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For information on the Animal Health Emergency Management project visit *www.animalhealth.ca* or email *design@declercq.ca*

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TABLE OF CONTENTS

INTRODUCTION	5
Acknowledgement	5
Overview	6
How to Use This Handbook	7
Best Results	8
UNDERSTAND	9
We are in this Together	9
Industry Risks	9
Disease-Related Sector-Wide Emergencies	10
Reportable and Notifiable Diseases	10
Emergency Phases	12
Who Can Help	13
Working Together	13
Biosecurity	15
Zoning	16
Scenario Example	17
Testing Your Readiness	19
PREPARE	21
It's in Your Hands	21
Farm Objectives	22
Farm Plan	23
Work Cycle	24
Inventory	24
Decision Makers and Contacts	25
Visitor Controls	25
Connecting with First Response Agencies	26
RESPOND	27
Alert	28
Suspicion/Confirmation	31
Response	35
1. CONTAINMENT AND MOVEMENT CONTROLS	35
2. INVESTIGATION AND TRACING	40
3. VACCINATION	42
4. DEPOPULATION (DESTRUCTION AND DISPOSAL)	44
5. FINANCIAL CONSIDERATIONS	46
6. CLEANING AND DISINFECTION	49
7. LIFTING OF RESTRICTIONS	51
Recovery	51
Maintaining Business Operations During an Emergency	52
CONCLUSION	55

SCHEDULE 1. GLOSSARY AND DEFINITIONS	57
SCHEDULE 2. OTHER HAZARDS RESOURCE	61
Structure Fire and Wildfire	61
Flooding	63
Power Grid Failure	65
SCHEDULE 3. KEY SERIOUS ANIMAL DISEASE SYMPTOMS	67
African Swine Fever (ASF)	67
Bluetongue	68
Bovine Spongiform Encephalopathy (BSE)	69
Brucellosis	70
Foot-and-Mouth Disease (FMD)	71
Peste Des Petits Ruminants	72
Scrapie	73
Vesicular Stomatitis	74
SCHEDULE 4: PRODUCER RESOURCES	75
Farm Objectives	75
Farm Plan Grid	76
Farm Work Cycle	77
Farm Inventory	78
Contact List Templates	79
Visitor Log	83
Visitor Risk Assessment Guide	84
Unusual Animal Health Event Indicator Protocol	85
Unusual Animal Health Event Initial Response Protocol	86
Notice of Suspicion Response Protocol	87
Confirmation Response Protocol	88
Producer Self Declaration Template	89
Emergency Communication to Owner Template (Custom Operations)	90
Non-Essential Movement Ban Protocol / Voluntary Cease Movement	91
Biosecurity Protocol	92
Mass Vaccination Protocol	94
Mass Depopulation and Disposal Protocol	95

INTRODUCTION

Acknowledgement

This handbook has been collaboratively developed with input and technical support from livestock commodity organizations across Canada, the Canadian Food Inspection Agency (CFIA) and several provincial governments including:

- Alberta Agriculture and Forestry
- BC Ministry of Agriculture, Food and Fisheries
- Manitoba Agriculture
- New Brunswick Department of Agriculture, Aquaculture, and Fisheries
- Nova Scotia Department of Agriculture
- Ontario Ministry of Agriculture Food and Rural Affairs
- Le Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec
- Saskatchewan Ministry of Agriculture

Overview

While emergencies are nearly impossible to predict, there are things you can do to minimize the impact. The Animal Health Emergency Management PRODUCER HANDBOOK BC Sheep and Goat Sectors has been developed to help producers and staff prepare for disease-related sector-wide emergencies. An effective and rapid response can play a vital role in:

- Reducing the risk to staff and family members
- Containing the incident
- Limiting the possible spread of disease
- Decreasing the impact on your business and the industry as a whole

We all have a role to play in protecting and strengthening our industry. There are three key sections in this handbook:

UNDERSTAND

- Provides background information on the phases of an emergency
- Valuable for individuals looking to gain a better understanding of government actions during an emergency, impacts of a serious animal disease, zoning, and more

PREPARE

A collection of customizable tools and templates that can be used by producers looking to better prepare their operation for an emergency event

RESPOND

- Describes the actions you can take to protect your farm and limit further spread
- Know your role as a producer as well as specific protocols related to movement controls, zoning, vaccination, and other possible orders

How to Use This Handbook

You will be better prepared for a disease-related emergency if you have worked your way through this handbook. We encourage you to regularly review this document and the tools provided.

For convenience, a glossary explaining various terms and acronyms used throughout this document has been included in Schedule 1. We have also colour coded the individual sections to reflect the UNDERSTAND, PREPARE and RESPOND themes and to draw attention to producer RESOURCES.

Throughout the handbook, you will see various suggested PROTOCOLS. These items contain helpful step-by-step prompts that should be considered and implemented as appropriate. Producers will also want to look out for sections containing the TOOL symbol. If you see this sign, it means a customizable tool has been made available in the **RESOURCES** section. We encourage you to tailor these templates for your operation.

PROTOCOL/PROCESS



Protocol or processes have been highlighted with a YELLOW outline and an ORANGE clipboard icon.

CUSTOMIZABLE TOOL



Customizable Tools have been highlighted with a solid GRAY outline and a GRAY tool icon.

Protocols and customizable tools are available in the RESOURCES section where they can be printed, completed and stored in an easily accessible location in case of an emergency.

Best Results

The information contained in this document is only of use if it is kept current and shared with staff. With this in mind, producers are encouraged to:

- Commit to reviewing this handbook annually
 - · Revisit the information and tools when you review and renew your insurance policies each year
- Ensure that information provided here is available and understood by farm personnel
 - The content in this handbook is easily incorporated into farm personnel training. Many of the elements can be customized, laminated and posted prominently, and/or inserted into your existing training material

In the event of a disease-related sector-wide emergency, necessary steps will be clearly communicated by industry associations and/or municipal, provincial and federal regulatory bodies. The information, protocols, and tools provided in this handbook are guidelines. Each disease emergency will be unique. While detailed needs of an actual event may differ from what's presented here, the concepts will be similar. To access the information and resources contained in this handbook online please visit www.animalhealth.ca.

UNDERSTAND

We are in this Together

A serious animal disease outbreak will have significant impacts across the livestock industry. Some diseases, such as foot-and-mouth disease, will also affect multiple species across a number of provinces if not the whole country. It is important that producers and livestock sectors work together in preparing and responding to serious animal disease outbreak emergencies.

This handbook has been designed to equip producers and their staff with up-to-date information and resources that can be used during the various phases of an emergency. Similar resources have been prepared for provincial and national livestock associations so that all key stakeholders can respond to a serious animal disease outbreak in a coordinated and effective manner that supports producers.



Industry Risks

Be it adverse weather, natural disasters, fluctuations in global markets, or even deliberate damage, producers must contend with challenging and unpredictable circumstances.

- **Terrorism -** deliberate introduction of disease or water/feed contamination
- **Border closure -** resulting from disease in either the importing or exporting region
- Lost social license a change in consumer preferences of certain industry practices
- Natural hazards extreme events such as forest/grass fires, overland flooding, earthquake, ice or severe hailstorms
- Power loss including widespread grid failure

Relative to a major disease outbreak, the risks identified above are generally considered less likely to cause sector-wide emergencies. The most widely recognized and likely scenario that will cause a sector-wide emergency event in our industry is a serious animal disease outbreak.

Although this handbook focuses on responding to serious animal disease outbreaks many of the concepts and resources are transferrable to other industry risks. The Other Hazards Resource found in Schedule 2 can help producers better prepare and respond to other emergency events such as fire, flood, or power failure.

Disease-Related Sector-Wide Emergencies

Serious animal disease outbreaks are recognized as the livestock industry's greatest vulnerability because they have the potential to impact the livestock sector as a whole. These types of emergencies can negatively affect consumer preferences and industry practices and can restrict Canada's trade and export capacity.

While the threat of Foot-and-Mouth Disease (FMD) is widely recognized by most producers, there are a number of serious animal diseases that have the potential to cripple the industry indefinitely. More information about these specific diseases can be found in Schedule 3.

QUICK FACT

In a 2016 national survey of livestock associations in Canada, 97% indicated that their sector was vulnerable to diseaserelated emergencies.

- Animal Health Emergency Management Project (2016)

A zoonotic outbreak (a disease affecting both humans and animals), feed/water contamination, or a newly 'emerging' disease could all be classified as disease-related sector-wide emergencies. This is due to the costly, widespread and prolonged impact on the market as well as the potential for border closure.

Reportable and Notifiable Diseases

As a producer you know your operation inside out. When an animal is unwell, there will be signs and it is your responsibility to act on those cues. Canadian producers have a duty of care, but they also have a legal requirement to report all suspected cases of certain diseases.

Reporting a suspected disease not only helps to reduce animal and human health impacts, it is integral to protecting our industry and communities across Canada. Serious animal disease outbreaks require extensive resources and expert assistance to contain and eradicate the disease, so it is important to alert the appropriate authorities as early as possible.

The diseases included in this section are federally reportable, or provincially notifiable diseases. In fact, these are listed specifically in the regulations that accompany the Health of Animals Act (Canada) and its provincial counterpart, the Animal Health Act (BC).

Reportable diseases generally require immediate action for prevention, control or eradication. Producers and veterinarians are legally required to report all suspected cases of reportable diseases. In contrast, notifiable diseases require monitoring for trade purposes, or to help the industry detect or understand their presence. Confirmation of a provincially notifiable disease does not usually require action, although further steps may be taken at the discretion of the provincial chief veterinary officer.

FEDERALLY REPORTABLE DISEASES

Bovine

- **Anthrax**
- Bluetongue
- Bovine spongiform encephalopathy (BSE)
- Bovine tuberculosis
- Brucellosis
- Contagious bovine pleuropneumonia
- Cycsticercosis
- Foot-and-Mouth Disease (FMD)
- Lumpy skin disease
- Rabies
- Rift Valley fever
- Rinderpest
- **Trichinellosis**
- Vesicular Stomatitis

Cervids (Deer)

- Chronic wasting disease
- Foot-and-Mouth Disease (FMD)
- Rabies
- **Trichinellosis**
- Vesicular Stomatitis

Equine

- African horse sickness
- Brucellosis
- Contagious equine metritis
- Equine infectious anemia
- Equine piroplasmosis
- Rabies
- **Trichinellosis**
- Venezuelan equine encephalomyelitis
- Vesicular Stomatitis

Poultry

- Fowl typhoid
- Newcastle disease
- Notifiable avian influenza
- Pullorum disease
- Rabies
- **Trichinellosis**

Sheep & Goats

- **Anthrax**
- Bluetongue
- **Brucellosis**
- Foot-and-Mouth Disease (FMD)
- Peste des petits ruminants
- Rabies
- Rift Valley fever
- Scrapie
- Sheep and goat pox
- **Trichinellosis**
- Vesicular Stomatitis

Swine

- African Swine Fever
- Brucellosis
- Classical Swine Fever
- Cycsticercosis
- Foot-and-Mouth Disease (FMD)
- **Pseudorabies**
- Rabies
- Swine Vesicular Disease
- **Trichinellosis**
- Vesicular Stomatitis

PROVINCIALLY REPORTABLE DISEASES

- · Infectious laryngotracheitis
- Mycoplasma gallisepticum, but only in turkeys kept or dealt with for commercial purposes
- Bovine cysticercosis
- · Plague caused by Yersina pestis
- **Pseudorabies**
- · Q fever caused by Coxiella burnetti
- · Tularaemia caused by Francisella tularensis

PROVINCIALLY NOTIFIABLE DISEASES

For a list of provincially notifiable diseases please refer to BC Ministry of Agriculture, Fisheries, and Food website.

Emergency Phases

A disease-related sector-wide emergency will generally move through the following six key phases - some of which are more involved than others. Depending on the disease and particular incident, some phases may occur quickly and go unnoticed, while others may extend over a period of time due to heightened risk of contracting a disease or difficulty managing an outbreak.

This handbook contains information pertaining to all of the above phases with the exception of prevention. For more details on how to protect your animals from disease, please review the national biosecurity standard for your respective commodity on the CFIA website or see the Biosecurity section on page 37.

Alert

An unusual animal health event has been reported. Industry may be asked to remain vigilant and to voluntarily adopt risk mitigation measures to safeguard against a potential serious animal disease outbreak.

Suspicion

A serious animal disease is suspected. This may be issued by the CFIA, provincial government (BC Ministry of Agriculture, Fisheries, and Food), or other reliable industry stakeholder. Industry may implement a Non-Essential Movement Ban Protocol to temporarily suspend movement.

Confirmation

A serious animal disease is confirmed. Confirmation will be formally announced by the Chief Veterinary Officer (Canada), Chief Veterinary Officer (BC), or either federal or provincial ministers. Mandatory containment strategies may follow.

Response

Industry professionals, government, and producers may all have a role to play in various key response components including containment, investigation/tracing, vaccination, depopulation/disposal, valuation/compensation, cleaning/disinfection, and lifting of restrictions.

Recovery

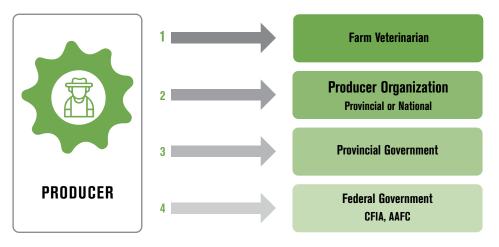
Immediate emergency has passed. Producers and industry may now focus on demonstrating absence of disease and regaining/resuming market access.

Prevention

BC production is unaffected by a disease incidence or occurrence, also known as peace time. Industry must remain vigilant for unusual animal health events and adopt risk mitigation measures to safeguard against a potential serious animal disease outbreak.

Who Can Help

During an emergency, there are four important points of reference for producers. These supports can provide clarification, direction and necessary resources. As illustrated below, the first point of contact if you notice something unusual with your livestock should be your farm veterinarian. For small lot livestock producers who do not have a producer organization, your next point of contact should be the BC Ministry of Agriculture, Fisheries, and Food (BCMAFF).



Working Together

Emergency management requires diverse skills, experience and knowledge to ensure an appropriate and effective response. Figure 1 on the following page, outlines the key structures, relationships and joint response required during an emergency.

During a disease-related sector-wide emergency that is not zoonotic the first response organizations are:

- **Canadian Food Inspection Agency (CFIA)**
- **BCMAFF**

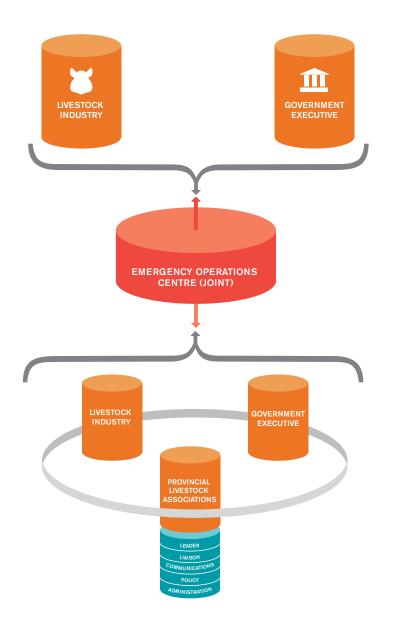
These agencies are supported by Agriculture and Agri-Food Canada (AAFC), Emergency Management BC (EMBC) and Public Safety Canada (PSC). If the disease is zoonotic (affecting humans as well as animals) the response will involve the Public Health Agency of Canada and the provincial Ministry of Health.

An Emergency Operations Centre (EOC) may be established by first response organizations during the suspicion or confirmation phases. The EOC is the temporary venue that is established to provide strategic leadership, manage operational decision-making, and coordinate the efforts of all collaborating organizations. If multiple levels of government are involved, a Joint EOC will be formed.

Representatives from your producer organization will be a part of EOC/JEOC discussion and decisions. In addition to advocating on behalf of the industry and providing sector expertise and insight, the association will help communicate updates to producers and confirm required action as the situation unfolds.

Everyone within the EOC/JEOC works together using the Incident Command System (ICS). This command-andcontrol system is used to manage emergencies of all types throughout most of North America and the rest of the world. ICS integrates a combination of facilities, equipment, personnel, procedures and communications operating within a common organizational structure. It allows people from various backgrounds to come together when required and to work as an effective unit.

Figure 1. The Emergency Operations Centre and its Relationship with Government, Industry and the Livestock Sector



WHAT HAPPENS AT THE STRATEGIC LEVEL?

Discussion, as required, around existing and proposed strategies such as:

- · Size of Primary Control Zone
- · Use of vaccination
- Use of welfare slaughter

WHAT HAPPENS AT THE **OPERATIONAL LEVEL?**

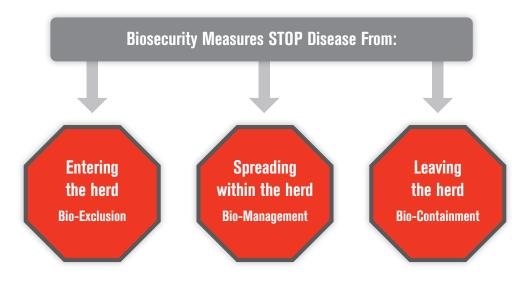
OPERATIONAL

Issues and actions decided at the EOC may include:

- · Provision of movement permits and licenses
- · Routing of feed, deadstock
- Development of key communications messages
- Implementation of vaccination strategy
- Process and logistics for depopulation and carcass disposal

Biosecurity

As a producer you are in a unique position to prevent disease exposure and transmission. By knowing and implementing the appropriate biosecurity measures you are not only helping to protect your farm, but also ensuring the health and vitality of Canada's livestock industry.



Some degree of biosecurity is likely already incorporated into your farm routines. Be it good hygiene, vehicle management or staff training, there are quick and simple steps that can safeguard your operation. As shown in Figure 2, biosecurity protocols are colour coded according to risk. Producers will want to ensure that all staff know the various protocols for each risk level. This is especially important when a disease is suspected within the trading area.

More information on biosecurity is included in the **RESPOND** section (*page 37*).

Figure 2. Escalating Biosecurity Levels



Zoning

Zoning is an internationally recognized practice used to control the spread of disease and facilitate a return to safe trade. In Canada, a Primary Control Zone (PCZ) may be implemented under authority of the Health of Animals Act, after epidemiological confirmation of a disease. The PCZ encompasses several subzones including the Infected Zone which includes the infected premises; the Restricted Zone which provides an additional buffer around the Infected Zone; and in some cases, a Security Zone. The Free Zone refers to areas beyond the PCZ.

The CFIA's zoning strategy, including size and shape of the zones, is determined after careful consideration of the disease, the outbreak, presence in wildlife or the environment, the nature of the industry, potential for spread as well as geographical features in the area such as waterways, roads and terrain. Multiple or larger zones may be declared, when more than one infected premises are involved.

The most restrictive disease control measures are applied to the area where infection has been confirmed, the Infected Zone. Less restrictive measures are established in the Restricted or Security Zones. Licenses or permits with specific criteria will be a requirement for movement into, within and out of these zones.

The association will have a role in briefing key decision makers and producers. Timely communication about zone locations, specific requirements, potential impact of the disease outbreak on the broader trading area and other related information will be paramount.

Figure 3. Zoning Strategy for Canada

Primary Control Zone

Encompasses the Infected Zone, Restricted Zone and Security Zone

Infected Zone

- Main focus of control efforts with most restrictive movement controls
- Encompasses all known infected premises
- Extends a minimum of 3 km from the infected premises in all directions
- Multiple or larger zones may be declared when additional infected premises are involved

Restricted Zone

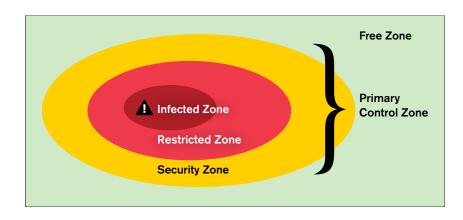
- Surrounds Infected Zone
- Extends a minimum of 10 km beyond an infected premises
- Multiple or larger zones may be declared when additional infected premises are involved
- Less restrictive movement controls

Security Zone

- Optional depending on the disease or the situation
- Buffer between the Restricted Zone and Free Zone
- No size restrictions
- Least restrictive movement controls

Free Zone

Area outside the Primary Control Zone



Scenario Example

The following scenario example briefly summarizes a serious animal disease event.

In this scenario we have 'ABC Sheep', a typical BC sheep farm that is facing an outbreak of Foot-and-Mouth Disease (FMD). We also have 'DEF Farms, a mixed farming operation that raises hogs, cattle, and goats that is located within the trading area and potentially at risk.

PLEASE NOTE THAT THIS IS AN EXAMPLE ONLY.

On Friday, after noticing that a number of animals are limping and have backed off feed, ABC Sheep staff proceed with the protocol for an unusual animal health event (see RESPOND section) and contact their local veterinarian to come and look at the animals.

The veterinarian suspects FMD, a federally reportable disease, and notifies the regulatory authority (BCMAFF and/or CFIA). A senior veterinary officer with the CFIA visits the farm very shortly afterwards, clinically diagnoses FMD and declares that ABC Sheep is an 'Infected Place'. Canada's Chief Veterinary Officer communicates this suspicion to the provincial and national livestock organizations setting out very limited and general information related to the incident.

Within days, the National Centre for Foreign Animal Disease in Winnipeg confirms the disease and Canada's Chief Veterinary Officer formally announces confirmation of the disease. Again, the information provided is quite limited and general.

As part of the disease control plan, the minister of Agriculture and Agri-Food establishes a Primary Control Zone. This zone includes all of Alberta, Saskatchewan, Manitoba, and British Columbia.

Infected Zones have now been declared around several new infected premises, as the outbreak has grown from the original case located near Abbotsford. The RCMP are enforcing a ban on all movements of livestock and livestock-related products such as feed and bedding within/to/from/through these zones. Permits are required for these movements and may be obtained from the



Joint Emergency Operations Centre, that has been established in Abbotsford.

A larger Restricted Zone extends around all of the Infected Zones, essentially from the US border north to 100 Mile House and to the Alberta border. Specific permits are required for all livestock and livestock-related products within/to/from/through this Restricted Zone. These are also being enforced by RCMP.

The Security Zone extends outwards from the Restricted Zone and covers the remainder of the Primary Control Zone. General permits are required for all livestock and livestock-related movements into or within the Security **Zone** and these are also enforced by police.

With the CFIA operational restrictions now in place, livestock of any sort are not moving anywhere in Western Canada without a permit. Movements into or through the Restricted Zones are even more limited and require specific permits; and there are almost no movements into, from or through the Infected Zones. The same is true for movements of other susceptible livestock including swine, sheep, goats and cattle. Permits are also required for horse movements as the disease may be carried on their body or the trailer even though they don't contract the disease itself.

DEF Farms is a mixed farming operation located within the Restricted Zone, near Abbotsford.

To protect the livestock, movement controls and biosecurity protocols requested by the BCMAFF and the CFIA are being strictly followed and all activity is being monitored closely. Vehicles entering the premises are washed and disinfected prior to entry and when leaving. A temporary washing station has been installed at the main entry as well as a structure to shelter a 24/7 security guard who is responsible for enforcement of the perimeter security, logging of all movements and overseeing vehicle washing.

Other than the main entry, all access points have been gated and locked. Red biosecurity protocols have been implemented and posted clearly to advise visitors of the risk. Where possible, drivers have been instructed to remain in their cabs.

Mass vaccination has also been ordered for operations located near the infected premises and for many operations within the **Restricted Zone**. A CFIA designated site supervisor has arrived at DEF Farms and is overseeing farm staff who are vaccinating animals according to a strict protocol.

While DEF Farms staff continue to vaccinate and monitor their herd, a destruction order has been issued and depopulation of sheep on ABC Sheep and other infected premises has commenced. All susceptible livestock on the infected premises are being slaughtered with the assistance of farm staff and under the oversight of a CFIA representative. As part of the disposal requirements, producers have opted to render some carcasses, and move others to government designated disposal sites.

Valuation teams sent to the infected premises are establishing a fair market value on a per head basis based on pre-outbreak prices for the different classes of livestock present. Compensation is being provided for all livestock ordered depopulated.

Prior to restocking, all of the infected premises must be thoroughly cleaned and disinfected in accordance with a CFIA protocol and to the satisfaction of CFIA. Landowners are responsible for these expenses.

Once there is no longer a chance of contracting the disease and all identified requirements have been met, CFIA will officially lift restrictions and give approval to restock the premises with animals.

It is important to note that in this bleak but realistic scenario, it may take a year to manage the outbreak and eradicate the disease. It will likely take considerably longer to regain disease free status and to negotiate international trade market access and fully resume exports.

Although the above scenario is fictitious, it captures many of the elements that apply to producers once a diseaserelated sector-wide emergency is confirmed. For more information about producer-specific responsibilities and associated resources please refer to the **RESPOND** section.

Testing Your Readiness

The following self-assessment is designed to help producers gauge whether their operation is prepared for a serious animal disease event. Please take a moment to answer the following questions.

YES	NO	
		Are you aware of the indicators and initial response actions for an unusual animal health event on your farm?
		Are you and your staff aware of signs and symptoms of serious animal diseases that could spur a disease-related sector-wide emergency?
		Are you aware of the official triggers used by response agencies to signify a disease-related sector-wide emergency?
		Have you discussed and shared information about specific biosecurity protocol levels with staff?
		Do you know the requirements of a voluntary cease movement and when it should be implemented?
		Are you aware of primary personal safety guidelines and mental health support resources available for producers?
		Are you aware of operational responsibilities associated with a mass vaccination directive?
		Are you aware of the expectations on personnel in the event mass depopulation and disposal are required?
		Are the farm's objectives for responding to an animal health related sector-wide emergency clearly identified and communicated to staff?
		Is a farm plan in the form of a schematic or aerial photo immediately available so that first responders can see the location of key emergency management items?
		Is the farm's inventory available for immediate provision to first responders, advising them of personnel, animals and assets to be safeguarded or removed, plus equipment and other items of potential use?
		Are staff and key decision-makers identified and listed with contact details so first responders can immediately contact them?
		Are key contacts such as suppliers and service providers identified and listed so others can contact them while primary decision-makers are occupied with emergency management decisions?
		Do you have established relationships and contact details for local and possibly provincial and federal government first response organizations?
		Can you control visitor movements in an emergency, e.g., access control, signage, logs or records, risk assessments?
		Are you aware of the key recovery actions, such as the requirement for cleaning and disinfecting before restocking can occur?

If you answered no to any of the above questions, there may be some work to do in preparing your operation for a disease-related emergency. The next sections of this handbook contain all the information you need to get started.

PREPARE

When the unexpected happens, it is important to be prepared. The aim of the PREPARE section is to get producers and staff thinking about the specifics of their operation before an emergency or crisis. By being proactive, your operation will be in a better position to respond and convey important details to emergency personnel as the situation unfolds.

It's in Your Hands

Being prepared for an emergency not only makes sense, it is necessary due diligence for farm operators who are ultimately responsible for the care and well-being of their animals.

Taking these steps now demonstrates a reasonable level of preparedness on your part. This is especially important for potential insurance claims but also extremely helpful for all involved.

While you may know your operation like the back of your hand, someone less connected to the farm will require more background in order to quickly orient themselves and understand unique features. The ability to access detailed information about your operation will make a difference when it matters most.

We recommend that producers clearly define their farm objectives, plan, inventory, contacts and visitor controls well in advance and update the information as needed. This information should be kept in a known location and discussed with staff and reviewed annually.

Farm Objectives

Emergencies can escalate quickly and cause significant and long-term impacts on the operation and net worth. A producer's view of their options and objectives may change drastically during and/or after an emergency. Available support programs at the time may also be crucial in determining whether the best course of action is to rebuild, liquidate or exit. For example, a producer planning a generational transfer in 10 years might suddenly face a more daunting future as a result of a serious animal disease outbreak and may elect to exit the industry altogether.

With this in mind, it is important to seriously consider your business objectives in advance. Clearly defining and communicating these objectives will help to guide efforts during the response, minimize incorrect assumptions and enhance outcomes.

When considering your objectives, it also helps to know the priorities of others. The primary objectives of first response agencies are listed below. Producers should note that these agencies are not responsible for preserving the personal property involved, such as animals and buildings.

FIRST RESPONSE AGENCIES OBJECTIVES **DURING AN EMERGENCY**

- 1. Save lives and minimize the impact on people, including first responders, survivors and others indirectly impacted
- 2. Protect public property, commencing first with critical infrastructure and then other public infrastructure
- 3. Protect the environment and subsequently restore and enhance its quality
- 4. Protect the economy, reducing disruption to lessen the impact

FIRST RESPONSE AGENCIES OBJECTIVES **DURING AN ANIMAL HEALTH EMERGENCIES**

- 1. Control the spread of disease
- 2. Eliminate the disease

As a farm operator, your foremost responsibility is to minimize the risk to humans directly involved. While first response agencies may assist or provide direction relative to animals, farm operators are ultimately accountable for:

- The well-being of the animals under their care
- Farm equipment
- The farm itself including fuel, fertilizers, medicine, etc.

Your business objectives should include maintaining human safety and the health and safety of the animals in your care; the resumption of normal business operations as soon as possible; and other specific priorities. Some questions to consider:

- What is required to ensure that you will be in a position to continue farm operations once the emergency is over?
- Would you downsize or exit the business if the opportunity presented?

Knowing short and longer-term objectives at the outset of a major emergency will help you to make decisions that can optimize your situation.

A customizable tool for identifying farm objectives is available in the **RESOURCES** section.

Farm Plan

First responders need to know the unique features of your farm and where key items are located. Not only does this help to ensure their safety, it enables them to address unexpected events at your operation. Responders will be far more effective, with less risk to life, if they can consult a farm plan while determining their approach to the situation at hand.

Your farm plan can be created from a one-page aerial photo or a hand-drawn schematic. If you've previously developed an Environmental Farm Plan, you may already have this information documented.

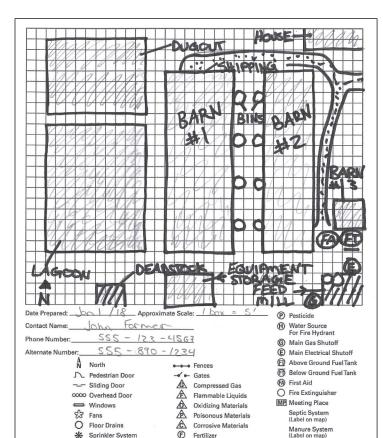
Preparing the plan may help you to identify additional risks as you mark out boundaries and add key items that are critical to effective emergency management.

An example is shown below, and a farm plan grid is provided in the RESOURCES section for preparation of a hand-drawn schematic, as an alternative to an aerial photo. Use the symbols in the legend as they are widely recognized by emergency management professionals. Don't forget to include the following key elements:

- Legal land descriptions
- Entryways
- Fencing
- Scale
- **Buildings**
- Recognized symbols

- Hazardous materials
- Directional arrow (North)
- Meeting place
- Mortality storage
- Access routes/barriers
- Potential contaminants

- Manure pits
- Important terrain features (drainage, ponds, creeks)
- Control zones
- Overhead wires



Once your plan is complete, laminate it and put a copy in your emergency management file and/or post it in a prominent location for staff to see.

A customizable farm plan grid for drawing your farm plan is available in the **RESOURCES** section.

Work Cycle

Every operation is unique. As a producer it is important to think about the workflow of your operation, including the daily and weekly events, product deliveries and animal movements that are essential to your operation. During an emergency, farm and response personnel will benefit from knowing what to expect in terms of regularly scheduled activity on and off the farm.

Disease containment measures may limit the flow of animals, feed and other products and services on or off the farm. Depending on the severity of the situation, permits or licenses may be required for such farm movements. Consider the logistics associated with getting approval for every movement on or off your premises as well as the day-to-day impact by asking yourself these questions:

- What if all movements on and off farm required a permit? How many permits might be needed on any given week?
- How often is feed delivered to the farm? How long could the farm operate without receiving a feed shipment?
- How often are animals moved on or off-farm? What would happen if these shipments were delayed?
- What other movements on and off-farm would be impacted as a result of movement restrictions?

By outlining these movements in advance, farm personnel and first responders will be better prepared and alert to the work cycle movements required for maintaining business operations.

A customizable tool for outlining your work cycle is available in the **RESOURCES** section.

Inventory

Current information about equipment, human resources and livestock inventory helps first responders and other emergency management professionals be more efficient and effective. In particular, they will be eager to know:

- Number of people residing or employed at the premises
- Whether there are any mobility issues
- Location and number of livestock
- Location and type of equipment

A customizable tool for listing your inventory is available in the **RESOURCES** section.



Decision Makers and Contacts



There is no time for ambiguity during an emergency. For this reason, information about key decision makers should be clearly defined and accessible.

The **primary decision maker** is someone who is authorized and able to make quick decisions on behalf of the operation. This is likely the owner or senior manager who will be available during an emergency and can make decisions or direct the issue to the more appropriate person.

A second decision maker should also be designated to assist if the primary decision maker is not available or is unable to make a particular decision in a timely manner. This information may be captured in the farm decision maker template provided in the RESOURCES section and should be regularly reviewed and updated.

In addition to a current staffing list, it is important that producers keep contact details handy for first responders, local veterinarian, livestock industry professionals, utility providers, relevant government departments, service contractors and neighbouring operations.

Keeping up-to-date contact information posted and readily available enables others to make calls on behalf of owners or key decision makers. It also allows potential risks to be identified and promptly addressed.

Visitor Controls



Visitors may unknowingly amplify the spread of disease on your farm and beyond to the industry at large. For this reason, it is good practice to regularly monitor visitor traffic and to control/restrict access during a disease outbreak.

Be it a one-time visitor or regular service provider, it is important to assess potential risk. This approach is reinforced in the national biosecurity standards. Producers may choose to limit or deny access depending on the visitor's movements and contact with livestock during the last 14 days.

Use the Visitor Risk Assessment Guide in the RESOURCES section to identify and manage the different potential risks associated with the range of visitors, equipment or vehicles entering the farm on a daily basis. The Visitor Log and may be used to record all farm visits and should be maintained on a consistent and ongoing basis. The checklist below is useful for identifying gaps in your visitor control biosecurity.

VIS	ITOR	CON	TROL	CHE	CKLI	ST

Establish control at recognizable primary access points on and off the farm with a lockable gate or some form of moveable barrier. Be sure to identify these items on the farm plan.
Establish control at access points to the pastures, barns, pens or fields and also at areas where feed and medications are stored.
Post signage prominently at all access points to the farm. All signage should prohibit unauthorized entry and indicate that biosecurity is in effect.
Ensure signage at primary access points directs entrants to the office. Signage at other points should discourage access and redirect entrants to primary access points.
Record all visitor access on a Visitor Log to facilitate follow up in an emergency.

Connecting with First Response Agencies

First responders will be more effective in responding to an emergency, if they have a good understanding of the premises they are accessing, the way in which business is conducted and farm specific objectives.

Some of the distinct characteristics or systems on your farm will play a key role in the risk reduction and personal safety strategies of various first responders. This information may also help limit the overall impact of the evolving situation.

Get acquainted with members of your local government first response agencies

The fire department is a good place to start

Familiarize yourself with the organizations that are initially responsible for sector-wide emergencies

- Disease-related emergencies:
 - BC Chief Veterinary Officer Provincial lead for animal health-related emergencies can be reached through the Animal Health Center Toll Free 1-800-661-9903
 - CFIA District Veterinarian/Chief Veterinary Officer National lead for animal healthrelated emergencies. Can be reached through the BC Regional Office 604-292-5700
- Other emergencies:
 - **RCMP (911)**
 - **Emergency Management BC**

In a disease outbreak or even in other types of emergencies, you may wish to share the information that was prepared in the **PREPARE** section with local government first responders.

RESPOND

The **RESPOND** section has been developed to help producers understand their role and expectations relative to specific situations that may arise during a serious animal disease outbreak.

Alert	 Unusual Animal Health Event Indicators Initial Response Protocols Producer Self Declaration 		
Suspicion/ Confirmation	 Official Communication Channels Sector-wide Triggers Custom Operator/Community Pasture Responsibilities 		Personal SafetyMental Health and Well-being
Response	Containment and Movement Controls	>	 Movement Restrictions and Zoning Biosecurity Protocols
	2. Investigation and Tracing		Disease Follow-UpTraceabilityPremises Identification
	3. Vaccination		Mass Vaccination
	4. Depopulation and Disposal		Destruction OrdersMethods
	5. Financial Considerations	_/	 Compensation (Financial Considerations) Valuation Additional Expenses Insurance Government Programs
	6. Cleaning and Disinfection		Cleaning and Disinfection Steps
	7. Lifting of Restrictions		Communication from the Regulatory Authority and Association Roles
Recovery	 Demonstrating Absence of Disease Re-establishing Market Activity 		

Initial recognition of a serious animal disease usually starts with a producer or their staff sensing that something is not right. This section contains information about indicators, initial response protocols and producer declaration responsibilities.

UNUSUAL ANIMAL HEALTH EVENT INDICATORS

Whether it is behavioural changes or physical symptoms, producers may get cues that their animals are unwell. Everyone on your operation should be aware of specific indicators that may signal a cause for concern.

The following Unusual Animal Health Event Indicator Protocol can be customized in consultation with your veterinarian to suit the specific needs of your farm. When these indicators are observed in individual animals or the herd, notify your veterinarian immediately and take their direction.

QUICK TIPS

- ✓ Know indicators and initial response protocols
- ✓ Recognize primary serious animal disease symptoms
- ✓ Discuss concerns with your veterinarian

UNUSUAL ANIMAL HEALTH EVENT INDICATOR PROTOCOL



Farm	Name:	PID #:
Veter	inarian:	Cell:
	of the following indicators are observed, then the farm's tigate further:	veterinarian will be contacted immediately to
	Unexplained or sharp increase in sickness, lameness, behavior	oural changes or death loss
	Exceeds normal acceptable level of this many head p Any death of unknown cause	per week/day: (head/%)
	Animals backed off feed/water (daily intake is down for reason	ons not related to weather or seasonality)
	Change in behaviour such as depression	
	Disease or symptoms not previously encountered	
	Typical disease or symptoms with abnormal severity or non-re-	esponsive to treatment
	Rapid spread throughout herds	
	Reportable/notifiable disease suspected on farm	
	Other events, as determined with your veterinarian	

Note: The protocols listed in the **RESPOND** section are included in the **RESOURCES** and are available online at www.animalhealth.ca/ahem/resources. They are designed to be completed and stored in an easily accessible location.

WHEN TO SPEAK WITH YOUR VETERINARIAN

Producers might suspect a problem when they observe:

- 1. Sudden onset of clinical signs such as those listed in the table below with high morbidity (large number of animals affected) or mortality
- 2. Rapid spread the symptoms have spread quickly between pens/barns or within a herd
- 3. Failure to respond to treatment standard treatment for symptoms has not been effective in treating clinical signs
- History consider recent contacts, international visitors, new introductions to the herd/flock

Sheep & Goats

Blisters/Vesicles/Erosions

- Dental pad, nostrils, tongue, muzzle
- Excess salivation,
- Necrotic lesion in the oral cavity, swollen lips
- Coronary band, interdigital space

Brain/Nervous System

- Tremors, incoordination
- Teeth grinding, change in mental status
- Excessive licking

Deaths

Sudden, higher than expected

Fever (rectal temp)

- Sheep 39.9 ° C
- Goats 39.7 ° C

Gastro-intestinal

Profuse diarrhea and dehydration

Lameness

- Hyperemic (red) coronary
- Rapid spread within a pen or barn

Production

- Decreased feed and water consumption
- Decreased milk production

Reproductive

Higher than expected abortion

Respiratory

- Mucopurulent nasal discharge, lacrimation, swollen eyes, conjunctivitis
- Pneumonia
- Swollen, cyanotic (blue) tongue

Skin

- Pruritis/itchiness, loss of wool/hair
- **Dermatitis**
- Skin eruptions, painful swellings

If you see any of these symptoms CALL YOUR VETERINARIAN

A quick reference for concerning basic signs and symptoms of serious animal diseases has been provided in Schedule 3. By familiarizing yourself with this information you can help improve disease awareness and early identification.

INITIAL RESPONSE TO AN UNUSUAL ANIMAL HEALTH EVENT

Your response to an unusual animal health event is crucial. Timely communication and decisive action are integral in:

- Limiting and containing the possible spread of disease
- Reducing risk to staff and family members
- Decreasing the impact on your business and the industry as a whole

Prior to developing your Initial Response Protocol, you will want to connect with your veterinarian and staff. Ensure that the steps you have collaboratively identified reflect the specific needs and features of your operation.

If any unusual animal health indicators are observed notify your veterinarian and take their direction. If you are uncertain of recommended precautions or required action, seek clarification from your veterinarian, producer organization, provincial government or CFIA.

UNUSUAL ANIMAL HEALTH EVENT INITIAL RESPONSE PROTOCOL

=1

Farm	Name: PID #:
1. No	tify staff and family members
	An unusual animal health event exists on the farm
	Review and strictly follow biosecurity protocols currently in place, or as established by management in consultation with veterinarian (e.g., green, amber and red biosecurity protocols)
	Minimize/avoid contact with other livestock, particularly of the same species
2. Ca	Il veterinarian and act on advice, for example:
	Isolate sick animals
	Submit samples for diagnosis
	Stop all livestock movements on/off the Infected Place
	Limit and monitor other movements on/off (e.g., staff, equipment, manure spreading etc.)
	Gather information/documentation as required (e.g., visitor log, livestock inventory, identification record including purchases/sales within the last 30 days, individual treatment log, herd health protocol)
	Other
ava is o	entify the primary decision maker within your organization. This will be the point person or coordinator to be ailable for key decisions. A back-up or secondary decision maker may be required if a serious animal disease confirmed. tify external contacts, if recommended by your veterinarian
IVO	Farm veterinarian to notify regulatory authority if required by law
	CFIA District Veterinarian called (suspect reportable disease)
	BC Chief Veterinary Officer via Animal Health Center (Toll Free 1-800-661-9903)
	Self-declaration by producer to industry association and neighbouring livestock producers (depending on suspected disease)
	Neighbouring livestock producers
	 Notify suppliers and other contracts (e.g., feed suppliers, livestock transporters, utility companies with access rights)

Suspicion/Confirmation

Timely and accurate information is crucial in an emergency. As rumours and misinformation circulate, producers need access to credible and trusted sources of information. This will confirm whether the situation requires immediate action and how they can protect themselves and others.

OFFICIAL COMMUNICATION

To minimize the spread of conflicting messages, producers should not react to hearsay and instead wait or look for communication from:

- Canadian Food Inspection Agency (CFIA)
- BC Ministry of Agriculture, Fishers, and Food (BCMAFF)

SECTOR-WIDE TRIGGERS

There may be two triggers for a sector-wide disease related emergency. The first trigger, **suspicion**, occurs when a CFIA, provincial veterinarian, or other trusted industry source diagnose or cannot rule out the presence

of a serious animal disease. The CFIA or provincial veterinarian will notify the producer and depending on the circumstances, regulatory officials may also notify industry associations and trading partners. Sampling and lab tests will be initiated, and additional information collected.

The next trigger, confirmation, occurs if the disease is confirmed by specific lab tests. At this point regulatory officials will formally provide Notification of Confirmation to a range of stakeholders starting with the producer and potentially including industry associations and trading partners. More details as well as the producer tasks that go hand in hand with these two triggers are listed in the following two response protocols.

QUICK TIPS

- ✓ Distinguish rumour from fact
- ✓ Be aware of Sector-Wide Triggers
- ✓ Share information
- ✓ Take care of yourself and your staff

Farm I	Name: PID #:
WHO	
CFIA,	provincial government, or livestock association communicates the suspicion of a serious animal disease
WHE	RE:
Anywl	nere within the area where a producer regularly does business (trading area)
WHE	V :
A fede	eral or provincial government veterinarian suspects the presence of a serious animal disease
WHAT	:
•	e referred to as 'the gray period,' when an outbreak is suspected but not confirmed and movement controls have en announced
PROD	UCER RESPONSE:
	Implement AMBER Elevated Risk biosecurity protocols, visitor logs, etc.
	Review RED High Risk biosecurity protocols
	Implement voluntary cease movement and animals in transit protocols, if recommended by government and industry leaders
	Seek additional guidance specific to the situation from veterinarian
	Monitor CFIA, BCMAFF, industry association websites and other media for updates

PRODUCER SELF DECLARATION

veterinary authorities.

NOTICE OF SUSPICION RESPONSE PROTOCOL

If an unusual animal health event were to evolve into a disease-related sector-wide emergency, professionals in your industry association, government representatives, the veterinary community and fellow producers will benefit from transparency regarding your situation. An awareness of basic details may help to reduce broader industry impacts and limit the spread of disease.

The 'Infected Place(s)', where the diagnosis was made, will also be subject to more restrictive requirements as directed by

Federal and provincial privacy and confidentiality legislation requires that you authorize the release and sharing of your personal information, including location. If you do not self-declare that you have an infected premise, your industry's ability to reduce broader industry impacts and limit the spread of disease may be hampered. By selfdeclaring, you are permitting the use of your information in this manner, in the best interests of the industry at large.

A template for the **Producer Self Declaration** is in the **RESOURCES** section.

CON	FIRMATION RESPONSE PROTOCOL
Farm I	Name: PID #:
WHO:	
	Chief Veterinary Officer or BC Chief Veterinary Officer makes a formal notification, providing confirmation of a serious disease
WHE	RE:
Anywł	ere within the area where a producer regularly does business (trading area)
WHE	l:
	ous animal disease is confirmed by the National Centre for Foreign Animal Disease, Canada's most highly specialized dely recognized animal disease laboratory
WHAT	: :
licens	confirmation is made, the federal minister may establish a Primary Control Zone and movement controls. Permits or es will be required for the movement of all livestock, related materials and equipment into, from, within or through the ry Control Zone
PROD	UCER RESPONSE:
	Implement RED High Risk protocol
	Implement voluntary cease movement and animals in transit protocols, if recommended by government and industry leaders
	Seek additional veterinarian guidance specific to the situation
	Monitor CFIA, BCMAFF, industry association websites and other media for updates

CUSTOM OPERATOR/COMMUNITY PASTURE RESPONSIBILITIES

by veterinary authorities.

Owners of livestock at custom operations should be advised of any emergency situation that affects or presents a risk to their animals. In addition to being part of the manager's duty of care, this may be a contractual requirement.

The 'Infected Place(s)', where the diagnosis was confirmed, will also be subject to more restrictive requirements as directed

Most contracts provide the operator with the authority and often the responsibility, to make decisions on behalf of the owner in the event of an emergency. While advice to owners may be provided by phone or in person, it should also be documented for legal purposes.

A sample Emergency Communication to Owners (Custom Operation) template can be found in the **RESOURCES** section.

PERSONAL SAFETY

Farm owners are responsible for the safety of personnel and residents relative to risks that are within their capacity to control or mitigate. This responsibility takes precedence over the care and needs of the livestock that may be on the farm.

Farm owners and management should:

- Be aware of evolving emergency events
- Understand the risks to human safety
- Take the necessary steps to ensure the safety of farm personnel, family and residents who may be living on the premises. This includes the delivery of training as appropriate

To put this in context, a farm owner may choose to assume a certain level of risk. They may decide to remain on the site, but they cannot instruct staff to assume the same level of risk, nor can staff be asked to work without the necessary or appropriate personal protective equipment (PPE). Your industry association can act as a link in helping to identify where PPE can be obtained.

Farm family members warrant special mention in view of the significant role they play at many operations. This is particularly important for children, as they cannot remain on the premises after an evacuation order has been given.

AgSafe is an organization that provides outreach and programming for those in the agriculture sector across BC in the form of education, training and consultation. During a serious animal disease outbreak, they are a knowledgeable organization that can advise on how to protect the health and safety of farm workers and employers. General farm safety information is available for workers and employers on the AgSafe website www.agsafebc.ca.

MENTAL HEALTH AND WELL-BEING

Unanticipated events like emergencies and the uncertainties that often accompany them can be extremely upsetting and stressful. People react in different ways to trauma and can experience a wide range of physical and emotional changes that can affect mental health and well-being. It is important to monitor your health and the health of those around you, and to access the appropriate resources as required.

If you or anyone you know is exhibiting the symptoms above, the first thing to do is ask for help. CRISIS Center BC provides 24-hour mental health support. They can be reached by calling 1-800-784-2433 or 310-6789 or visit www.crisiscentre.bc.ca



EMOTIONAL AND PSYCHOLOGICAL SYMPTOMS

- · Shock, denial, or disbelief
- · Confusion, difficulty concentrating
- Anger, irritability, mood swings
- · Anxiety and fear
- · Guilt, shame, self-blame
- · Withdrawing from others
- Feeling sad or hopeless
- · Feeling disconnected or numb

PHYSICAL SYMPTOMS

- · Insomnia or nightmares
- Fatigue
- · Being startled easily
- Difficulty concentrating
- Racing heartbeat
- · Edginess and agitation
- · Aches and pains
- · Muscle tension
- · Loss of appetite

Response

1. CONTAINMENT AND MOVEMENT CONTROLS

Well before a disease is confirmed, producers are able to take steps to reduce potential transmission. Be it implementing biosecurity protocols, voluntarily stopping the flow of animals/ products, and complying with mandatory movement controls, there are ways to protect your farm and others in your industry.

Stopping movements early will not only help to contain and limit the spread of disease, but it may also reduce the length of market interruption and facilitate faster market recovery. There are, however, certain criteria that have to be met, tests to be completed and critical information that is required, before provincial or federal government ordered movement controls can be initiated. Industry may implement voluntary movement controls in the interim.

Implementation of movement controls may also be progressive. Initially, industry leaders may choose to implement a voluntary cease movement to reduce the spread of disease in the early stages of the outbreak. A likely next step could see provincially ordered movement controls invoked in place

QUICK TIPS

- ✓ Voluntarily stop operational movements
- ✓ Comply with Movement Restrictions
- ✓ Know relevant Biosecurity **Protocols**

of the voluntary cease movement. Federally ordered movement controls may follow and may be enforced within a single province or across several provincial regions, each with specific zone designations. These three basic forms of movement controls are detailed below.

NON-ESSENTIAL MOVEMENT BAN PROTOCOL / VOLUNTARY CEASE MOVEMENT

At the outset of an outbreak, industry leaders in the different commodities may recommend a standstill for a period of 72-hours. The cease movement would apply to specific livestock and possibly products and equipment. Exceptions may be defined for certain classes of animals, movements to specific destinations, or movements of particular products. See next page for the Non-Essential Movement Ban Protocol.

PROVINCIAL MOVEMENT CONTROLS

Once a provincial laboratory has confirmed the presence of a serious animal disease, provincially ordered movement controls may provide legal authority for standstill measures. Provincial movement restrictions would be enforced through provincial authorities.

FEDERAL MOVEMENT CONTROLS AND ZONING

Once the disease is confirmed at the National Centre for Foreign Animal Disease in Winnipeg, the federal minister may establish a Primary Control Zone (PCZ). As discussed in the zoning section on page 16, the PCZ may include a Security Zone, Restricted Zone and Infected Zone. Permits and licenses will be required for all movements into/out of/within/through these zones and will set out specific and enforceable criteria for the movement of livestock and related items. These permits may be available online, while specific licenses for higher risk movements will more likely be required on a case-by-case basis from the Emergency Operations Centre. Federally ordered movement controls are enforceable with significant financial penalties and potential for RCMP involvement for non-compliance.

Whether movement controls are voluntary or legislated and enforced, full and early compliance is essential to control the spread and limit the impacts of a serious animal disease outbreak. Our trading partners will be taking note of our approach and likely be more willing to resume trade activity sooner if the action taken was swift and effective.

NON-ESSENTIAL MOVEMENT BAN PROTOCOL

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Farm Name:	PID #:

The purpose of this document is to clarify the circumstances and conditions under which producers should temporarily suspend movement during a serious animal disease event.

WHEN would the Protocol be triggered?

- This Protocol is not intended to be used for routine animal disease events.
- Industry leaders may use the Protocol as a strategy to mitigate risk and limit the spread of a serious animal disease in the early stages of an outbreak.
- Industry leaders may ask producers to implement movement controls in advance of an official CFIA directive and application of formal controls measures.
- Industry leaders may consider this action when a serious animal disease has the potential to spread rapidly via the movement of susceptible animals, their products and by-products. In most cases this action would be based on advice from the Chief Veterinary Officer for Canada (CVOC) or a Chief Veterinary Officer for a province.

WHO does the Protocol apply to?

· All livestock operations with susceptible species, such as: auctions, sale yards, slaughter facilities etc., within a province or trading area.

WHAT does the Protocol entail?

- A standstill on all **non-essential** livestock and livestock-related product movements.
 - Three days (72 hours) initially the length can be shorten or extended based on the specific situation.
 - · Livestock and livestock-related products may not be brought on or off a premises, whether to slaughter or other destination.
- · Which movements may be deemed essential and the actions required to enable that movement.

WHY is the Protocol recommended by industry leaders?

- In the early stages of a potential major disease outbreak, reduced movements are critical to disease containment and limiting the introduction/spread to other premises/regions.
- This action is deemed beneficial to an effective response, rapid recovery, reduced market downtime and the industry's longterm viability.

HOW is the Protocol applied?

· Participation is voluntary but strongly recommended and promoted by sector stakeholders.

IN GENERAL, the following will apply:

Livestock in transit within a province	 If not commingled after departure, then return to point of origin. If commingled or reloaded after departure, then continue to destination and hold in segregated facilities on arrival.
Livestock in transit to one province from another province or country	Return the load to the point of origin.
Deliveries (feed or other)	 Farm to consider use of a 'transfer station' to off-load feed. Drivers to remain in cab. Vehicles dry cleaned and ideally washed prior to coming on a premises with susceptible animals. Vehicles are not to enter the production area (restricted access zone) of the premises.
Deadstock	 Pickup suspended for duration of Protocol. Carcasses must be secured in a biosecure manner which prevents scavenging.
Duty of care	The person who is in possession or has oversight of the animals will be responsible for their well-being.

BIOSECURITY

Whether on boots, clothing, equipment or livestock supplies, staff and visitors can unknowingly spread disease. Biosecurity measures can lower the risk. Developed in collaboration with a veterinarian, biosecurity protocols provide clear instruction on how to manage:

- Animal health practices
- Animal movement risks
- The movement of people, vehicles, equipment and tools

GREEN biosecurity protocols should be a part of your Normal day-to-day business while AMBER and RED protocols will coincide with Elevated Risk and High Risk emergencies associated with serious animal disease outbreaks. A sample Biosecurity Protocol can be found on the next page.

Producers should note that prior to a serious animal disease confirmation (verified by lab results), an operation may be declared by CFIA an 'Infected Place' on the basis of suspicion only. Specific movement restrictions and biosecurity measures will be ordered and enforced. Other premises nearby or ones that can be linked to the 'Infected Place' may also be affected.

> Species specific national biosecurity standards developed by CFIA are a good starting point for determining appropriate on-farm biosecurity measures.

> The standards are available on the CFIA website www.inspection.gc.ca

BIOSECURITY PROTOCOL (SAMPLE)

_____ PID #: _____ Farm Name: _____

GREEN + AMBER

Normal day-today

Use of this AMBER Elevated Risk biosecurity protocol should be reviewed when:

- There is concern that an unconfirmed disease may be present in the trading area (area of business)
- There is suspicion of a serious animal disease within the trading area

What to Do:

- Review and verify current biosecurity practices and compare with industry biosecurity standard
- Ensure biosecurity standard is known by staff and understand the importance of following the standard

Use of this RED High Risk biosecurity protocol should be reviewed when:

- There is **SIGNIFICANT** concern that a disease is present in the trading area
- A formal Notice of Confirmation has been declared for a relevant serious animal disease within the trading area

What to Do:

+ RED

 STRICTLY adhere to the biosecurity standard

FARM ACCESS

GREEN + AMBER RED

Normal

- · Restrict primary access points where farm offices or personnel are present to monitor access
- · Use Visitor logs in accordance with risk assessment tool and ensure they are placed at entry/exit points
- · Bar or otherwise prevent access through all secondary access points where the farm does not have an ongoing presence
- Post biosecurity signage at access points

· Additional as recommended at time of Confirmation

SICK ANIMALS

GREEN + AMBER

Normal

- · Isolate to the extent possible
- Minimize contact or potential for contact with healthy animals/pens
- · Assign dedicated clothing, equipment, pens, feed and water stations
- Designate staff to handle as follows:
 - · No contact of other animals after treating sick animals
 - · Change of outerwear/footwear
 - · Wash hands before and after treatment

· Additional as recommended at time of Confirmation

RED

INCOMING/OUTGOING TRAFFIC

GREEN	+ AMBER	+ RED
Normal	Ensure disinfection prior to entering farm and before leaving	No incoming livestock
	Have drivers consider additional biosecurity protocols	Postpone arrivals and
	Document truck movements on and off the farm.	departures pending more
	Ensure drivers are recording dates and times of farm pickups	information on outbreak and conditions under which animals
		may be moved

STAFF

GREEN	+ AMBER	+ RED
Normal	 Remind staff of indicators and immediate response protocol for unusual animal health events Ensure those owning and/or in contact with livestock have dedicated clothing and footwear for the farm and change clothing/footwear when entering or leaving the farm premises All staff to wash hands and feet prior to entering or leaving the farm 	 Staff to make alternate arrangements for care of personal livestock or be moved into a position having no contact with operation's animals All staff to wash hands again, and boots, when entering production area for the purposes of working with animals or entering pens, processing or hospital unit

DEADSTOCK

GREEN + AMBER RED Normal • Designate specific staff to handle and remove animals from pens No pickup of deadstock on-farm • Instruct staff to wash hands and clothing after handling deadstock Additional as recommended at • Ensure separation from other farm practices time of Confirmation for equipment • Refer to depopulation and disposal section for more information about deadstock burial • Monitor key websites for information and recommendations (e.g., Industry associations, BCMAFF, CFIA and AAFC)

PRODUCTION AREA e.g., barn, manure storages, feed mills

GREEN	+ AMBER	+ RED
Normal	No visitors No external animals, vehicles or personnel beyond main office/delivery area	Additional as recommended at time of Confirmation

2. INVESTIGATION AND TRACING

A critical component of containing a disease is determining how it was introduced and how far it has spread. Animal identification, premises identification, and traceability systems are not only integral to investigating movements that led to an outbreak, they facilitate tracing of contacts associated with other cases.

Similarly, the visitor logs discussed earlier can help identify how a disease may have entered an area and people or equipment that may be at risk. This section highlights steps that producers can take both before and during an emergency to assist investigators and protect their farm.

DISEASE FOLLOW-UP

Epidemiologists are specially trained to get to the bottom of a disease outbreak. During an adverse disease event these specialists will conduct interviews with key staff, review all available data and documentation such as identification records and visitor logs, monitor affected animals and collaborate with other authorities.

As they review the situation, they will try to identify the following:

WHEN

- · Incubation period
- · Time of onset (first signs)

HOW

- · Location and spatial distribution
- · Species and numbers
- Economic and social relationships on the farm
- Supply and disposal practices
- Disease prevention systems
- Hygiene

WHERE and WHEN

- · Animal and staff movements
- Deliveries, vehicles, equipment, feed, water, airborne potential

TRACEABILITY

Knowing where animals are currently located, their movement history and who they have had contact with can significantly help disease responders locate at risk animals who may be spreading or have potentially been exposed to the disease. Traceability systems bring together animal identification, premises identification (PID) and animal movement data and make it easily accessible when it is needed most.

QUICK TIPS

- ✓ Keep up-to-date records
- ✓ Consider traceability options
- ✓ Register your land with a PID

By enhancing the speed and precision of a response, traceability systems can significantly reduce the overall impact of an emergency. Whether it is a disease outbreak, or other significant hazard such as wildfire or flood, traceability can contribute to a reduction in the size and scale of an adverse event.

Not only does traceability increase our effectiveness, it's what our trading parties expect. In fact, these systems help to facilitate re-entry into important international markets by demonstrating a commitment to shortening investigation timelines, controlling spread more quickly and reducing the number of quarantined or slaughtered animals. Clearly this is of great benefit to livestock, producers and consumers alike.

PREMISES IDENTIFICATION (PID)

PID is another essential tool used by emergency response professionals to manage a serious animal disease outbreak and other adverse events.

Across Canada, governments use premises identification numbers to distinguish parcels of land and farm locations. PID systems can serve as an early warning mechanism to notify animal owners of a natural disaster such as a flood or fire that could affect their animals or operations. They also provide a way to connect livestock to specific pieces of land or identify potentially affected transportation routes, which is very helpful during a disease-related emergency.

During a disease outbreak, a PID will help ensure a quick, accurate and cost-effective emergency response. To register your farm and receive a PID:

Call: 1-888-221-7141

Visit: www.gov.bc.ca/premisesidprogram

Email: BCPID@gov.bc.ca

3. VACCINATION

Vaccination can play an important role in slowing the spread of disease. By vaccinating animals, producers are able to strengthen the buffer area around the Infected Place, protect animals at risk, and safeguard the industry.

MASS VACCINATION

During a major disease event, provincial or federal authorities may order mass vaccination. If ordered, compliance is required under the federal Health of Animals Act and its related regulations or similar provincial legislation.

Vaccinated animals will be identified and their individual animal ID recorded. Depending upon the disease, vaccinated animals may need to be slaughtered and even diverted from the food chain.

The CFIA will state the necessary protocol once the mass vaccination program is ordered. The CFIA is responsible for providing vaccine and dosage guidelines to producers who then must vaccinate their animals accordingly. If vaccination is ordered, a comprehensive vaccination strategy will be discussed with and accepted by industry leaders. The strategy would set out:

QUICK TIPS

- ✓ Understand your duty to comply with government ordered vaccination
- ✓ Take direction from your government appointed site supervisor
- ✓ Ensure staff are familiar with vaccination technique and requirements
- The type of premises, species and even class of animals to be vaccinated
- Location within the Primary Control Zone of premises being vaccinated
- Recordkeeping requirements
- Subsequent use restrictions for vaccinated animals

For example, vaccination may be ordered at all operations within the Infected Zone for all susceptible livestock regardless of their sex or class. Producers may be required to use onsite farm personnel to carry out the vaccination to free up qualified government and emergency staff to focus on other necessary control measures. In this scenario, a site supervisor will be designated by CFIA or BCMAFF to ensure compliance with required protocols.

Our industry's continued livelihood hinges on the CFIA and/or AAFC's ability to state with certainty that protocols have been completed in strict compliance with the conditions that international animal and public health authorities require for Canada to regain domestic and international market access. For this reason, 100% compliance with the CFIA or AAFC protocol is essential. A sample mass vaccination protocol is provided below.

MASS VACCINATION PROTOCOL (SAMPLE)



Farm I	lame: PID #:	
	Farm owner/manager to review and accept the vaccination protocol with a site supervisor appointed by CFIA or BCMAFF, setting out all requirements including:	
	Species/class to be vaccinated	
	• Method	
	• Dosage	
	Record keeping requirements	
	Booster requirements	
	End use	
	Oversight	
	Other control factors	
	All personnel acknowledge their acceptance of regulatory oversight whether provided by CFIA or BCMAFF	
	All personnel agree to apply protocol as directed by CFIA or BCMAFF site supervisor	
	Farm staff will:	
	Record receipt of vaccine doses and ensure oversight of vaccine as directed	
	Vaccinate all animals, as set out in the vaccination protocol and directed by the site supervisor	
	 Record individual animal identification of each vaccinate, at time of vaccination, together with date and place and members of vaccination crew and vaccination oversight personnel 	
	 Identify vaccinates, as required by regulatory authority. This may be a temporary or permanent identifier (e.g., ear tag or brand) 	
	Record unused vaccine doses and return to regulatory authority if required	
	Provide CFIA or BCMAFF site supervisor with record of animal identification for all animals vaccinated	
	Apply second or booster vaccination if directed, using similar protocol, in the time frame required	

4. DEPOPULATION (DESTRUCTION AND DISPOSAL)

Provincial or federal authorities may order mass depopulation, the destruction of animals and disposal of carcasses in response to a major outbreak. This is an unfortunate but necessary and very effective strategy to stop disease spread and to protect our industry. Depopulation may also be an option of last resort to address an animal surplus situation, in other words, a welfare cull.

DESTRUCTION ORDERS

Destruction orders will be issued for each of the designated premises. When ordered, compliance is required under the Health of Animals Act and its related regulations or similar provincial legislation. A site supervisor appointed by CFIA or BCMAFF will provide regulatory oversight.

Depopulation strategies will be discussed with and accepted by industry leaders. This collaborative process will involve a detailed evaluation of the risks to human and animal health and economic and environmental considerations. The means and methods to be used will be prescribed in a strict protocol after consideration of the various alternatives and the conditions at hand including numbers of animals, whether they are diseased or not, location, facilities, soil types, water table, and other key elements.

QUICK TIPS

- ✓ Understand your duty to comply with orders
- ✓ Follow protocols agreed to by industry leaders provided by CFIA

METHODS

There are various methods used to destroy animals and dispose of carcasses. One such strategy involves use of a designated slaughter facility, possibly salvaging a portion of the carcass and/or directing carcass to landfill. Based on the specifics of the animals and location in question, industry leaders and government regulators will select the method from the following options that are approved for use:

Destruction	Disposal
Free bullet	Burial at a central location and/or approved secondary
Captive bolt (penetrating or non-penetrating)	landfill sites
Electrocution (single or two-stage)	Incineration
Injection	Rendering
,	Processing for food (depending on the disease)

Farm personnel will have a role in both depopulation and disposal processes. Staff with livestock handling skills and equipment familiarity will be guided by a BCMAFF or CFIA appointed site supervisor. Using farm personnel and other resources will allow qualified government and professional staff to work on other necessary control measures.

Strict compliance with the protocols set out by CFIA or BCMAFF is essential. In order to regain domestic and international market access, CFIA and/or BCMAFF will need to state with certainty that prescribed depopulation protocols have been carried out in strict compliance with the conditions specified by international authorities for animal health, public health, and the environment.

While the CFIA or BCMAFF will state the necessary protocol at the time of the mass destruction and disposal program, a sample destruction and disposal protocol is provided below so producers can be aware of the requirements of such a program ahead of time.

BC producers wanting to familiarize themselves with additional information on this topic are encouraged to review the following on the BCMAFF's website:

- BC Ministry of Agriculture, Fisheries, and Food Poultry and Livestock Carcass Disposal
- BC Environmental Farm Plan

Manager	e a destruction order is issued, operators and personnel will need to: Review and accept the overall depopulation and/or disposal strategies required by regul or BCMAFF
Manager	
oversight and	
	Follow directives from the Regulator's designate (site supervisor) who will provide regular instructions regarding: • Species/class involved
	 Depopulation and/or disposal protocols (method and means) Record-keeping requirements, etc.
on takes place	Assist with the assembly, movement, restraint, and processing of animals, whether depo
	Prepare and provide records of animals depopulated and/or disposed of, as set out in the Examples of the type of records can be found in the Information for Valuation/Competition .
All	Apply animal biosecurity practices as prescribed
	Follow personal biosecurity requirements as prescribed and which may include any or all other requirements:
	Showering before and after each shift
(PPE)	Hand washing before putting on and after removal of Personal Protective Equipment
	Wearing of PPE
	Taking any vaccine or prophylactic medication, if any is recommended by public
h officials	
	Self-monitoring for any signs of personal sickness and seeking medical care if sy
oms appear	 Self-monitoring for any signs of personal sickness and seeking medical care if sy Having NO CONTACT with other livestock for a prescribed period of time after to

5. FINANCIAL CONSIDERATIONS

A disease outbreak can place significant stress and financial pressure on affected producers. While depopulation orders are never welcome, producers may be compensated for some of their losses. There may also be support available through other sources such as insurance and government aid.

COMPENSATION - HEALTH OF ANIMALS ACT (FEDERAL)

The federal minister may order compensation when a destruction order is issued for particular animals. The amount is determined and paid in accordance with the *Health of Animals Act* (Federal) or provincial legislation.

It is important to explicitly note that compensation will only be awarded to herds that have been ordered destroyed by the federal minister for disease control purposes.

Compensation under the Health of Animals Act has limits and is not intended as insurance or full recompense. It covers:

QUICK TIPS

- ✓ Keep accurate and up-to-date animal records
- ✓ Contact your association for help finding a qualified evaluator
- ✓ Check your insurance coverage
- ✓ Know your financial aid options
- The fair market value of animals ordered destroyed less any salvage value
- Other things that may be ordered destroyed such as contaminated feed or animal products
- Disposal costs

Compensation is reduced by any salvage value derived from the carcasses, which is also paid to the producer.

The maximum compensation for animals ordered destroyed will depend on the species and category of animal. These maximum values are listed in the "Compensation for Destroyed Animals Regulations" on the CFIA website.

VALUATION

Fair and accurate valuation of the animals is a necessary step in determining the compensation due to the owners of the animals ordered destroyed. The valuation process involves two evaluators, one selected by the operator and the other selected by the CFIA. Operators can identify their own evaluator or choose one from a list that may be made available at the time of the outbreak.

Evaluators will base their findings upon the animals and relevant records, as presented by the operator. Their valuation is presented to the CFIA veterinarian responsible for the valuation process.

The table below contains some common queries related to compensation:

QUESTION	RESPONSE
Will value be based upon pre-outbreak prices or current prices?	Valuations are historically based upon prices in effect just prior to the outbreak
How is value determined?	Fair market value is used, typically based on either: factors such as age, weight, class, etc.; or the animals' point in the production cycle at time of destruction
What special attributes might be considered that add value?	Organically raised, specialty breeds, purebred lines, pregnant animals, etc.
How long does payment take?	For recent outbreaks compensation was provided in approximately six weeks, however this will vary depending upon the situation

Other issues may surface during the compensation process. These topics will be explored and jointly addressed by the industry and government executive. The CFIA will work with the industry to ensure that the compensation process runs as smoothly as possible.

INFORMATION FOR VALUATION/COMPENSATION

When compensation is sought, farm personnel will be asked to assist the valuation process by providing the following information from all animals being valued:

- · Animal purchase/birth date
- · Description (e.g., number of head, class, sex, species, breed of animal)
- Production/quality records or parameters
- Individual ID if available, or other (group) identifiers
- Owner details, e.g., name and contact information

- · Premises identification PID (farm)
- Date of quarantine and depopulated
- Depopulation method
- Premises identification PID (depopulation location, if different)
- Disposal method
- Premises identification PID (disposal location, if different)
- Salvage value received, if any (payment received for animal/ carcass)

ADDITIONAL EXPENSES

While compensation can help cover animal losses there are other expenses associated with a disease-related emergency. These may include cleaning and disinfecting or decontaminating premises and equipment that will not be covered. Since these items are not part of the compensation process, producers need to be aware of all other avenues for financial aid.

COMMERCIAL INSURANCE

Commercial insurance provided in the private sector may be available to producers depending on individual policy specifics. Producers should review their coverage with an experienced broker annually and consider adjustments that would better protect them from disease-related emergencies.

If coverage is available, some losses to consider are those related to mortality, disease, livestock relocation, infrastructure losses, flood, weather such as hail or fire, and business interruption.

Producers should know the specifics of what perils or events are covered by their insurance and what costs are addressed.

INSU	INSURANCE CHECKLIST		
	Have you checked to ensure your coverage is current?		
	Have you reviewed your operation with your insurance broker with specific consideration for coverage of potential perils or events?		
	Do you have records of the individual animal identifiers that are within your possession?		
	Have you assessed the risks associated with actions you might take in response to certain perils and the coverage available should you do so? For instance, moving animals off premise from a flood zone or fire path?		
	Do you have business interruption coverage that would cover you in the event of a sustained border closure or market collapse?		
	Have you documented your various protocols, including your emergency management protocols, so that if necessary, you can demonstrate due diligence to the insurer?		

GOVERNMENT PROGRAMS

In response to certain disasters or emergencies the federal and provincial governments may make funding available for individuals and in some cases business operators. These supports are in addition to funding offered for compensation and are typically provided to the recipient through provincial authorities.

Federal and provincial governments have also partnered to develop and deliver a suite of risk management programs. For more information about any of these programs please contact Agriculture and Agri-Food Canada or refer to their website.

AgriStability

Covers losses associated with increased feed costs or reduced revenue from sale of livestock

AgriRecovery

Disaster relief on a case-by-case basis

Agrilnvest

Provides a 'savings account' for producers that may cover small income declines

BC producers can learn more about the Provincial Disaster Financial Assistance by searching "Disaster Assistance" on the BCMAFF website.

6. CLEANING AND DISINFECTION

In the event that a serious animal disease occurs on your farm you will be required to clean and disinfect the premises after the disease is eradicated.

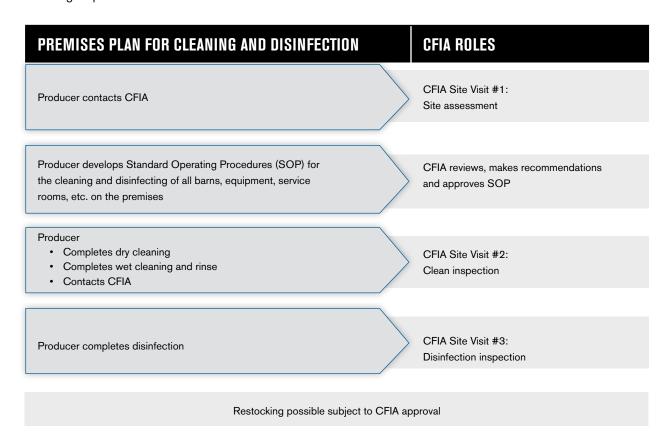
Cleaning and disinfection actions and costs are the responsibility of the owner of the premises. In some cases, this might be the landlord of the property even if they do not personally own the affected livestock.

Your premises will continue to be designated as an 'infected premises' until cleaning and disinfection are completed to the satisfaction of the province or CFIA. After that time, restocking can begin to take place.

QUICK TIPS

- ✓ Have cleaning and disinfecting supplies on hand
- ✓ Develop your Standard Operating Procedure (SOP) with input from CFIA
- ✓ Work with CFIA inspectors

Although cleaning and disinfection protocols are typically site-specific producers can expect to move through the following steps:



During a disease event the CFIA or AAFC will provide producers with clear guidance and instruction for cleaning and disinfection. The requirements and expectations for cleaning and disinfection will differ considerably between diseases. Below is a sample checklist that may be considered when developing a protocol for cleaning and disinfection on your farm.

CLE	ANING AND DISINFECTION CHECKLIST
IDEI	NTIFY
	Areas that need to be cleaned and disinfected
	(barns, storage, garages, offices, entrances, feed bins/feeding equipment, etc.)
	Materials, equipment and machinery to be cleaned and disinfected
DEV	ELOP
	A list of area(s) or equipment that are difficult to clean
	Entry and exit procedures
DET	ERMINE
	Application method and required equipment
SEL	ECT
	Appropriate methods of cleaning - dry and wet, including application method and required equipment

7. LIFTING OF RESTRICTIONS

Once the outbreak situation has stabilized and the risk has diminished the appropriate regulatory authority will begin lifting disease response conditions. This decision will be made after discussion with industry leaders.

A statement will be released by the BCMAFF or CFIA indicating that the disease-related sector-wide emergency is now over. This information will be welcome news to producers and will come by way of the industry associations. Industry associations will communicate changes to conditions and sector-wide disease-related emergency status to its members and others within the livestock sector using a variety of communication tools.

QUICK TIPS

- ✓ Keep your eye out for updates from your producer organization
- ✓ Regularly visit your association's website

Recovery

As conditions are removed, focus will turn to the recovery process. CFIA, the federal government and industry leaders will be working diligently to gain formal recognition of Canada's 'disease-free' status by our trading partners around the world. This is an involved process that may take months and even years.

Once Canada has successfully demonstrated an absence of the disease for the required time frame and our 'disease-free' status is recognized by the World Organisation for Animal Health and national regulatory authorities of our various trading partners, industry stakeholders can begin to re-establish market share. This too will take time.

Maintaining Business Operations During an Emergency

A human pandemic, serious animal disease, zoonotic outbreak, or natural hazard such as extreme weather events, fire, or flood, emergencies can significantly interrupt business operations and the flow of farm products.

Supply chain disruptions are not only inconvenient; they can also pose serious challenges for producers, transporters, processors, and many other industry stakeholders. During the COVID-19 global pandemic livestock industries felt the impact of product unavailability, shortages and impeded flow. Adaptability and quick decisionmaking proved integral in handling the unexpected and reducing negative impacts.

The purpose of this section is to highlight some of the potential disruptions to business operations along with strategies that producers may use to help manage the ripple effect. The information included in this section has been developed to support you in assessing risk, planning in advance, and responding in the moment to a business interruption.

ESSENTIAL BUSINESS WORKFLOW

There are movements both on and off your farm that are critical to business operations. Whether you are an infected premises/place, located nearby an infected farm, or outside the zone of infection, an emergency can trigger all types of business workflow interruptions.

Typical work flows on Canadian livestock farms include:

- Outgoing shipments of livestock
- Incoming supply of livestock
- Incoming supply of feed and supplements
- Outgoing by-product (deadstock and manure)
- Movement of farm workers
- Service provider visits such as veterinarians, utility technicians, and equipment technicians



Some questions for consideration:

What if you couldn't ship livestock on or off your farm? How long could you operate without moving livestock or livestock-related products?

What is your storage capacity for feed? How long could you operate until you will need more shipments of feed or supplements?

What if you were restricted from moving deadstock or manure? How long could you operate?

What if there were restrictions on farm workers accessing your farm? How would you staff your operation?

What if there were restrictions on service providers entering your farm?

In the event of disease outbreak or other emergency event, these movements may be restricted or made more difficult. Thinking about these things in advance can help you be even more prepared for the unexpected.

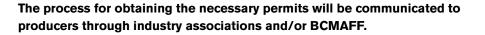
During a disease outbreak, restrictions to movements on or off farm will highly depend on the location of the premises and its relation to the Infected Zone as discussed in the zoning section of this Handbook on page 16.

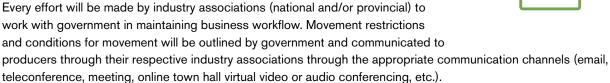
- Movement controls will be most restrictive into or out of the 'Infected Zone'
- Less restrictive movement controls will be placed on those in the 'Restricted Zone'
- Least restrictive movement controls will be placed those in the 'Security Zone'

Producers will need to be prepared to utilize licenses and/or permits to move livestock or livestock-related products into or out of the control zone.

LICENSING AND PERMITTING

Government may require movement permits or licenses for movements of livestock or other farm-related products into, out of, within, or through infected areas. How, where, and what movements require permits will be communicated by the government to the livestock industry.





SUPPLY SURPLUS

There may be instances when the flow of livestock becomes significantly bottle necked. Supply surplus issues will need to be handled by the affected producer. This scenario was experienced by many livestock industries during the COVID-19 pandemic when packing plants were shutdown or experienced reduced processing capacity due to localized outbreaks of the virus.

In this challenging situation, producers will need to take action to manage the number of animals they are raising and the barn capacity for holding upcoming replacement livestock.

Some potential methods for managing the oversupply of livestock on BC farms might include:

- Altering diets and feed programs to slow growth
- Selling livestock
- Delaying impregnation
- Utilizing empty barns (if available)
- Aborting pregnant livestock
- Humane euthanasia

Associations can support producers with information on surplus management. Going forward, it is important that industry continues to work with government to develop policies that will aid in addressing anticipated risks.



HUMANE EUTHANASIA

Producers are responsible for maintaining the health and wellness of their livestock. This makes euthanasia a very challenging topic for producers to address.

During an emergency, business work flow interruptions may result in an accumulation of newborn livestock with no way of selling or moving them. This can leave producers with unforeseen operational and financial challenges, and limited solutions.

Humane euthanasia may be an option to consider as a last resort. The National Farm Animal Care Council (NFACC) facilitates the development of species-specific Codes of Practice for the care and handling of farm animals. The Codes was developed to provide guidelines for the care and handling of different species of farm animals. The Codes outlines methods for euthanasia.

For any method to be considered acceptable, it must:

- · Render the animal immediately insensible; and
- The animal must not return to sensibility prior to death

For more information on approved methods for euthanasia please refer to the Codes of Practice at www.nfacc.ca.

CONCLUSION

Although the prospect of dealing with any phase of a disease-related sector-wide emergency is daunting, there are things we can all do to strengthen and protect our industry. This handbook has been developed to help producers understand important concepts, be as prepared as possible for an outbreak situation and to respond appropriately.

Your provincial livestock association is committed to advocating on behalf of the beef industry and providing producer support. If you have any questions or concerns about the information contained in this document please contact:

BC Sheep Federation www.bcsheepfed.com

BC Goat Association info@bcgoat.ca www.bcgoat.ca

BC Purebred Sheep Breeders' Association www.bcsheep.com

For more information and specific resources on serious animal disease prevention please visit www.animalhealth.ca

TABLE OF CONTENTS

INTRODUCTION

SCHEDULE 1. GLOSSARY AND DEFINITIONS

Glossary

AAFC Agriculture and Agri-Food Canada

ADM Assistant Deputy Minister

ASF African Swine Fever

CBSA Canada Border Services Agency

BCMAFF British Columbia Ministry of Agriculture, Fisheries, and Food

CCVO Council of Chief Veterinary Officers
CFIA Canadian Food Inspection Agency

CVO Chief Veterinarian Officer

ED Executive Director

EMBC Emergency Management BC

EMC Emergency Management Committee

EOC Emergency Operations Centre, modified by (J) Joint, (G) Government, (N) National, or

(R) Regional, (A) Area

FAD Foreign Animal Disease

FADES Foreign Animal Disease Emergency Support Plan

FMD Foot-and-Mouth Disease

FSAHD Food Safety and Animal Health Division

GIS Geographic Information System

HAA Health of Animals Act – Federal

ICS Incident Command System

IP Infected premises

JIC Joint Information Centre

LMIS Livestock Market Interruption Strategy

NCFAD National Centre for Foreign Animal Disease

NCIAP National Critical Infrastructure Assurance Program

NERT National Emergency Response Team

OIE Office International des Epizooties/World Organisation for Animal Health

PAHS Plant and Animal Health Strategy

PCZ Primary Control Zone

PHAC Public Health Agency of Canada
POC Provincial Operations Centre
PPE Personal Protective Equipment

PSC Public Safety Canada

RCMP Royal Canadian Mounted Police

Definitions

Animal health emergency	An outbreak or epizootic of a serious animal disease requiring immediate action to contain, control and eradicate the disease, including: • Animal movement controls • Slaughtering of animals known to be or suspected of being infected • Disposal of carcasses or infected products • Cleaning and disinfecting of the Infected Place and transport • Application of measures aimed at limiting the spread of the disease and • Tracing the origin of the disease, etc	
Confirmed Case	Confirmation of disease by National Centre for Foreign Animal Disease on samples obtained at the farm by CFIA staff by: • Virus isolation • Antigen identified from animals showing clinical signs or • Linked to confirmed outbreak, or antibodies from other than vaccination with clinical signs.	
Emergency Operations Centre (EOC, NEOC, PEOC, REOC, JEOC)	Site of decision-making, leadership and management for the event are administered using the Incident Command System (ICS). May be implemented on a (N) national, (P) provincial or (R) regional basis, (J) join, in which case it will be preceded by the letter N, P, A R, or J.	
During an emergency, an industry organization's Emergency Management Committee is authorized to make decisions on behalf of the organization. The committee may be composed of Chair/President, General Manager/Executive Director, Vice Chair/President or Animal Committee Committee Chair and/or other executive members or staff as required; a quorum of three required. All members have voting rights. Decisions require a majority. Meetings will be closely the Chair/President and decisions recorded.		
EOC Director	The person named as EOC Director is responsible for the Emergency Operations Centre and responsible for the management of disease control or eradication operations.	
Infected place	Where an inspector or officer suspects or determines that a disease or toxic substance exists in a place and is of the opinion that it could spread or that animals or things entering the place could become affected or contaminated by it, the inspector or officer may in writing declare that the place is infected and identify the disease or toxic substance that is believed to exist there, and such a declaration may subsequently be amended by the inspector or officer.	
Infected premises	Premises where a federally reportable disease has been detected through laboratory testing.	
Livestock Market Interruption Strategy	The LMIS is a national strategy developed by federal, provincial, and territorial governments and the livestock industry to enhance preparedness to manage any large-scale livestock market interruption focused on the impact to healthy animals. The strategy is made up of a variety of tools and information to support government and industry planning, decision-making and action.	
Local authority	The council of a city, town, village, regional government or Indigenous group.	

Definitions

Plant and Animal Health Strategy	The PAHS is a strategy of government, industry, academia and other stakeholders to strengthen Canada's protection of plant and animal health by collaboration, innovation and risk prevention.	
Production area	The operation corrals, pens, barns, and pastures where livestock are or may be kept.	
Reportable diseases	Reportable diseases are outlined in the <i>Health of Animals Act</i> and Reportable Diseases Regulations and are usually of significant importance to human or animal health or to the Canadian economy. Anyone having care and control of an animal (e.g., owner, veterinarian, laboratory) is required to immediately report the presence of an animal that is contaminated or suspected of being contaminated with one of these diseases to a CFIA district veterinarian. Foreign Animal Diseases (FAD) are reportable diseases that are not found in Canada. Note: Provinces may also have a reportable disease list that may include diseases that are not in the federal Reportable Diseases Regulations.	
Serious animal diseases	Serious animal diseases (SAD) are diseases that are more severe than common animal health illnesses and that can have significant impacts to trade and industry operations.	
Special premises	Premises such as an abattoir, artificial insemination centre, sales yard, zoo, game farm, shipping yard or any other premises where animals are kept or assembled.	
Suspect case	The presence of clinical signs or post-mortem lesions in susceptible animals consistent with a specific disease reported by a private practitioner, an owner, a provincial laboratory, or a veterinarian in charge or district veterinarian and determined as high risk in consultation with the disease specialists or all susceptible animals epidemiologically determined to have been exposed to the virus.	
Trade(ing) area	The geographic area that either directly or indirectly interacts with the province in consideration and includes areas where bulk of animals bought from or sold to. An interruption or outbreak in any portion of the trading area would impact the province in consideration.	
Triggers	SUSPICION occurs when a CFIA or provincial veterinarian diagnoses or cannot rule out the diagnosis of a serious animal disease. The CFIA or provincial veterinarian will notify the producer and depending on the circumstances regulatory officials may also notify industry associations and trading partners. Sampling and lab tests will be initiated, and additional information collected. The next trigger CONFIRMATION occurs if the disease is confirmed by specific lab tests. At this point regulatory officials will formally provide notification of confirmation to a range of stakeholders starting with the producer and potentially including industry associations and trading partners.	

Notes:			

SCHEDULE 2. OTHER HAZARDS RESOURCE

Emergencies, seasonal events and natural disasters can place a tremendous strain on producers, animals, and the food supply chain. While these challenges are difficult to predict, advance preparation can help safeguard the welfare of those involved, ensure business continuity, and speed recovery after the event. The following resources have been developed by provincial governments and have been included to provide additional emergency guidance for producers.

Structure Fire and Wildfire

Fires can have a devastating impact on a farm. Whether it's a small area fire or uncontrolled wildfire, flames can spread across vast tracts of land, posing serious threats to livestock in barns, pens and pastures.

STRUCTURE FIRES

Farm buildings, sheds, and residences may be seriously impacted during a fire. These structures often contain materials such as wood, hay, and straw that can act as feedstock and further fuel the blaze.

The ignition of a fire may be triggered by engine exhaust, exposed wiring, or lighting as well as other on farm heat sources such as combustion of bedding, litter or hay. It is important to keep flammable materials away from heat sources and to be aware that high moisture levels in bales can contribute to excess heat, mould growth, and loss of dry matter.

Fortunately, almost all structure fires are preventable. By being observant and practicing common-sense fire prevention techniques you can help reduce risks.

Considerations for Barn Fires:

- Never put personal safety in jeopardy to save an animal
- Panicked animals normally will not leave a barn on their own, because they do not fear fire
- Most animals are killed from smoke inhalation and those who do survive rarely recover
- A structure can be completely engulfed in less than six minutes

Livestock Tips During a Fire

Horses

- Lead animals from the left-hand side
- Horses are easier to control when blindfolded
- A towel over the horse's eyes, secured under the halter works well to keep horses from running back into the barn

Cattle

- Cattle are very difficult to remove from a burning barn as they will try to return to a structure if not confined away from the fire
- Try to move animals in a group instead of one at a time. Isolation greatly stresses the animals, and they will generally be more cooperative if moved together
- Dairy animals should be relocated to a protected area if the fire occurs in winter, as they cannot withstand extreme weather

Swine

- Pig barn fires are very challenging. If numerous pigs are in a barn, they will be almost impossible to evacuate
- Pigs must be confined after removal from a barn, or they will attempt to run back into the burning structure
- If possible separate livestock by species, especially pigs from other animals

Poultry

Poultry barn fires generally have a high mortality rate as birds are very difficult to move during a large structure fire

WILDFIRE

Wildfires can spread across forests, grasslands and fields at an astonishing rate. Farms near wildlands/grasslands or owners that have livestock near these natural areas should be prepared for and know steps to minimize wildfire risks and losses.

Resources

Wildfire Information: 1-888-3FOREST (1-888-336-7378) FireSmart manuals www.firesmartbc.ca/resource-types/guidesmanuals

Material derived from BC Emergency Management Guides

Preparation

There are several proactive measures that can be completed in advance to prepare producers for a wildfire emergency including:

- Having contact information for prearranged off-farm evacuation sites handy
- Reviewing wildfire history in area
- Identifying and maintaining equipment that may help fight an approaching grassfire or wildfire (e.g., disk, harrow, tractor, water truck)
- Clearing vegetation and wood debris within 10 meters of any farm structure
- Reducing vegetation and wood debris within 10 to 30 meters of farm structures by thinning and pruning vegetation
- Storing hay away from roads or fences, and surrounding bale stacks with a bare area or fuel reduced strips
- Mapping location of fire extinguishers, evacuation sites and routes that may be used for animal movement
- Prohibiting smoking in and around barns
- Inspecting electrical systems regularly and correcting any deficiencies
- Removing accumulated dust from electrical fixtures, heaters, etc. on a regular basis
- Keeping the number of appliances at a minimum in the barn
- Using space heaters only when someone is in the barn
- Obtaining and installing fire extinguishers near all building exits
- Ensuring hay is dry before storage
- Storing hay outside the barn in a dry, covered area, if possible

Response

In the lead up to and during a wildfire emergency, producers will try to protect their farms and prevent losses. As you respond to the threat of wildfire consider the following:

- Evacuating employees/visitors to an agreed safe meeting place as required
- Notifying the fire authority immediately. In my area, the number is _
- Assessing the fire and only attempting to contain or extinguish a small fire if it can be done safely

Flooding

Flooding is a natural and often seasonal hazard that can be extremely disruptive and can pose a threat to animal and human health.

The most common cause of flooding is rain and/or snowmelt that accumulates faster than it can be absorbed into the soil, drainage or water bodies. Not only can flooding cause immediate issues with rising water levels, it can also disrupt services and create broader public health concerns.

By assessing the threat of flood and being prepared, producers can improve their readiness for an emergency. The risk of flooding will depend on the geographical location (e.g., proximity to creeks, streams, and rivers) as well as topographical features (e.g., drainage basins, low lying land, etc.).

Common Flooding Terms

High Streamflow Advisory River levels are rising or likely to rise rapidly, but no major flooding is expected.

Minor flooding is possible

Flood Watch River levels are rising and will approach or may exceed the banks. Flooding of

areas adjacent to affected rivers may occur

Flood Warning River levels have exceeded the top of the bank or will surpass it imminently.

Flooding will occur in areas near affected rivers

Livestock Tips During a Flood

- 1. Unconfined animals can usually take care of themselves during a flood
- The farmer's goal should be keeping livestock high and dry
- Your local emergency coordinator can provide up-to-date flood information and forecasts

Preparation

There are activities that can be completed prior to a flood that will better prepare producers in the event of an emergency including:

- Reviewing local or provincial floodplain map and assessing flooding potential
- Identifying locations where livestock can be moved, on-site and/or off-site, including evacuation route
- Mapping out safe locations and routes on map
- Identifying livestock haulers that could assist in livestock movement on short notice, if applicable
- Considering shipping animals that are approaching market weight
- Identifying high ground to move equipment (e.g., motors, tractors, tools, etc.), pesticides, fertilizer, or other chemicals
- Identifying electrical power switches/breaker to shut off power to areas where flooding is imminent
- Locating feed, bedding material, medications, etc. in areas unlikely to be flooded
- Considering methods of moving feed and water to location safe from flood
- Checking that backup generators are in working order and extra fuel is available in the event of a power outage

The necessary approach during a flood will depend on various factors including river or stream levels, winter snow load, ground conditions, and current and forecasted precipitation. It is important to stay informed of situation developments and relocation instructions as they are communicated through online channels, television, radio and social media. Always follow evacuation orders and ensure human safety first.

Some actions to consider if an evacuation order is issued and time permits movement of animals:

- Arrange trucks, trailers, drivers, and handlers to move animals if necessary
- Use prearranged route to move livestock to a location where they will be safe from the flood (high ground) whether that be on-farm or off-farm
- Ensure animals have access to food, clean water, and ample living area

In the event that a producer is unable to move their livestock into a pre-determined safe area, freeing animals may be the best option. Opening gates and/or cutting fences will allow animals to move and avoid the flood. This should only be done if the producer can determine that there is no reasonable danger to people or vehicular traffic from freeing the animals. If animals are set free, local authorities should be notified immediately.

Power Grid Failure

Utility outages are generally unexpected and inconvenient. These downtimes can be triggered by a variety of events, including severe weather, wildfire, and other potential hazards.

Producers should consider the length of time their operations can function without electricity, natural gas, or water. Preparation and appropriate response will minimize the impact of prolonged outages and will help protect your equipment and livestock.

Power Outage Safety Tips

- 1. Look up and down look for electrical hazards overhead and underground
- 2. Stay back Make sure you're standing at least 10 meters away from fallen power lines
- 3. Call for help If you see a power line on the ground, stay back at least 10 meters and call 911

Questions to ask yourself?

- Which critical equipment and facilities rely on electrical power, natural gas, and/or water?
- What if these utilities are unavailable?
- How long could you operate with the utility?
- Are back up measures possible?

Preparation

The following activities may help prepare producers in the event of an emergency:

- Ensure backup generator available working and is tested regularly
- Have sufficient fuel available to run generator for at least seven days
- Identify locations of electrical breakers, water shut-off, and natural gas/propane shut-off and include on farm map
- Ensure electrical panels are well-marked and breakers can easily be turned off
- Test critical equipment with backup power and ensure working as required
- Identify equipment that should be shut off during a power outage and record the sequence for turning on
- Determine how livestock will be fed during a power failure
- Identify backup measures to supply heat for animals, if applicable
- Store battery-operated lights in a location that is easily accessible and have fresh batteries on hand
- Create a contact list that includes energy suppliers and electrician details
- Protect sensitive equipment with surge protectors
- Back up computer files regularly

Response

Some factors to consider when responding to a power outage include:

- Confirming back-up generator or other power source is working
- Contacting power provider to set up re-connection as soon as possible
- Ensuring all animals have access to appropriate food and water
- Using alternative forms of barn heat or ventilation if possible

Notes:		

SCHEDULE 3. KEY SERIOUS ANIMAL DISEASE SYMPTOMS

For more information on livestock diseases and tips for recognizing signs of disease search "animal disease information" on the Canadian Food Inspection Agency (CFIA) website (https://inspection.canada.ca) or the Center for Food Security and Public Health (www.cfsph.iastate.edu).

African Swine Fever (ASF)

DESCRIPTION & SYMPTOMS

African swine fever is an important viral disease of pigs that has become a serious threat to worldwide pork production. It can cause fever, internal bleeding, and high death rates. There is no vaccine and no effective treatment, and severely affected pigs usually die. The spread of ASF is facilitated by a number of factors, including its persistence for long periods in uncooked pork products, which may be fed to pigs in food scraps (pig swill), and its ability to become established in wild or feral suids. There is no evidence to support that the ASF virus can infect humans.

The clinical signs of ASF range from mild to severe and may appear suddenly or cause chronic illness. The disease looks very similar to classical swine fever.

ASF virus can cause the following symptoms:

High fever

- Internal bleeding
- Loss of appetite
- Vomiting and diarrhea (sometimes bloody)
- Weakness

- Abortions in pregnant sows
- Inability to stand
- Death may occur suddenly or following a period of illness
- Reddening of the skin

HOW IS ASF SPREAD?

ASF can be spread directly between sick and healthy pigs through contact with the blood, tissues, secretions and excretions from infected pigs. Animals that recover may become persistent carriers of the virus. Their role in the spread of the disease is not fully understood. The virus also persists in the body tissues after death. The virus can survive for several months in fresh pork and processed pork products, which can be a risk for transmitting disease.

ASF can also be spread indirectly. Because the ASF virus can survive for long periods of time outside of the host, it can be spread by contamination of objects, such as farm equipment, vehicles, clothing, footwear, and feed.

Soft ticks have been shown to carry the virus. In Africa, they are considered to be the primary mode of transmission, particularly between the native wild hogs and domesticated animals. It is not known if the tick species found in Canada are capable of transmitting ASF.

HOW IS ASF CONTROLLED/ERADICATED?

There is no treatment or vaccine for ASF.

WHY IS ASF A CONCERN?

ASF is a federally reportable disease, and the world would close its borders to Canadian pork exports if Canada were to contract the disease. The loss of international markets would result in a significant market interruption resulting in a sector-wide emergency for several years.

Bluetongue

Bluetongue is an insect-borne, viral disease primarily of sheep, occasionally sheep and deer and, very rarely, cattle. The disease is non-contagious and is only transmitted by insect vectors. The disease is caused by a virus belonging to the family Reoviridae.

DESCRIPTION & SYMPTOMS

Bluetongue can cause serious illness and death in sheep. There is no cure and death may occur within seven days. The symptoms include:

- Fever
- Reddening of the lining of the mouth and nose
- Swelling of the lips, tongue and gums
- Difficulty swallowing and breathing
- A swollen, purple-coloured tongue
- Lameness

Diagnosis can be made based on the appearance of clinical signs and lesions. The presence of midge vectors is also considered. Laboratory tests are required to confirm the diagnosis.

There is no effective treatment for bluetongue.

HOW IS BLUETONGUE SPREAD?

Bluetongue is transmitted from animal-to-animal by a specific species of biting Culicoides midge. In Canada, the presence of the virus is usually restricted to later summer and early fall.

The virus does not survive in the environment outside a midge or its animal host. It cannot be spread through contact with animal carcasses and products such as meat and wool.

HOW IS BLUETONGUE CONTROLLED OR ERADICATED?

The strategy is to contain the outbreak and minimize trade impact by:

- Using a combination of quarantine and movement controls to prevent spread
- Treatments and husbandry procedures to control vectors, reduce transmission and protect susceptible animals
- Tracing and surveillance to determine the extent of virus and vector distribution or
- Zoning to define infected and disease-free areas

There is no justification for stamping out but some animals may need to be destroyed for welfare reasons. It is not possible to eradicate the bluetongue vectors.

Bovine Spongiform Encephalopathy (BSE)

DESCRIPTION & SYMPTOMS

BSE is a federally reportable, slow developing prion disease. Affected cattle may not show any signs of the disease for up to three to six years after they have been exposed to BSE prions. Since the average time between an animal's infection with the prion and the onset of clinical signs normally ranges from four to five years, clinical signs of BSE are found in adult animals. Symptoms may last for a period of two to six months before the animal dies.

Animals with BSE may demonstrate some of the following symptoms:

- Nervous or aggressive behaviour
- Depression
- Hypersensitive to sound and touch, twitching, tremors
- Abnormal posture
- Lack of coordination and difficulty in rising from a lying position
- Weight loss, or decreased milk production

HOW IS BSE SPREAD?

BSE is not a contagious disease and is slow moving. It is spread through consumption of feed that is contaminated with infectious material.

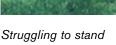
HOW IS BSE CONTROLLED/ERADICATED?

BSE typically exists in live animals for a long period before it is evident. There is no test for the disease in live animals. Accordingly, it is difficult to control or eradicate other than by slaughter of the affected animals and cohorts that also consumed infected feed.

WHY IS BSE A CONCERN?

BSE is a human health concern, although the disease itself is not found in humans. The disease results in the death of affected animals, and depopulation or slaughter of any/all animals thought to have consumed infected feed. International borders are closed to countries that do not demonstrate adequate controls relative to BSE.







Brucellosis

DESCRIPTION & SYMPTOMS

Brucellosis is a federally reportable disease that is chronic and contagious. It can affect many species of mammals, particularly cattle, swine, sheep, goats, horses and other ruminants.

Following infection, the bacteria spread through the blood and lymphatic system of the animal, infecting many issues - particularly the reproductive organs, mammary glands, and joints. This can cause abortions, weakened offspring, and infertility.

Any infected animal may carry brucellosis for life. Various blood tests can be used to identify the presence of brucellosis.

HOW IS BRUCELLOSIS SPREAD?

Animals can become infected with brucellosis in several ways, including:

- · Through direct contact with infected tissues or fluids from an infected animal
- · By consuming colostrum or milk from an infected animal, or
- · By consuming feed or water that has been contaminated by infected tissues or fluids

HOW IS BRUCELLOSIS CONTROLLED/ERADICATED?

Brucellosis is a reportable disease in Canada, meaning that anyone who suspects that an animal has brucellosis must notify the CFIA immediately.

If the disease is detected in a livestock herd in Canada, the CFIA immediately implements disease control measures. This includes the humane destruction and disposal of all infected animals and animals that were exposed to the infection.

The bacteria that cause brucellosis are susceptible to certain antibiotics. However, treatment of animals does not effectively eliminate the infection. Vaccines have been developed to prevent the disease symptoms (e.g., abortion). However, these vaccines do not necessarily prevent animals from becoming infected with bacteria and are not approved for use in Canada.

WHY IS BRUCELLOSIS A CONCERN?

Brucellosis is a zoonotic disease, which means it can be spread from animals to humans. Human cases are rare in Canada.

Foot-and-Mouth Disease (FMD)

DESCRIPTION & SYMPTOMS

A viral disease-causing fever and vesicles, which are similar to blisters, that quickly pop and cause erosions in the mouth or on the feet, resulting in excessive salivation or lameness. Because they pop quickly, these blisters are not always easy to see. FMD affects all ungulates or hoofed animals.

These signs may appear in affected animals during an FMD outbreak:

- Livestock backed off feed and eating less, or not eating, because of painful tongue and mouth blisters
- Vesicles that rupture and discharge clear or cloudy fluid, leaving raw, eroded areas surrounded by ragged fragments of loose tissue
- Sticky, foamy, stringy saliva
- Lameness with reluctance to move
- Great increase in body temperature for two to three days
- Other indicators include abortions and heart disease and death in newborn animals
- It will take many months for animals to regain weight lost during the illness, and recovered animals suffer lower milk production, conception rates and rates of gain

HOW IS FMD SPREAD?

FMD is an infectious and highly contagious viral disease that is spread by aerosol, sometimes at a distance of several miles. The virus can also exist for several days on metal, cloth or other surfaces or in organic matter including manure. FMD is commonly introduced through the movement of infected livestock or manure, or contaminated equipment / vehicles / clothing.



Lesions



HOW IS FMD CONTROLLED OR ERADICATED?

FMD is difficult to control or eradicate, other than by slaughter of the affected and exposed animals. Vaccines may be used to slow the spread, but vaccinated animals are ineligible for export.

WHY IS FMD A CONCERN?

FMD is not a disease of concern to humans. Although animals may recover from FMD, international borders are closed to countries that are not free of FMD. Were FMD to occur in Canada, the loss of international markets would result in a significant market interruption resulting in a sector-wide emergency for several years.

Peste Des Petits Ruminants

DESCRIPTION & SYMPTOMS

Peste des petits ruminants (PPR) is a viral disease of sheep and goats.

PPR is characterized by the following clinical signs:

- Diarrhea
- Fever
- Pneumonia
- Sores in the mouth, and
- Death



Picture from Bovine Veterinarian

The disease usually has a sudden onset with the following clinical signs:

- Clear nasal discharge
- Fever
- Loss of appetite, and
- Severe depression

As the disease progresses the following additional signs can be observed:

- Thick yellow discharge crusting and blocking the nostrils
- Severe eye infections
- Swelling of the tissues in the mouth
- Ulcers on the lower gums; dental pad, hard palate, cheeks and tongue, and
- Severe diarrhea, resulting in dehydration and severe weight loss

Pneumonia is common in later stages. Pregnant animals may abort. The prognosis of PPR is poor - death can occur three to eight days after the onset of the fever. Young animals are the most severely affected.

After death, the animal carcass may leak bodily fluids from body openers and bloat rapidly. Rigor motris might not occur, and blood may not clot.

HOW IS PESTE DES PETITS RUMINANTS SPREAD?

The disease is not highly contagious and transmission requires direct contact between animals. Sources of the virus include:

- Feces from infected animals
- Nasal discharge
- Secretions from coughing, and
- **Tears**

Although close contact is the most likely mode of transmission, it is suspected that water, feed troughs, and bedding can also be contaminated with secretions and become additional sources of infection.

HOW IS PESTE DES PETITS RUMINANTS CONTROLLED/ERADICATED?

There is no specific treatment for this disease. To eradicate the disease, CFIA would use a "stamping out" policy which would include the humane destruction of all infected and exposed animals.

Scrapie

Scrapie is a transmissible spongiform encephalopathy that affects sheep and goats. It is caused by a buildup of abnormal prion proteins in the central nervous system. The disease is highly contagious and slow progressing. Prions are primarily shed in the birth fluids, but milk, feces, saliva, and urine. Animals can become infected when they come in contacted with contaminated material. Sheep and goats can be genetically susceptible or resistant to scrapie, and in order to develop the disease the animal must be both genetically susceptible and exposed to prions.

Symptoms of classical scrapie include:

- Behaviour changes
- **Tremors**
- Balance problems
- Abnormal gait
- Poor coat
- Incoordination

There is no live test for scrapie so the disease is only confirmed after the animal dies or is euthanized when a scrapie case is identified, CFIA destroys all exposed animals, quarantine and animal movement restriction are put in place, cleaning and disinfection of the premises and follow up on deadstock surveillance is also required.

Vesicular Stomatitis

DESCRIPTION & SYMPTOMS

Vesicular Stomatitis (VS) is a viral disease affecting horses, ruminants such as cattle and sheep, members of the deer and Ilama families, and swine. It is most significant because it closely resembles Foot-and-Mouth Disease.

VS causes mild fever, and the formation of blister-like lesions on the inside of the mouth, and on the lips, nose, hooves, and udder. The blisters break, leaving raw, sore areas. Affected animals often salivate profusely, and are unwilling to eat or drink. Lactating animals show a marked decrease in milk production. Some animals may also become lame.

VS is diagnosed by laboratory tests on samples of fluids from the vesicles of the affected animals, or by testing a blood sample taken from the animal.

HOW IS VESICULAR STOMATITIS SPREAD?

Animals are infected with the virus by eating or coming into contact with substances contaminated with saliva or fluid from lesions of infected animals. Spread in dairy herds may also occur as a result of milking procedures. In some regions, insects play a significant role in the spread of the disease.

The disease may also be transmitted to humans who come into contact with infected animals. It causes influenzalike symptoms.

HOW IS VESICULAR STOMATITIS CONTROLLED/ERADICATED?

VS is a reportable disease in Canada. Any animals suspicious of infection should be kept separate from healthy animals, preferably indoors. Those working with the animals should wear protective clothing when handling suspect animals to help prevent exposure to the virus.

If VS is diagnosed on a Canadian farm, a quarantine would be imposed to restrict movement of the animals. The quarantine would be lifted 30 days after all clinical signs have disappeared.

SCHEDULE 4: PRODUCER RESOURCES

This section includes templates to assist you in preparing for and responding to an unusual animal health event emergency event. Electronic versions are available at www.animalhealth.ca/ahem/resources

Farm Objectives

FARM OBJECTIVES: DISEASE-RELATED SECTOR-WIDE EMERGENCY



Farm Name:	PID #	#:
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In a sector-wide emergency, real or perceived, the principal objectives are to:

1. Keep personnel safe

· Including staff, management, owners, and their families, and residents on the farm

2. Minimize animal losses

- · Avoid or minimize animal loss within the barns or pastures
- · Avoid or limit impacts of the event spreading from the farm

3. Minimize animal health and welfare impacts

- · Avoid or minimize introduction of disease into the farm
- · Avoid or minimize the spread of disease within the farm
- · Avoid or minimize the spread of disease from the farm
- Avoid or minimize animal stress on the farm

4. Determine best direction for the operation:

- · Resume or grow business activities as quickly and as safely as possible
- · Regain normal operations at the farm, as soon as practical and safe for staff and residents
- · Expand as opportunities present
- Downsize or exit operations as efficiently and safely as possible
- Consider potential productivity versus input costs
- Consider shutdown costs, sale of facilities/equipment and impacts on staff

5. Other:

Farm Plan Grid

FARM PLAN GRID		
Farm Name:	PID #:	
Legal Land Description:	Address:	
One Time Capacity:	Normal Operating Capacity:	
	N. N. d.	
Date Prepared:	N North (P) Pesticide V Visitor Parking (H) Water Source for	r Fire Hydrant
	S Staff Parking G Main Gas Shutofi	•
Approximate Scale:	Fences E Main Electrical SI	
	Gates (FT) Above Ground Fu (FA) First Aid	uel Tank
Contact Name:	F Flammable Liquids First Aid First Aid First Aid First Aid First Aid	
Phone Number 1:	Oxidizing Materials MP Meeting Place	
	Poisonous Materials Septic System (la	
Phone Number 2:	C Corrosive Materials Manure System (F Fertilizer	(label location)

Farm Work Cycle

FARM WORK CYCLE

Farm Name:	PID #:



Activity	Frequency	Quantity
Example: Feed Delivery	Daily	2 loads @ 15 Mt per load
Feed Delivery		
Shipment of Animals		
Movement of People		
Deadstock Pickup		
Other Traffic		
Pregnancy Check		
Husbandry Protocols (breeding, weaning, etc.)		
Other		

Farm Inventory

FARM INVENTORY OF PEOPLE	AND EQUIPMENT		
			SA.
Farm Name:		PID #:	
PEOPLE	1		
Number of people living here:		Number of people employed:	
Number of disabled persons:		Nature of disability:	
Number of heavy-duty equipment operators:		Number of others: (excl. owner/operator):	
	NV	Colon Chiler Operator,	
BARN/BUILDING SUMMAF Building/Barn	Capacity	Feed Storage/Bin	Inventory/Capacity
<u> </u>		Teed Storage/ Bill	пистопу обрасту
EQUIPMENT & RESOURCE	S ON HAND (Descrip	otion, Number & Location)	
Bulldozers/Scrapers/Skidder:			
Front-End Loaders:			
Backhoes:			
Vaccines/Medicines:			
Portable Water Pumps:			
Portable Generators:			
Fire Extinguishers:			
Absorbent Material (Shavings, straw, etc.)			
Sand Bags:			
First Aid:			
Personal Protection Equipment:			
Other:			

Contact List Templates

PRIMARY/SECONDARY ON-FARM CONTACTS	
Farm Name:	PID #:
IN CASE OF EMERGENCY	
Primary Contact:	
Farm Name:	
Land Phone:	Cell Phone:
Legal Land Location:	
Municipality:	911 Address:
(if available)	
Directions to this location:	
Secondary Contact:	
Land Phone:	Cell Phone:
Community Pasture Manager:	
Land Phone:	Cell Phone:
Off Site Contact:	
Land Phone:	_ Cell Phone:
Notes:	

	NTAC	

Farm Name:	PID #:	

	PID #:			34
Contact Dhone	Contact Email	Lives on	Owns	Equipment

Name	Title	Contact Phone	Contact Email	Lives on Farm (Y/N)	Owns Animals (Y/N)	Equipment Operator (Y/N)

EXTERNAL CONTACT LIST		
Farm Name:	PID #:	

WHO	PRIMARY CONTACT	PHONE & CELL	EMAIL
Primary Emergency Organizations			
Police/RCMP			
Fire			
Ambulance			
Veterinarian			
Municipal Emergency Management			
BC Animal Health Center		1-800-661-9903	
Utilities			
Electricity Supplier			
Internet Provider			
Telephone Service			
Natural Gas			

continued >>

>> CONTINUED



FIA Emergency Line	1-800-442-2342	
Chief District Office (Burnaby)	604-292-5700	
Ministry of Agriculture (local office)		
Service Providers		
Deadstock Provider		
Fuel		
Insurance Broker		
Feed 1		
Feed 2		
Feed 3		
Livestock Transporter		
Electrician		
Plumber		
Lenders		
Livestock Owners		

Visitor Log

VISITOR LOG					
Farm Name:		 PID) #:		
national	Animal Contact? (Y/N)				
RDED I tours, inter	Entered Production Area? (Y/N)				
RE RECO	Previous livestock/ farm contact (Y/N)				
ENTRIES A	Comments				
SITOR tion. ervice provi	License Plate No.				
SES, ALL VISIT ntering the operation. ermission (e.g., servic operators, staff, family	Contact Number				
PURPOSE st point of enterering with permine (owner/ope	Company				
FOR BIOSECURITY PURPOSES, ALL VISITOR ENTRIES ARE RECORDED Entry is recorded at the earliest point of entering the operation. Visitors include all people entering with permission (e.g., service providers and professionals, school tours, international visitors, etc.) Excludes personnel (owner/operators, staff, family, etc.)	Ма ше				_
FOR BIO	Date				

Visitor Risk Assessment Guide

VISITOR RISK ASSESSMENT GUIDE



			PID #:					
RISK CATEGORY	CRITERIA	DESCRIPTION	EXAMPLE	BIOSECURITY REQUIREMENTS				
LOW	Within the past 14 days: • 0 livestock contact • 0–1 visits to livestock operations	Visitor is from urban area and does not have livestock contact	Old acquaintance in the area and decide to visit	Record visits				
	Within the past 14 days: • Livestock contact at one operation	Contractor outside of agriculture that typically does not visit farming operations	A utility provider that entered a pen to fix a light	Minimize access to production area Prevent all but essential contact with livestock				
MODERATE	Within the past 14 days: • Visited more than one livestock operation	Travel from or are transported from farm to farm, but do not enter the production area or come into direct contact with livestock or manure	Service personnel that may enter the production area but rarely come into contact with livestock manure	Before access is permitted, ensure clean footwear/clothing/ tires/surfaces, all visibly clean of organic matter				
	Neighbouring livestock producer	Producer who shares a fence-line with your operation						
	Within the past 14 days: • Livestock contact at multiple operations	Individuals who travel from or are transported from farm to farm Individuals who enter the	Veterinary and livestock inspection professionals who enter the production area and generally come into direct contact with livestock manure	Producers must apply biosecurity practices to these visitors • Prevent all but essential access to the production area or contact with livestock • Before access or contact is				
нідн	Other livestock operator (including employee)	production area and have direct contact with livestock or manure	Custom manure cleaning operators and equipment that may transport manure from one production area to another	 Defore access or contact is permitted, ensure: Tires/surfaces are visibly clear of organic matter The person wears clothing and footwear dedicated to 				
	Persons from other countries where reportable diseases are a concern		Personnel who work with livestock at their own or another operation	the operation, or wears fresh coveralls or clean clothing and disinfects footwear The person disinfects off-farm equipment or tools contacting				
	Person who has handled sick or segregated animals at this or other operations		Personnel working with animals in the segregation or sick facility	livestock, or provide site specific tools				

Unusual Animal Health Event Indicator Protocol

UNL	UNUSUAL ANIMAL HEALTH EVENT INDICATOR PROTOCOL														
Farm	Name: PID #:														
Votor	inarian: Cell:														
Veter	maran														
-	If any of the following indicators are observed, then the farm's veterinarian will be contacted immediately to investigate further:														
inves	stigate further:														
	Unexplained or sharp increase in sickness, lameness, behavioural changes or death loss														
	Exceeds normal acceptable level of this many head per week/day: (head/%)														
	Any death of unknown cause														
	Animals backed off feed/water (daily intake is down for reasons not related to weather or seasonality)														
	Change in behaviour such as depression														
	Disease or symptoms not previously encountered														
	Typical disease or symptoms with abnormal severity or non-responsive to treatment														
	Rapid spread throughout herds														
	Reportable/notifiable disease suspected on farm														
	Other events, as determined with your veterinarian														

Unusual Animal Health Event Initial Response Protocol

			OFUNOL FRUIUGUL

EØ

Farm	n Name: PID #:	
1. N	otify staff and family members	
	An unusual animal health event exists on the farm	
	Review and strictly follow biosecurity protocols currently in place, or as established by management in consultation with veterinarian (e.g., green, amber and red biosecurity protocols)	
	Minimize/avoid contact with other livestock, particularly of the same species	
2. C	all veterinarian and act on advice, for example:	
	Isolate sick animals	
	Submit samples for diagnosis	
	Stop all livestock movements on/off the Infected Place	
	Limit and monitor other movements on/off (e.g., staff, equipment, manure spreading etc.)	
	Gather information/documentation as required (e.g., visitor log, livestock inventory, identification record including purchases/sales within the last 30 days, individual treatment log, herd health protocol)	
	Other	
a١	lentify the primary decision maker within your organization. This will be the point person or coordinator to be vailable for key decisions. A back-up or secondary decision maker may be required if a serious animal disease confirmed.	:
4. N	otify external contacts, if recommended by your veterinarian	
	Farm veterinarian to notify regulatory authority if required by law	
	CFIA District Veterinarian called (suspect reportable disease)	
	BC Chief Veterinary Officer via Animal Health Center (Toll Free 1-800-661-9903)	
	Self-declaration by producer to industry association and neighbouring livestock producers (depending on suspected disease)	
	Neighbouring livestock producers	
	 Notify suppliers and other contracts (e.g., feed suppliers, livestock transporters, utility companies with access rights) 	

Notice of Suspicion Response Protocol

NOTICE OF SUSPICION RESPONSE PROTOCOL
Farm Name: PID #:
WHO:
CFIA, provincial government, or livestock association communicates the suspicion of a serious animal disease
WHERE:
Anywhere within the area where a producer regularly does business (trading area)
WHEN:
A federal or provincial government veterinarian suspects the presence of a serious animal disease
WHAT:
May be referred to as 'the gray period,' when an outbreak is suspected but not confirmed and movement controls have not been announced
PRODUCER RESPONSE:
Implement AMBER Elevated Risk biosecurity protocols, visitor logs, etc.
Review RED High Risk biosecurity protocols
Implement voluntary cease movement and animals in transit protocols, if recommended by government and industry leaders
Seek additional guidance specific to the situation from veterinarian
Monitor CFIA, BCMAFF, industry association websites and other media for updates
The 'Infected Place(s)', where the diagnosis was made, will also be subject to more restrictive requirements as directed by veterinary authorities.

Confirmation Response Protocol

CONFIRMATION RESPONSE PROTOCOL
Farm Name: PID #:
WHO:
CFIA's Chief Veterinary Officer or BC Chief Veterinary Officer makes a formal notification, providing confirmation of a serious animal disease
WHERE:
Anywhere within the area where a producer regularly does business (trading area)
WHEN:
A serious animal disease is confirmed by the National Centre for Foreign Animal Disease, Canada's most highly specialized and widely recognized animal disease laboratory
WHAT:
Once confirmation is made, the federal minister may establish a Primary Control Zone and movement controls. Permits or
licenses will be required for the movement of all livestock, related materials and equipment into, from, within or through the Primary Control Zone
PRODUCER RESPONSE:
Implement RED High Risk protocol
Implement voluntary cease movement and animals in transit protocols, if recommended by government and industry leaders
Seek additional veterinarian guidance specific to the situation
Monitor CFIA, BCMAFF, industry association websites and other media for updates
The 'Infected Place(s)', where the diagnosis was confirmed, will also be subject to more restrictive requirements as directed by veterinary authorities.

Producer Self Declaration Template

SAMPLE PRODUCER SELF DECLARATION



As owner of the following animals, hereafter referred to	o as 'the Animals'
Species:	
Approximate number:	
PID #:	
Location:	
In the town of: Pr	rovince of:,
Hereafter referred to as "the province," and duly represent	ed as a livestock producer by the following association
herea	after referred to as 'the association'
Agency and/or the Government of British Columbia to shadisease investigation with the Association as necessary, we the investigative process. I agree to release the Association from any and all claims I set out in this Direction, provided that such disclosure shadomission on the part of any of the Recipients.	ovince of,
Witness' Signature	Owner's Signature
Premises: Location of the barn/barns or pastures at w	legal owner of the animals located at the premises identified. which the disease testing has taken place. ed to each livestock production premises within the province.

TABLE OF CONTENTS

Emergency Communication to Owner Template (Custom Operations)

EMERGENCY COMMUNICATION TO OWNERS (CUSTOM OPERATION)		34
Farm Name:	PID #:	
Date:	Contract #:	
Operation Name:		
Livestock Owner:		
Description of animals affected:		
Nature of emergency or risk:		
Authority to make decisions to protect animal well-being (r	reference to specific contract section):	
Contact information:		

Non-Essential Movement Ban Protocol / Voluntary Cease Movement

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Farm Name:	PID #:

The purpose of this document is to clarify the circumstances and conditions under which producers should temporarily suspend movement during a serious animal disease event.

WHEN would the Protocol be triggered?

- This Protocol is not intended to be used for routine animal disease events.
- · Industry leaders may use the Protocol as a strategy to mitigate risk and limit the spread of a serious animal disease in the early stages of an outbreak.
- · Industry leaders may ask producers to implement movement controls in advance of an official CFIA directive and application of formal controls measures.
- · Industry leaders may consider this action when a serious animal disease has the potential to spread rapidly via the movement of susceptible animals, their products and by-products. In most cases this action would be based on advice from the Chief Veterinary Officer for Canada (CVOC) or a Chief Veterinary Officer for a province.

WHO does the Protocol apply to?

· All livestock operations with susceptible species, such as: auctions, sale yards, slaughter facilities etc., within a province or trading area.

WHAT does the Protocol entail?

- A standstill on all non-essential livestock and livestock-related product movements.
 - Three days (72 hours) initially the length can be shorten or extended based on the specific situation.
 - Livestock and livestock-related products may not be brought on or off a premises, whether to slaughter or other
- · Which movements may be deemed essential and the actions required to enable that movement.

WHY is the Protocol recommended by industry leaders?

- · In the early stages of a potential major disease outbreak, reduced movements are critical to disease containment and limiting the introduction/spread to other premises/regions.
- · This action is deemed beneficial to an effective response, rapid recovery, reduced market downtime and the industry's longterm viability.

HOW is the Protocol applied?

• Participation is voluntary but strongly recommended and promoted by sector stakeholders.

IN GENERAL, the following will apply:

Livestock in transit within a province	 If not commingled after departure, then return to point of origin. If commingled or reloaded after departure, then continue to destination and hold in segregated facilities on arrival.
Livestock in transit to one province from another province or country	Return the load to the point of origin.
Deliveries (feed or other)	 Farm to consider use of a 'transfer station' to off-load feed. Drivers to remain in cab. Vehicles dry cleaned and ideally washed prior to coming on a premises with susceptible animals. Vehicles are not to enter the production area (restricted access zone) of the premises.
Deadstock	 Pickup suspended for duration of Protocol. Carcasses must be secured in a biosecure manner which prevents scavenging.
Duty of care	The person who is in possession or has oversight of the animals will be responsible for their well-being.

Biosecurity Protocol

BIOSECURITY PROTOCOL (SAMPLE)

_____ PID #:___ Farm Name: ___

GREEN + AMBER

Normal day-today

Use of this AMBER Elevated Risk biosecurity protocol should be reviewed when:

- There is concern that an unconfirmed disease may be present in the
- · There is suspicion of a serious animal disease within the trading area

What to Do:

- · Review and verify current biosecurity practices and compare with industry biosecurity standard
- Ensure biosecurity standard is known by staff and understand the importance of following the standard

Use of this RED High Risk biosecurity protocol should be reviewed when:

- There is **SIGNIFICANT** concern that a disease is present in the trading area
- A formal Notice of Confirmation has been declared for a relevant serious animal disease within the trading area

What to Do:

+ RED

 STRICTLY adhere to the biosecurity standard

FARM ACCESS

GREEN + AMBER

Normal

- · Restrict primary access points where farm offices or personnel are present to monitor access
- · Use Visitor logs in accordance with risk assessment tool and ensure they are placed at entry/exit points
- · Bar or otherwise prevent access through all secondary access points where the farm does not have an ongoing presence
- · Post biosecurity signage at access points

+ **RED**

· Additional as recommended at time of Confirmation

SICK ANIMALS

GREEN + AMBER

Normal

- · Isolate to the extent possible
- Minimize contact or potential for contact with healthy animals/pens
- · Assign dedicated clothing, equipment, pens, feed and water stations
- Designate staff to handle as follows:
 - · No contact of other animals after treating sick animals
 - · Change of outerwear/footwear
 - Wash hands before and after treatment

RED

· Additional as recommended at time of Confirmation

INCOMING/OUTGOING TRAFFIC

GREEN	+ AMBER	+ RED
Normal	Ensure disinfection prior to entering farm and before leaving	No incoming livestock
	Have drivers consider additional biosecurity protocols	Postpone arrivals and
	Document truck movements on and off the farm.	departures pending more information on outbreak and
	Ensure drivers are recording dates and times of farm pickups	conditions under which animals
		may be moved

STAFF

GREEN	+ AMBER	+ RED
Normal	 Remind staff of indicators and immediate response protocol for unusual animal health events Ensure those owning and/or in contact with livestock have dedicated clothing and footwear for the farm and change clothing/footwear when entering or leaving the farm premises All staff to wash hands and feet prior to entering or leaving the farm 	 Staff to make alternate arrangements for care of personal livestock or be moved into a position having no contact with operation's animals All staff to wash hands again, and boots, when entering production area for the purposes of working with animals or entering pens, processing or hospital unit

DEADSTOCK

GREEN + AMBER **RED** Normal • Designate specific staff to handle and remove animals from pens • No pickup of deadstock on-farm • Instruct staff to wash hands and clothing after handling deadstock · Additional as recommended at • Ensure separation from other farm practices time of Confirmation for equipment • Refer to depopulation and disposal section for more information about deadstock burial • Monitor key websites for information and recommendations (e.g., Industry associations, BCMAFF, CFIA and AAFC)

PRODUCTION AREA e.g., barn, manure storages, feed mills

GREEN	+ AMBER	+ RED
Normal	No visitors No external animals, vehicles or personnel beyond main office/delivery area	Additional as recommended at time of Confirmation

Mass Vaccination Protocol

MASS VACCINATION PROTOCOL (SAMPLE)

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Farm N	Name: PID #:			
Farm owner/manager to review and accept the vaccination protocol with a site supervisor appoint by CFIA or BCMAFF, setting out all requirements including:				
	Species/class to be vaccinated			
	Method			
	• Dosage			
	Record keeping requirements			
	Booster requirements			
	End use			
	Oversight			
	Other control factors			
	All personnel acknowledge their acceptance of regulatory oversight whether provided by CFIA or BCMAFF			
	All personnel agree to apply protocol as directed by CFIA or BCMAFF site supervisor			
	Farm staff will:			
	Record receipt of vaccine doses and ensure oversight of vaccine as directed			
	 Vaccinate all animals, as set out in the vaccination protocol and directed by the site supervisor 			
	 Record individual animal identification of each vaccinate, at time of vaccination, together with date and place and members of vaccination crew and vaccination oversight personnel 			
	 Identify vaccinates, as required by regulatory authority. This may be a temporary or permanent identifier (e.g., ear tag or brand) 			
	Record unused vaccine doses and return to regulatory authority if required			
	Provide CFIA or BCMAFF site supervisor with record of animal identification for all animals vaccinated			
	Apply second or booster vaccination if directed, using similar protocol, in the time frame required			

Mass Depopulation and Disposal Protocol

MASS DEPOPULATION AND DISPOSAL PROTOCOL (SAMPLE)		
Farm I	Name: PID #:	
Once	a destruction order is issued, operators and personnel will need to:	
	Review and accept the overall depopulation and/or disposal strategies required by regulatory authority CFIA or BCMAFF	Owner/ Manager
	Follow directives from the Regulator's designate (site supervisor) who will provide regulatory oversight and instructions regarding:	
	Species/class involved	
	Depopulation and/or disposal protocols (method and means)	
	Record-keeping requirements, etc.	
	Assist with the assembly, movement, restraint, and processing of animals, whether depopulation takes place at the farm or elsewhere	
	Prepare and provide records of animals depopulated and/or disposed of, as set out in the protocol. Examples of the type of records can be found in the Information for Valuation/Compensation chart	
	Apply animal biosecurity practices as prescribed	All
	Follow personal biosecurity requirements as prescribed and which may include any or all of the following and other requirements:	personnel
	Showering before and after each shift	
	Hand washing before putting on and after removal of Personal Protective Equipment (PPE)	
	Wearing of PPE	
	Taking any vaccine or prophylactic medication, if any is recommended by public health officials	
	Self-monitoring for any signs of personal sickness and seeking medical care if symptoms appear	
	Having NO CONTACT with other livestock for a prescribed period of time after these operations	
	Report any spillage of material (urine, manure, hide, other) that might potentially contain contaminant (virus, bacteria, other), outside the prescribed area for disposal	

INFORMATION FOR VALUATION/COMPENSATION

When compensation is sought, farm personnel will be asked to assist the valuation process by providing the following information from all animals being valued:

- · Animal purchase/birth date
- Description (e.g., number of head, class, sex, species, breed of animal)
- Production/quality records or parameters
- Individual ID if available, or other (group) identifiers
- Owner details, e.g., name and contact information

- Premises identification PID (farm)
- · Date of quarantine and depopulated
- · Depopulation method
- · Premises identification PID (depopulation location, if different)
- · Disposal method
- Premises identification PID (disposal location, if different)
- Salvage value received, if any (payment received for animal/ carcass)

