Glanders/Farcy*	*Burkholderia mallei*	HI	LO
Goat Plague (Peste de Petits Ruminants)*	Morbillivirus	NO	HI
Haemorrhagic septicaemia	$$		
Heartwater	$$		
Infectious bursal disease (Gumboro disease)	$$		
Infectious bovine rhinotracheitis infections/infectious pustular vulvovaginitis	$$		
Japanese encephalitis	$$		
Johnes Disease (mycobacterium paratuberculosis)	$$		
Leishmaniasis	$$		
Lumpy Skin Disease*	Capripoxvirus (biting insects)	NO	LO
Maedi-visna*	Visna/maedi virus	NO	LO

	(retroviruses)		
Myxomatosis	$$		
Nairobi sheep disease	$$		
Newcastle Disease*	Paramyxovirus avulavirus	LO	HI
Nipah virus encephalitis	$$		
Paramyxovirus (including canine distemper*, rinderpest, Hendra, Nipah diseases)	Various paramyxoviridae	HI	HI
Porcine Epidemic Diarrhoea	Coronavirus	NO	LO
Porcine reproductive and respiratory syndrome virus	$$		
Q fever	$$		
Rabbit haemorrhagic disease	$$		
Rabies*	Rabies lyssavirus	HI	HI
Rabies in bats	Bat lyssavirus	HI	LO
Rift Valley Fever*	Phlebovirus (biting insects)	HI	LO
Rinderpest*	Paramyxoviridae morbillivirus	NO	HI (* but considered extinct as of 2001)
Salmonellosis (S.abortus virus)	$$		
Scrapie *	Prion protein	HI	HI
Screwworm (old world and new world)	$$		
Tuberculosis*	*Mycobacterium tuberculosis*	LO	LO
Sheep and Goat Pox*	Capripoxvirus	NO	HI
Sheep Scab*	*Psoroptes ovis*	NO	HI
Surra	*Trypanosoma evansi* (biting flies and vampire bats)	NO	LO
Swine Vesicular Disease*	Enterovirus	NO	HI
Taenia solium	$$		
Teschen Disease (Porcine encephalomyelitis)	Picorna virus teschovirus	NO	LO
Theileriosis	$$		
Trichinella spp	$$		
Trichomonosis	$$		
Trypanosoma brucei, congolense, simiae, vivax or evansi	$$		
Tularemia	$$		
Vesicular Stomatitis *	Indiana vesiculovirus	HI	HI
Warble Fly	*Hypoderma* spp	HI	LO
West Nile Fever	West Nile Flavivirus (biting insects)	HI	LO

The EU's Animal Health Regulation came into force on 21st April 2021. Whilst there is no requirement to implement the AHR in FI (or GB), in GB there are some legislative changes that the UK Government have made in order to enable ongoing trade with the EU as a Third Country. This is to allow the movement of live animals, products of animal origin and germinal products from GB to the EU and from GB to Northern Ireland to continue. This includes the requirement (in Annex I of the Entry into the Union Act) that all terrestrial diseases listed under the Animal Health Regulation are notifiable in third countries exporting live animals to the EU

Others to think about that are on the WOAH list

All the fish/mollusc/crustacean diseases (WOAH aquatic list) – need to be legislated under different orders as fish cf animals

APPENDIX 2. LEGISLATIVE FRAMEWORK

Legislation	Summary
The Civil Contingencies (Emergency Powers) Ordinance 2006	Enables the making of time-bound emergency regulations in situations where there is a serious threat to human welfare, including from disruptions to animal life. *NOTE: the threshold for exercising these powers is high, and most provisions for animal diseases outbreak response can be made under Animal health legislation*
Animal Health Acts 1981 and 2002	UK Acts adopted into FI law (with some exceptions and modifications). The main legislation for controlling the spread of disease. Requires animal owners and keepers to report any suspicion of notifiable disease. Grants powers of movement restrictions, entry, compulsory slaughter etc in the pursuit of disease control.
Animal Health Ordinance	Applies, (with exceptions and modifications) the provisions of the Animal Health Act 1981 as law of FI
Animals (Welfare and Protection) Ordinance 2016 and associated Welfare Codes	Animal welfare protection and duty of care by owners/keepers, including ensuring freedom from disease and suffering. Welfare Codes provide acceptable means of killing animals, which must only be performed by a competent person
Livestock and Meat Products Ordinance 2010	Regulates import of animals, slaughter, disposal, abattoirs and treatment of meat products for export and domestic trade
Livestock and Meat Products (Protection of Animals at time of slaughter or killing) Regulations 2015	Welfare requirements for killing of animals. Applicable only to the abattoir
Livestock and Meat Products Ordinance 2010	Regulates import of animals, slaughter, disposal, abattoirs and treatment of meat products for export and domestic trade
Livestock and Meat Products (Identification and Movement of Cattle/Sheep/Pigs) Regulations 2010	Requirements for ear tags and movement certificates. Important for disease tracing.
Hydatid Eradication (Dogs) Order 1981	Requirements to prevent access to herbivore carcases by dogs, cats and birds. Relevance to large scale culling and disposal operations.
Maritime Ordinance 2017 Part 14 London Convention and Protocol on the Prevention of Marine	A licence is required to deposit substances or articles on the seabed or into the sea. Necessary for the disposal of animals or animal parts at sea.

Pollution	
Regulation (EU) 2016/429	EU Regulations for the prevention and control of animal diseases which are transmissible to animals or to humans. Covers terrestrial and aquatic species, domestic and wild. Requirements for biosecurity, surveillance, traceability, reporting, control of transmissible diseases and for implementing power for compulsory control and eradication of disease and specific, detailed and rapid procedures and contingency plans for management of disease emergencies. Includes requirements for a disease control centre, training simulations and exercises.
Conservation of Wildlife and Nature Ordinance 1999	Protection of wildlife, with allowance for control including killing if under pursuance of an order under the Animal Health Ordinance. Licenses can be issued for purposes required to prevent the spread of disease or public health.
Animal Health Matters Ordinance 2022	Amends the Animal Health Ordinance 1998 with (regard to updating procedures, eg disease suspicion must be notified to veterinary service or DNR not a police constable) and amends Stanley Common Ordinance 1999 (with regard to having powers to close areas of Stanley Common in the event of an infectious disease)
Animal Health (Definitions Extended and Duties of Keepers of Poultry) Order 2022	Made under sections 15(5), 87(2) and (5) and 88(2) and (4) of the AHA: it extends the definitions of animals and poultry and the duties of poultry keepers. It also extends section 88(1) of the AHA which is the list of diseases that are notifiable in the Falklands Islands to bring them in line with UK and WOAH lists
Animal Health (Emergency Measures for Outbreaks of Infectious Diseases) Order 2022	Made under sections 1, 7(1), 8(1), 15(4) and (5), 17(1) , 23, 25, 28, 34(7), 38(1) 65A(3), 75 and 83(2) of the AHA. It defines suspect and infected cases and premises and control zones and who can declare them. It designates powers and various other responsibilities.

APPENDIX 3. EAD KEY CONTACT LIST Last updated Feb 2023

	Role	Name	Telephone	Email
Local				
VS	On Duty Vet		55366	
VS	Senior Veterinary Officer	Zoe Fowler	51330	zfowler@naturalresources.gov.fk
VS	Veterinary Officer	Phillip Van Der Riet	52710	pvanderriet@aturalresources.gov.fk
VS	Veterinary Officer	Veronika Koch	56451	vkoch@naturalresources.gov.fk
VS	Practice Manager	Sarah Bowles	55976 22976	sbowles@naturalresources.gov.fk
VS	VN assistant	Teenie Ross	52140 22087	tross@naturalresources.gov.fk
VS	Veterinary Receptionist and Agricultural assistant	Kimberley Alazia	53035	vetreception@naturalresources.gov.fk
DOA	Manager	Katrina Stephenson	54330 21241	kstephenson@naturalresources.gov.fk
DOA	Laboratory Manager	Joshua Anderson-Wheatley	51699	jwheatley@naturalresources.gov.fk
DOA	Biosecurity Officer	Dani Biagorri	27355 55535	biosecurity@naturalresources.gov.fk
DNR	DoNR	Andrea Clausen	27260	AClausen@naturalresources.gov.fk
Other Directorates/Departments				
Emergency Services and Islands Security	Director	Alan Horberry	27230 52673	ahorberry@sec.gov.fk
Environment	Environmental Officer	Mike Jervois	28427	mike.jervois@sec.gov.fk
FIGAS	General Manager	Morgan Goss	27220	mgoss@figas.gov.fk
External agencies				
DEFRA (UK)	CVO	Christine Middlemiss	0207 238 495 07780 228514	christine.middlemiss@defra.gov.uk
APHA	General		0044 (0)20 822 57611 or 0044 (0)20 802 69348 (Out of Hours)	

APHA	Diagnostic Laboratory Sample advice		00 44 (0)1932 357335 00 44 (0)3000 600022	 lab.services@apha.gov.uk
APHA	Head of Contingency Planning Division ((CPD)	Joanna Anderson		CPD Team inbox: contingency.planning@apha.gov.uk JoannaEAnderson@apha.gov.uk
Pirbright Laboratory	Diagnostic Laboratory Director	Sample receipt Donald King	0044 (0)1483 231078/231446	Incoming.samples@pirbright.ac.uk donald.king@pirbright.ac.uk
MOD	Civil Military Liaison Officer	Karl Henry	55784 74314	karl.henry885@mod.gov.uk
Met Office (MPA)	Manager, South Atlantic	Katie Major	MPA 73575.	Team email: nimbusmpa@metoffice.gov.uk

APPENDIX 4. EAD INVESTIGATION BLUE BOX EQUIPMENT LIST

Box 1:

Surgical masks	10
Respirator masks (minimum FFP3)	6
Safety Protection Glasses (EN166)	*2*
Surgical gloves 1 box (check correct size)	1 box
Heavy duty reusable rubber gloves (check correct size)	2 pairs
Disposable impervious boiler suits	6
Disposable plastic aprons	10
Clinical waste bags	20
Heavy duty plastic bin bags large	20

Box 2:

Scalpel blades	1 box
Scalpel handle	1
Tissue forceps	1
Thermometer	1
Sample swabs (aluminium or plastic-handled)	60
Gauze swabs	1 pack
Sterile sample pots LARGE	10
Sterile Universal containers	50
Sterile Transport tubes 10ml (freezer-proof)	20
Lithium heparin tubes	20
EDTA VACUTAINER tubes (10 ML)	20
Plain VACUTAINER tubes (10 ML)	20
VACUTAINER needles 21G	20
VACUTAINER needles 19G	20
VACUTAINER Luer Adapters	20
VACUTAINER holders	20
Syringe 2ML	50
Syringe 10 ML	10
Syringe 20 ML	10
Syringe 50ml	5
Needle 18G	20
Needle 21G	20
BioBottle/PathoPak 1L	1
BioBottle/PathoPak 3L	1
Microscope slides	1 box
Microscope slide container	2
Sharps bin	1

Box 3:

Small/medium/large(A4) Self-seal (e.g. Minigrip) plastic bags	30 of each
Tape (to seal bags)	1
Cotton Wool	1 roll
Plastic cable ties	20
Labels (stick-on), small and large	20 of each
Pencils	2
Notebook (ideally Waterproof Aquascribe®)	1
Waterproof permanent marker pens (different colours)	4
Waterproof clipboard	1
Animal records (EADILIST) forms	10
Report Case Submission Forms (EXD40)	5
Report Case Submission labels - Pirbright (Blue)	5
Report Case Submission labels - Weybridge (Pink)	5
UN3373 labels	5
Torch plus spare batteries	1
Emergency Contact List	1
Biosecurity signs	10

Reference: APHA Exotic Disease Investigation List of Equipment

APPENDIX 5. EAD 'GRAB AND GO' EQUIPMENT CHECKLIST

Ear defenders	1
Wellington boots	1
Waterproof jacket and trousers	1
First aid kit including eye wash	1
Post mortem instrument box	1
Stethoscope	1
Hoof knife/pick	1
Buffered Formal saline	500 ml
FMD transport medium (see recipe)	500ml
PBS solution (If no FMD transport medium)	500ml
Cool Box	1
Gel packs frozen	2
Firearm or Humane Killer and ammunition	As needed
Mobile Phone with camera	1
Satellite phone (if location no phone reception)	1
Stock Marker Spray can (different colours)	2
GPS Recorder plus spare batteries	1
Head torch	As needed
Ear Tag applicator	1
Ear Tags	20
Sedatives	As needed
Euthatal	1 bottle
Antibacterial liquid handsoap	1 bottle
Trigene 5L (dilute 1:100 for general disinfection)	1
Virkon 5g tabs (dilute to 1% general disinfection/5g in 500mls; 2% FMDV/5g in 250mls)	50 tabs
Hand held spray bottle (for disinfectant)	1
Bucket	1
Boot brush	1
Sponge	1
Backpack Pressure Sprayer (10L)	1
FAM Iodophore 5 Liters	1
Foot bath (plastic trays)	2
Hand Scrubbing Brush	4
Paper towel rolls	2
Measuring jug (for disinfectants)	1

SPECIFIC INVESTIGATIONS

Probang (FMD)

APPENDIX 6. PPE AND PERSONAL DECONTAMINATION PROTOCOL

EAD are by definition notifiable and/or potential zoonoses, and prevention of spread of disease agent to other animals or premises, or to humans, is essential.

High risk level biosecurity PPE will always be used by the VO and other personnel when in direct contact with affected or suspect animals/animal materials during investigation of, and operational response to, an EAD.

This level of PPE may subsequently be modified, only if confirmation of disease agent and a risk assessment requires otherwise.

High risk level PPE consists of:

- **Rubber boots**
- **Impervious disposable overalls with hood**
- **Eye protection (goggles or safety glasses)**
- **FFP3 face mask (disposable)**
- **Two pairs of nitrile gloves**

Additional equipment:

- Plastic ground/drop sheet
- Footbath
- Bucket
- Soap
- Water
- Disinfectant for footbath – e.g Virkon® powder for dilution to 2%
- Spray bottle full of disinfectant (e.g. Virkon®2%)
- Scrubbing brush
- 2 large plastic bags with ties (e.g. clinical waste bags)
- 1 large plastic bag for placing removed rubber boots

- Sampling equipment and sealable plastic bags (see blue boxes)
- Thermometer
- Stethoscope

Ensure you have all the required PPE, sampling and decontamination equipment before leaving the VS offices. This is in the blue boxes and on the grab and go checklist.

Make sure you know what the case definition is for suspected disease and what samples are required.

Note: Virkon® and other disinfectants are hazardous chemicals and cause skin irritation and serious eye damage, especially in neat/concentrated form. Always wear protective gloves and eye/face protection. Use only in a well-ventilated area. Avoid breathing dust. Wash hands thoroughly after handling.

1. When you arrive, park your vehicle outside the property, or outside the 'dirty' area if it is not the property boundary. You may need to transfer your equipment into a farm vehicle to move closer to the animals under investigation.

2. Identify the 'dirty' area (where the suspected case/s is located) and the 'clean' area outside this. Select an entry/ exit point between the 'clean' and 'dirty' areas. This will likely be the farm boundary gate. Designate a small transition area at the entry/exit point where actions will be taken to move back and forth between the 'clean' and 'dirty' areas. If weather conditions allow lay the plastic ground/drop sheet in this area so it is clearly designated and provides a dry surface for you to lay out equipment and put on your PPE. It may be more sensible to set up your 'transition area' in the back of an emptied out vehicle to protect from the weather and items blowing away.

3. In the 'clean' area lay out all PPE and equipment to be taken with you into the 'dirty' zone. Ensure you have everything you need including disposable overalls, rubber boots, eye protection, mask or respirator, two pairs of gloves, sampling equipment, two plastic bags for samples, disinfectant wipe, stethoscope, thermometer, bucket, soap or detergent and scrubbing brush for gross decontamination. If no water is available in the dirty area you will need to fill the bucket with water now.

4. Set up the transition zone ready for decontamination when you move from the 'dirty' zone back into the 'clean' zone:
    a. On the 'dirty side', place a footbath full of disinfectant, a bucket and/or spray bottle full of disinfectant, a scrubbing brush and 2 x large plastic bags with ties for contaminated waste
    b. On the 'clean' side place a bucket and/or spray bottle full of disinfectant and 2 x large plastic bags with ties for contaminated PPE.
    c. Put on PPE in the following sequence
        i. Wash hands with soap or detergent and water and dry.
        ii. Remove footwear and leave it on the clean side, stepping on to the plastic sheet.
        iii. Put on disposable overalls.
        iv. Put on boots (overall legs go outside boots).
        v. Put on respirator. Check it fits correctly.
        vi. Put on eye protection.
        vii. Put on hood of overalls so that no part of the face is exposed.
        viii. Put on two pairs of gloves. Ensure the outer gloves fit snugly over the sleeves of your overalls. If required you can tape the outer gloves to the overall sleeves with duct tape.
5. Pick up sampling equipment, stethoscope, thermometer, and enter the dirty area. Anyone assisting you will require the same PPE
6. Undertake clinical examination, live animal sampling or post¬mortem sampling as required.
7. Decontaminate the primary sample containers by wiping with disinfectant after collection and place in a plastic bag and seal. Repeat this step so that the sample is double bagged. This

is important to protect the sample during decontamination into the clean area as disinfectants may leach into the sample and destroy it.

8. Remove any gross contamination from you and your equipment while in the 'dirty' area using the brush, soap or detergent and water you have pre-placed on the dirty side. Clean the treads on your boots.
9. Place waste in a plastic bag and seal. Decontaminate the outside by dipping in or spraying with disinfectant. Place it in a second plastic bag, seal and decontaminate the outside. Place the double-bagged waste in the 'clean' area (clean side of the plastic ground sheet).
10. Decontaminate yourself and your equipment:
    a. Decontaminate boots by scrubbing in a footbath of disinfectant.
    b. Step onto the plastic ground sheet
    c. Spray disinfectant on outer gloves or dip into bucket of disinfectant.
    d. Decontaminate sample containers and other equipment (stethoscope/thermometer) to the 'clean' side by dipping them in or spraying with disinfectant.
11. Move to the 'clean' side of the transition area and remove PPE in the following sequence:
    a. Remove the outer pair of gloves and wash hands (still encased in the inner pair of gloves) in disinfectant.
    b. Remove overalls – Unzip and avoid touching the outer surface and roll down over the boots. Roll up the overalls and place in contaminated waste bag
    c. Remove boots, touching only the unexposed (tops) of the boots. Place the boots in a plastic bag for further cleaning disinfection off site
    d. Remove eye protection by leaning forward and avoiding touching the front surface. Place in contaminated waste bag.
    e. Remove respirator, touching only the back straps. Place in contaminated waste bag
    f. Remove inner pair of gloves, taking care not to touch the outer surface and put in contaminated waste bag.
    g. Wash hands, arms and face and dry.
    h. Rollup the plastic ground sheet and place in contaminated waste bag
    i. Tie off contaminated waste bag. Disinfect bag by spraying or dipping in disinfectant then put in a second bag and repeat disinfection. Place in clean area for disposal.

12. Before leaving the property advise the owner or manager on biosecurity procedures for use on the property to contain the disease, as well as any measures needed to protect people against infection. Ensure they know what PPE they will require for handling affected animals and where to get this PPE from.

13. Have a hot shower/bath and launder all clothes.

A useful video on high risk level PPE can be found at Australian Veterinary Association | Personal Biosecurity (ava.com.au)

APPENDIX 7. ACTION PLAN CHECKLIST FOR DEPOPULATION

An action plan for depopulation (culling) must be drawn up and tailored for each EAD premises, in consultation with the owner/owner's agent. **A concise written plan, with maps and diagrams of the premises**, is required, for approval by the SVO (or operations manager if appointed). All personnel involved must be briefed of the plan and their defined role. Firstly, establish:

a. Layout of premises, facilities and equipment
b. Number, species and location of animals to be destroyed
c. Valuation method prior to destruction
d. Destruction technique to be used, and an alternative
e. Destruction site/s
f. Disposal technique and disposal site/s – must be established before destruction commences; as close to destruction site as possible
g. Equipment and facilities required for destruction and disposal
h. Personnel requirements – number, roles and responsibilities
i. Timeframe
j. Costs

The following list details the considerations required to develop a site-specific plan:

1. What are the occupational health and safety risks (animal and human injuries, firearms, disease risks, psychological impact, chemical/drug risks etc) and necessary mitigations?
2. What actions are required to limit possible environmental impacts of the operation? - pollution, risks to wildlife
3. What resources are needed to move and secure animals? Where possible, move animals to the centre of the IP or areas furthest from other susceptible animals or wildlife
4. What handling and restraint systems are required for live and dead animals?
5. What additional animal welfare measures must be taken? (visual separation, confirmation of death)
6. What are the biosecurity risks and what measures are required to mitigate them and contain the pathogen? Consider movement restrictions and controls; designation of 'dirty' and 'clean areas'; movement flow of animals, personnel, and equipment; decontamination protocols and training; control of wildlife.
7. Are any special measures needed such as closure of airspace (firearms) or shielding from public view?
8. Have legal requirements been fulfilled? (e.g compulsory destruction notices, valuation and compensation processes, environmental pollution, marine disposal licences))
9. What recording systems will be used? (NB Proof of depopulation and process used may be required for disease-free status)
10. What workflow protocols are required? – including adequate rest and meal breaks for personnel

Order of Killing:

1. Affected animals

2. Direct contacts
3. Other susceptible animals in descending order of epidemiological importance

In general, if more than one species are held on the premises they should be killed in the following order. Disease-specific and welfare conditions may apply:

- Pigs
- Cattle
- Goats
- Sheep
- Poultry

Young animals, particularly if unweaned, should be killed before older animals, and immediately after separation from dams.

APPENDIX 8. RESTRICTIONS NOTICE TEMPLATE

Y:\Veterinary Services\Vet Service\ExCo papers\NCPEAD\Follow up NCPEAD implementation Dec 22

Animal Health (Emergency Measures for Outbreaks of Disease) Order 2022

Avian influenza

Notice of suspect premises (article 3)

1. This notice is given under article 3 (suspected premises) of the Animal Health (Emergency Measures for Outbreaks of Disease) Order 2022 to [*insert name*] of [*insert address*] ("**the occupier**").

2. Notice is given on the grounds that I [*insert name*], a veterinary officer of the Falkland Islands Government know or suspect that —

(a) avian influenza exists or has in the previous 56 days been present on the premises or

(b) any animal or poultry on the premises has been contaminated by being exposed directly or indirectly to the disease.

3. [*If applicable*] This written notice confirms notice is given verbally on [*insert date less than 24 hours earlier*].

4. The notice relates to [*insert a description of the suspected premises, by reference to a map attached to the notice if necessary*] ("**the suspected premises**").

5. While this notice is in force, the occupier must comply with the restrictions or requirements in the Schedule, being measures to be taken to contain and limit the spread of disease.

6. Poultry or animal products may only be moved onto and off the suspected premises —

(a) [*specify the circumstances e.g. if directed to do so by a veterinary officer*] for the purposes of destruction at Sand Bay abattoir; or

(b) in accordance with a licence granted under article 9 of the Order.

7. This notice is in force until the veterinary officer, after an investigation, is satisfied that infection or contamination with avian influenza are not present on the suspected premises and declares the premises are free from disease by revoking the notice in writing.

8. This notice may be amended in writing at any time.

Signed …… Date ……..

Veterinary officer

SCHEDULE

Restrictions and requirements

(a) [*insert requirements relating to individual animals or poultry*];

(b) [*insert requirements relating to the movement onto and off the suspected premises of*

(i) animals or poultry, or animals or poultry of a specified kind]

(ii) people

(iii) animal products, feed and fodder and

(vi) vehicles or any other thing liable to spread disease;]

(c) [*insert requirements relating to cleansing and disinfection, which may include —*

(a) cleansing and disinfection of vehicles, equipment, surfaces and other things on the premises that are liable to be contaminated with, or spread, disease;

(b) the materials to be used or the method to be employed for such cleansing and disinfection;

(c) the timing or frequency of cleansing or disinfection;

(d) the destruction of anything that may be contaminated by disease and cannot be cleansed or disinfected adequately or at all;

(e) provision for cleansing and disinfection to be carried out at the expense of the occupier of the premises or at the expense of the Governor.];

(d) [*insert requirements relating to the control of rats, mice and other rodents that are not domestic pets*];

(e) [*anything else? E.g. warning signs, record keeping*].

Animal Health (Emergency Measures for Outbreaks of Disease) Order 2022

Avian influenza

Declaration of temporary control zone

I, Andrea Clausen Director, Department of Natural Resources make this Declaration under article 4 of the Animal Health (Emergency Measures for Outbreaks of Disease) Order 2022 ("**the Order**").

Before making this Declaration, I consulted the Senior Veterinary Officer in accordance with article 4(1) of the Order.

1. The premises and area known as [*insert description*] and shown hatched and edged red on the attached map are a temporary control zone for the purpose of preventing the spread of disease.

2. The temporary control zone includes —

(a) [*insert description of suspected premises*]; and

(b) [*insert details of any public place i.e. (any part of) Stanley Common; any highway; and any other place to which the public has access as of right or by virtue of express or implied permission*].

3. For the purposes of this Declaration, any premises that are partly inside and partly outside the temporary control zone are to be treated as being wholly inside it.

4. Within the temporary control zone the restrictions and requirements set out in the Schedule apply.

5. Poultry or animal products may only be moved into and out of the temporary control zone —

(a) [*specify the circumstances e.g. if directed to do so by a veterinary officer*] for the purposes of destruction at Sand Bay abattoir; or

(b) in accordance with a licence granted under article 9 of the Order.

6. This Declaration ceases to have effect on [*insert date*].

7. Any person who keeps or has charge of animals or poultry in a temporary control zone, and any occupier of premises in a temporary control zone where animals or poultry are kept, must comply with biosecurity guidance published by the Governor under section 6A of the Act.

8. Failure to comply with this Declaration may be prosecuted as a criminal offence, for which the penalty on conviction is a fine up to level 5 (£4000) or up to 6 months in prison or both.

Date 2022 …….

ANDREA CLAUSEN

Director, Department of Natural Resources

Falkland Islands Government

SCHEDULE

Restrictions and requirements

(a) Subject to paragraph 7 of this Declaration, movement into and out of the temporary control zone of —

(i) poultry,

(ii) animal products (including meat or carcases, meat products, skins or hide, wool feathers, milk, milk products, eggs or embryos and manure or other animal waste or slurry);

(iii) poultry feed and fodder;

(iv) litter or bedding used by poultry; and

(v) vehicles or any other thing liable to spread disease,

is prohibited.

(b) Movement within the temporary control zone of —

(i) poultry,

(ii) animal products (including meat or carcases, meat products, skins or hide, wool feathers, milk, milk products, eggs or embryos and manure or other animal waste or slurry);

(iii) poultry feed and fodder;

(iv) litter or bedding used by poultry; and

(v) vehicles or any other thing liable to spread disease,

Is only permitted in accordance with the directions of a veterinary officer.

(c) No person may enter or leave a temporary control zone without a licence.

(d) Persons keeping poultry in the temporary control zone must comply with the directions of a veterinary officer as to the management of such poultry.

(e) [*insert requirements relating to cleansing and disinfection which may include —*

(i) cleansing and disinfection of vehicles, equipment, surfaces and other things on the premises that are liable to be contaminated with, or spread, disease;

(ii) the materials to be used or the method to be employed for such cleansing and disinfection;

(iii) the timing or frequency of cleansing or disinfection;

(iv) the disposal or destruction of anything that may be contaminated by disease and cannot be cleansed or disinfected adequately or at all;

(v) provision for cleansing and disinfection to be carried out at the expense of the occupier of the premises or at the expense of the Governor];

(f) Persons keeping poultry in the temporary control zone must keep and maintain a record of all such poultry that —

(i) is updated daily with details of numbers of birds that have died or have shown symptoms of disease since the record was last updated; and

(ii) includes such other information as a veterinary officer may reasonably require in order to monitor the spread of disease and the rate of transmission.

(g) Any person who occupies premises in a temporary control zone and any person keeping poultry on such premises must keep and maintain a record of persons entering or leaving the premises including whether the person —

(i) entered by vehicle or on foot;

(ii) was duly authorised to enter or leave the zone; and

(iii) complied with cleansing and disinfection requirements.

(h) [*anything else? E.g., erection of warning signs, fencing etc.*]

Animal Health (Emergency Measures for Outbreaks of Disease) Order 2022

Avian influenza

Notice of declaration of infected place (article 5(4))

1. This notice is given under article 6 (declaration of infected place) of the Animal Health (Emergency Measures for Outbreaks of Disease) Order 2022 by Andera Clausen, Director of Natural Resources ("**the Director**") to [*insert name*] of [*insert address*] ("**the occupier**").

2. Notice is given that the Senior Veterinary Officer has declared [*insert a description of the infected place, by reference to a map attached to the notice if necessary*] to be an infected place ("**the infected place**").

3. Notice is given on the grounds that the Senior Veterinary Officer of the Falkland Islands Government has concluded that avian influenza exists or has in the previous 56 days been present on the premises.

4. While this notice is in force, the occupier must comply with the restrictions or requirements in the Schedule, being measures to be taken to contain and limit the spread of disease.

5. Poultry or animal products may only be moved onto and off the infected place —

(a) [*specify the circumstances e.g. if directed to do so by a veterinary officer*] for the purposes of destruction at Sand Bay abattoir; or

(b) in accordance with a licence granted under article 9 of the Order.

6. This notice is in force until revoked by the Director.

Signed …… Date ……..

ANDREA CLAUSEN

Director of Natural Resources

Falkland Islands Government

SCHEDULE

Restrictions and requirements

(a) [*insert requirements relating to individual animals or poultry*];

(b) [*insert requirements relating to the movement onto and off the infected place of*

(i) animals or poultry, or animals or poultry of a specified kind]

(ii) people

(iii) animal products, feed and fodder and

(iv) vehicles or any other thing liable to spread disease;]

(c) [*insert requirements relating to cleansing and disinfection, which may include —*

(a) cleansing and disinfection of vehicles, equipment, surfaces and other things on the premises that are liable to be contaminated with, or spread, disease;

(b) the materials to be used or the method to be employed for such cleansing and disinfection;

(c) the timing or frequency of cleansing or disinfection;

(d) the destruction of anything that may be contaminated by disease and cannot be cleansed or disinfected adequately or at all;

(e) provision for cleansing and disinfection to be carried out at the expense of the occupier of the premises or at the expense of the Governor.];

(d) [*insert requirements relating to the control of rats, mice and other rodents that are not domestic pets*];

(e) [*anything else? E.g. warning signs, record keeping*].

Animal Health (Emergency Measures for Outbreaks of Disease) Order 2022

Avian influenza

The Governor, on the advice of Executive Council makes the following Declaration under article 7 of the Animal Health (Emergency Measures for Outbreaks of Disease) Order 2022 ("**the Order**").

Declaration of protection zone

1. The premises and area known as [*insert description*] and shown hatched and edged red on the attached map are a protection zone for the purpose of preventing the spread of disease.

2. The protection zone includes —

(a) [*insert description of infected premises*];

(b) [*insert details of any public place i.e. (any part of) Stanley Common; any highway; and any other place to which the public has access as of right or by virtue of express or implied permission*]; and

(c) [*insert description of other premises in the PZ*].

3. For the purposes of this Declaration, any premises that are partly inside and partly outside the protection zone are to be treated as being wholly inside it.

4. Within the protection zone the restrictions and requirements set out in the Schedule apply.

5. Poultry or animal products may only be moved into and out of the protection zone —

(a) [*specify the circumstances e.g. if directed to do so by a veterinary officer*] for the purposes of destruction at Sand Bay abattoir; or

(b) in accordance with a licence granted under article 9 of the Order.

6. This Declaration ceases to have effect on [*insert date*].

7. Any person who keeps or has charge of animals or poultry in the protection zone, and any occupier of premises in the protection zone where animals or poultry are kept, must comply with biosecurity guidance published by the Governor under section 6A of the Act.

8. Failure to comply with this Declaration may be prosecuted as a criminal offence, for which the penalty on conviction is a fine up to level 5 (£4000) or up to 6 months in prison or both.

Date 2022 …….

ALISON M. BLAKE C.M.G.,

Governor

SCHEDULE

Restrictions and requirements

(a) Subject to paragraph 7 of this Declaration, movement into and out of the protection zone of —

(i) poultry,

(ii) animal products (including meat or carcases, meat products, skins or hide, wool feathers, milk, milk products, eggs or embryos and manure or other animal waste or slurry);

(iv) poultry feed and fodder;

(v) litter or bedding used by poultry; and

(vi) vehicles or any other thing liable to spread disease,

is prohibited.

(b) Movement within the protection zone of —

(i) poultry,

(ii) animal products (including meat or carcases, meat products, skins or hide, wool feathers, milk, milk products, eggs or embryos and manure or other animal waste or slurry);

(iiii) poultry feed and fodder;

(iv) litter or bedding used by poultry; and

(v) vehicles or any other thing liable to spread disease,

is only permitted in accordance with the directions of a veterinary officer.

(c) No person may otherwise enter or leave the protection zone without a licence.

(d) Persons keeping poultry in the protection zone must comply with the directions of a veterinary officer as to the management of such poultry.

(e) The following activities are [prohibited][subject to the restrictions specified] —

(i) [*describe activities* e.g. fishing/ hunting/ egging/ walking]
(ii) …;

(f) [*insert requirements about vaccination of poultry*]

(g) [*insert requirements relating to cleansing and disinfection which may include —*

(i) cleansing and disinfection of vehicles, equipment, surfaces and other things on the premises that are liable to be contaminated with, or spread, disease;

(ii) the materials to be used or the method to be employed for such cleansing and disinfection;

(iii) the timing or frequency of cleansing or disinfection;

(iv) the disposal or destruction of anything that may be contaminated by disease and cannot be cleansed or disinfected adequately or at all;

(v) provision for cleansing and disinfection to be carried out at the expense of the occupier of the premises or at the expense of the Governor];

(h) Persons keeping poultry in the protection zone must keep and maintain a record of all such poultry that —

(i) is updated daily with details of numbers of birds that have died or have shown symptoms of disease since the record was last updated; and

(ii) includes such other information as a veterinary officer may reasonably require in order to monitor the spread of disease and the rate of transmission.

(i) Any person who occupies premises in a protection zone and any person keeping poultry on such premises must keep and maintain a record of persons entering or leaving the premises including whether the person —

(i) entered by vehicle or on foot;

(ii) was duly authorised to enter or leave the zone; and

(iii) complied with cleansing and disinfection requirements.

(j) [*anything else? E.g., erection of warning signs, fencing etc.*]

APPENDIX 9. MOVEMENT LICENCE DURING RESTRICTIONS TEMPLATE

VET- give normal vet correspondence ref

LICENCE TO MOVE DURING RESTRICTIONS PLACED BY DECLARATION ON *(INSERT DATE)*

To: name and address of person receiving licence

A copy of the Declaration placing restrictions due to a suspect or confirmed case of highly pathogenic avian influenza is attached.

As an exception to section *XXX* I hereby grant you a licence to: note here what is allowed as an exception to the declared restrictions

This licence is valid from xxxxx to xxxxxx

Dr Andrea Clausen
Director of Natural Resources
Falkland Islands Government

APPENDIX 10 . DRAFT COMMUNICATIONS PIECE

FALKLAND ISLAND GOVERNMENT VETERINARY SERVICE

EMERGENCY ANIMAL DISEASE: ANNOUNCEMENT FROM THE SENIOR VETERINARY OFFICER

There is a [suspected/confirmed] outbreak of [NAME OF DISEASE] in [livestock/ poultry/ wild birds/ fish/ other] at [LOCATION/NAME OF PREMISES}. This is a serious notifiable disease and we are taking swift action to [confirm/contain and eliminate] it using our National Contingency Plan for Emergency Animal Disease, working with our Government partners and other stakeholders.

With immediate effect, as of today [DAY,DATE], all animal movements to and from the [suspected/infected] premises are banned by Emergency Order and strict biosecurity measures are in place while we undertake the necessary veterinary investigations. This means that there is (amend as necessary:) a road closure at [LOCATION] and no members of the public must enter [DESCRIBE PROTECTION ZONE AREA AND BOUNDARIES] until [DATE or FURTHER NOTICE]. All farms within this Protection Zone are being contacted with instructions.

Optional: The Government is also imposing a national standstill on all [animals /livestock/including/not-including horses with immediate effect. Exceptions to this must only occur by issue of a licence from the Veterinary Service.

We ask that farmers, animal keepers and members of the public are highly vigilant for signs of animal disease and report any findings or sightings of sick or dead animals [NAME SPECIES if appropriate]. Signs to look out for include [LIST SIGNS OF DISEASE e.g. lameness].

Please report these immediately to the Veterinary Service on telephone number 27366 or 55366 out of hours. Note that reporting of suspicion of notifiable disease is a legal requirement in the Falkland Islands under the Animal Health Act.

Falkland Islands Government and the Veterinary Service is grateful for everyone's understanding and co-operation as we take the necessary actions to minimise adverse impacts of this emergency disease outbreak. We will keep you informed as our knowledge changes, including ongoing and further restrictions and controls on animal movements.

APPENDIX 11. AMENDMENTS TO DOCUMENT

DATE	AMENDMENT/AUTHOR
27/02/2023	**ZF:** inserted licence template into appendix 9
	Updated list of Notifiable diseases in appendix 1 following publishing of legislative amendments Updated legislative framework in appendix 2 following drafting and approval in 2022 Updated contact list Added in amendments appendix

GLOSSARY

AI	Avian Influenza
Animal keeper	a person, not being the owner of that animal, by whom that animal is for the time being ordinarily kept; a person is a keeper of an animal if the person has it in the person's possession (*Animals (Welfare and Protection) Ordinance 2016)* *Note: A person is not the keeper of an animal if they have it in their possession only for the purpose of preventing it from causing damage, restoring it to its owner, enabling it to undergo veterinary treatment, or transporting it on behalf of another person*
APHA	Animal and Plant Health Agency (UK)
Animal owner	The person to whom the animal lawfully belongs, and includes an agent of the owner (*Animals (Welfare and Protection) Ordinance 2016)*
CVO UK	Chief Veterinary Officer of the UK
DC	Dangerous Contact – animals of susceptible species where the risk of exposure to infection is considered to be very high
DOA	Department of Agriculture
DNR	Natural Resources Directorate
DoNR	Director of Natural Resources
EAD	Emergency Animal Disease
EC	European Commission
EU	European Union
FIG	Falkland Islands Government
FIG MIP	Falkland Islands Government Major Incident Plan
FMD	Foot and Mouth Disease
IP	Infected Premises
Kept animal	Any animal that is kept for any purpose, including commercially, for exhibition, and as a pet or hobby. Kept animals include livestock (cattle, sheep, goats, pigs, horses, camelids), poultry and domestic pets. Wild animals are considered kept if they are 'under the control of man whether on a permanent or temporary basis', or 'not living in a wild state' (*Animals (Welfare and Protection) Ordinance 2016)*

Livestock	All animals that are kept, fattened or bred for the production of food, wool, fur, feathers, hides and skins or any other product obtained from that animals; animals kept for other farming purposes, or an animal that is not being kept for farming purposes but that is of a kind normally kept for such purposes (*Animals and Livestock (Amendment) Ordinance 2022)*
MOD	UK Ministry of Defence
NCPEAD	National Contingency Plan for Emergency Animal Disease
Poultry	Any domestic fowl, goose, duck, guinea-fowl, pigeon, quail or turkey (*Conservation of Wildlife and Nature Ordinance 1999*);
Premises	For EAD, premises generally refers to farms and the abattoir, but may refer to domestic premises, wild or other areas such as beaches and shoreline, depending on the species and disease of concern. Includes any place, any vehicle, vessel, aircraft or hovercraft, any tent or movable structure *(Animal Welfare and Protection Ordinance)*
PZ	Protection Zone
RZ	Restricted Zone
SVO	Senior Veterinary Officer
SP	Suspect Premises
SZ	Surveillance Zone
TCZ	Temporary Control Zone
TCG	Tactical Co-ordination Group
UK	United Kingdom
Veterinary surgeon	A person qualified in veterinary medicine and surgery and registered with a body established or recognised for that purpose under the laws of a country or territory. (All FIG Veterinary Officers are suitably qualified veterinary surgeons)
VO	Veterinary Officer
VS	Veterinary Service
WOAH	World Animal Health Organisation (formerly known as OIE, Office International des Epizooties)

END OF PART B

FALKLAND ISLANDS GOVERNMENT

NATIONAL CONTINGENCY PLAN FOR EMERGENCY ANIMAL DISEASE

ANNEX - SUMMARY FOR ANIMAL KEEPERS

1. INTRODUCTION

- This document from the Veterinary Service summarises points from the Falkland Island Governments' (FIG) National Contingency Plan for Emergency Animal Disease. It explains how animal keepers can help prevent animal diseases, what they must do if they suspect disease and how the government will respond to disease. It is available on the Veterinary Service website at Veterinary Service (falklands.gov.fk).

- An Emergency Animal Disease (EAD) can be defined as:
    - a disease exotic to the Falkland Islands (i.e. not normally present);
    - a new, more virulent, strain of an endemic disease;
    - a disease of unknown or uncertain cause,

      that it is in the national interest to be free from, or which may be an entirely new disease, and is considered of national impact or significance.

- Emergency Animal Diseases (EAD) may affect only animals, or have the potential to be transmitted from animals to humans (zoonotic diseases). Many are notifiable, requiring them by law to be reported to government authorities.

- Responsibility for preventing EAD outbreaks, reporting suspicion and dealing with them if and when they occur is shared between government, operational partners and stakeholders. Stakeholders include all those who may be affected by a disease outbreak and incudes the farming industry and rural businesses and as well as those keeping animals for any purpose, for example as a pet. By working together we can all help each other to keep the Falkland Islands free of unwanted animal diseases.

- There are many clear legal requirements on animal keepers – for example, reporting disease suspicion, tagging and maintaining records of livestock so animals and movements can be traced, and complying with any restrictions imposed in a disease outbreak.

- The National Contingency Plan for EAD also covers aspects of the response, if appropriate, to disease outbreaks in wild animals.

2. VIGILANCE AND BIOSECURITY

- As animal keepers you are responsible for the health and welfare of your animals. You should check and monitor your animals regularly for any signs of ill health. These could include changes in behaviour, a loss of condition, lameness, stopping eating or drinking, vocalising more or developing skin lesions. Unexpected death in one or more animals, or changes in production are also causes of suspicion and must be reported. Reviewing production records can help you to detect disease early.

- You should follow good biosecurity at all times, regularly check the health of your livestock, poultry and individual animals, and monitor them for changes in production. Biosecurity encompasses all measures that prevent or reduce the risk of disease entering or becoming established in kept animals, or from spreading once disease occurs. You must comply with import restrictions and animal movement licences.

- You should have your own plan so that you know what you would do if an animal disease is suspected or confirmed on your premises. The Veterinary Service can help and advise you in developing your local plan.

- If you suspect disease in wildlife, such as observing unusual signs, or mass mortality, it is important to report these also.

3. ANIMAL KEEPER RESPONSIBILITIES

- If you notice clinical signs in any of your animals, including pets/companion animals, or a change in production causes you to suspect an emergency animal disease that might be notifiable, you are required by law to report that suspicion to the Veterinary Service.

- Report any disease suspicion immediately to the Veterinary Service (VS) on **27366** or the out of hours mobile **55366.**

- If you are not sure about the significance of the signs you should still discuss first with the Veterinary Service, and we will advise you.

4. ACTIONS IF DISEASE IS SUSPECTED OR CONFIRMED

On suspicion

- When you report a suspected emergency animal disease, we (the Veterinary Service) will assess your call. If appropriate, we will launch an official investigation and send a veterinary officer to your premises to conduct a veterinary investigation.

- The purpose of the veterinary investigation is to establish if disease is present, or may have been present, on your premises. If so, we need to find out for how long, where it may have come from, and where it may have spread to.

- We will immediately put in place temporary statutory restrictions which the veterinary officer will confirm in writing when they arrive. In addition, we will specify the biosecurity requirements you must comply with. For example, you may need to provide a means of cleansing and disinfection at the entrances and exits of the premises and buildings, or warning signs at appropriate places.

- We will prohibit the movements of animals to and from the premises. It is highly unlikely that we would allow or license any movements at this stage. You will need to stop all visits to the premises except those that are specifically permitted under licence. You will need a licence to move anything on or off your premises, and should discuss any licence requirements with the veterinary officer.

- You must provide information required by veterinary officer. You must help them in investigating and controlling disease. You may need to provide details of animal identification (e.g. ear tags), production records, and details of movements of animals and other things liable to transmit disease, on and off the premises.

- Restrictions apply to all premises where disease is reported, whether it's a farm or a private dwelling. We will adjust the restrictions as appropriate to the circumstances at the specific premises.

- While carrying out the veterinary investigation, the veterinary officer will conduct a clinical examination of your animals and an inspection of your production and animal movement records. If disease cannot be ruled out at this stage the veterinary officer will take samples for laboratory testing. In certain circumstances the veterinary officer may require animals to be humanely destroyed. The veterinary officer may impose further restrictions – you will need to make sure that you understand and comply with them.

- Depending on the disease concerned, the restrictions may apply to your whole premises, a part of the premises or to individual animals. They will usually include a ban on the movement of susceptible animals on and off your premises. They may also include restrictions on anything else that is liable to transmit disease, such as meat, wool, other products, equipment, and vehicles.

- We will leave the restrictions in place until we can rule out an exotic notifiable disease. If we confirm disease, then the restrictions will remain in place. The

occupier of the premises is responsible for making sure that the restrictions are observed.

- The aim of our restrictions is to prevent the spread of disease. There will inevitably be some disruption to normal business for those affected.

- We may also declare a temporary control zone (TCZ) around the premises where we suspect disease. We are most likely to do this if we suspect important notifiable diseases such as Foot and Mouth Disease (FMD) or Avian Influenza (AI). This TCZ may extend to the whole Falkland Islands. If your premises are within a TCZ, you will have to comply with the conditions and restrictions stated in that declaration, even if you do not suspect disease at your own premises.

- You should have plans in place to deal with prolonged movement restrictions.

On confirmation

- If we confirm a notifiable exotic disease in the Falkland Islands, the Veterinary Service will take immediate action – in partnership with operational partners and stakeholders to:
    - Eradicate the disease, so that we can regain our disease-free status. This may involve the disease control measures described earlier, including humane destruction of animals
    - Protect the health and safety of the public and those directly involved in controlling the outbreak;
    - Minimise the economic effects on the taxpayer, the public and the farming industry

- Within its disease control objective, the Veterinary Service aims to:
    -
- For most diseases, we will do this by:
    - taking action on the infected premises (IP) and other premises (contact premises) where disease is most likely to have spread from and to, for example where there have been recent animal or other movements between premises.
    - imposing wider area-based controls, including risk-assessed animal movement controls and controls on animal products. In the case of Foot and Mouth Disease (FMD) in particular, we will impose immediate movement restrictions across the entire Falkland Islands on susceptible animals.
    - restricting activities that might increase the risk of spread. For example, there might be a ban on shooting or fishing.
    - considering banning gatherings of animals including shows or sales.

- considering export bans.
- considering compulsory housing of animals.
- investigating the origin of the disease and determining whether there has been further spread of disease from that source (tracing).
- undertaking other surveillance to investigate possible further spread of disease.
- considering vaccination to prevent further spread of disease.

- If disease is confirmed on your premises you will need to continue to comply with the restrictions and measures put in place until the disease is stamped out and restrictions are lifted. We may ask the Police and Defence Force to assist with ensuring compliance.

- If your premises are located within a declared disease control zone, you must comply with the conditions and restrictions which apply within the zone. You may also be required to carry out additional biosecurity measures. You must watch particularly carefully for any signs of disease and report any suspicions immediately to the Veterinary Service.

5. MOVEMENT CONTROLS AND LICENCES

Licensing

- We may allow specific, limited individual movements of animals, using specific licences. Whether we do so will depend on the circumstances and will be subject to veterinary risk assessment and statutory requirements. These licences would set out criteria (veterinary inspection, cleansing and disinfection and monitoring) that you would need to meet, before, during or after the move. You must comply with restrictions and with all conditions in order to minimise the risk of spread of disease.

- We will keep you informed of the disease situation and will provide guidance on how to apply for movement licences. We will also keep you informed about the likely timing of changes to restrictions within zones.

Welfare moves

- You are responsible for the welfare of your animals. Once we have put movement restriction zones in place, we will consider whether licences can be made available to permit certain essential movements for welfare purposes, for example to permit veterinary treatment. In all cases it will be subject to assessment of the risk. Strict conditions will apply to these licences, ensuring such moves take place under suitable biosecurity arrangements. We will respond to requests for welfare moves as quickly as possible and explain our decisions clearly.

6. COMMUNICATIONS

- For each outbreak or incident of emergency animal disease, we will make sure that we provide accurate, timely updates on the latest situation, as well as guidance for those affected. In the event of a disease outbreak we will communicate with you by a combination of means including telephone, email, radio and print messages and via our website Veterinary Service (falklands.gov.fk).

7. DEPOPULATION

- For many diseases our policy is to quickly cull affected animals to prevent the spread of the disease. For livestock diseases, this may involve the depopulation (culling) of whole herds of animals. For other diseases, only single animals may need to be humanely destroyed.

- We may consider sparing certain limited categories of animals, such as rare species or breeds at risk, so long as this does not compromise our work to control the disease. We make decisions to spare on a case by case basis. A vet will carry out a risk assessment of the premises. There are no guarantees an animal or bird will be spared.

- We will arrange depopulation and disposal of affected carcases. Disposal may need to take place on your premises. The Veterinary Service will help you in developing a local plan for the most appropriate method and location for animal depopulation and disposal for your premises.

8. VALUATION AND COMPENSATION

- When an animal is destroyed in order to control an exotic notifiable disease, there are laws which set out whether you are entitled to compensation. Where we need to pay you compensation, we will make sure that the animal is valued appropriately.

9. CLEANSING AND DISINFECTION

- Premises and potentially contaminated transport and equipment will need to be cleansed and disinfected. This will need to be done once the animals which may catch the disease have been destroyed, and their carcases have been safely disposed of. We do this to prevent disease spreading from the premises. We also do this so that when the premises are re-stocked, the disease won't occur again.

- We carry out preliminary disinfection as soon as depopulation is completed, and all carcases have been removed. A secondary/final cleansing and disinfection is then required. This is done at our cost. For most diseases, we will not allow restocking until this has been completed. Further details on methods for cleansing and disinfection can be obtained from the Veterinary Service.

10. RESTOCKING

- We may allow controlled restocking after appropriate cleansing and disinfection. We may allow a limited number of animals onto the premises (sentinel animals) which can be observed to make sure that disease is no longer present. In some cases, samples will be taken from these sentinel animals for laboratory testing, to confirm that disease no longer exists on the premises before all restrictions are lifted and you are allowed to restock completely.

- For other diseases – particularly if there are prolonged outbreaks, or if secondary cleansing and disinfection is not carried out – it may not be possible to restock for several months.

11. VACCINATION

- We may consider vaccination as a control tool as part of wider disease control strategies. This can help move towards the overall goal of eradicating the disease where it is practical to do so, and the full benefits outweigh the wider costs. In the short term, vaccination can help slowdown, reduce and potentially prevent disease spread.

- Vaccination can have significant costs for industry and government. Vaccination also has wider implications for effective monitoring of disease spread, and for trade and movements of animals.

- Vaccination is disease specific and vaccines may not be available for all exotic notifiable diseases. We will carefully consider a range of technical and other issues in balancing the costs and benefits of deploying vaccine.

12. TRADE, IMPORT AND EXPORT

- In the event of a disease outbreak or incident and depending on the disease, the Falkland Islands may lose its WOAH (World Organisation for Animal Health) international disease-free status. This may result in some countries no longer accepting animals or animal products from us. We may need to withdraw export certificates until the situation has been clarified with the importing country.

- Trade restrictions can remain in place for a long time, even after the disease has been eradicated and disease-free status has been re-established. Trade is important for the financial viability of the Falkland Islands and so we will work closely with trading partners to make sure that trade can start again as quickly as possible.

SUMMARY

- Practice good biosecurity around animals at all times.
- Check the health of your animals regularly.
- Report any suspicion of animal disease immediately to the Veterinary Service on **27366** (mobile **55366).**
- In the event of an animal disease outbreak, follow all official guidance and comply with all restrictions placed on you, your animals and your premises.
- By working together we can all help to keep the Falkland Islands free of unwanted animal disease, and to maintain our way of life and economy.