

ANIMAL HEALTH EMERGENCY MANAGEMENT

PRODUCER

HANDBOOK

ONTARIO CATTLE SECTOR



**CANADIAN
AGRICULTURAL
PARTNERSHIP** | **PARTENARIAT
CANADIEN pour
l'AGRICULTURE**

Canada

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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 Ontario beef producer handbook 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 and impact multiple commodity sectors 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 industry's greatest vulnerability because they have the potential to impact the beef industry and 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 such as Bovine Spongiform Encephalopathy (BSE), Bovine Tuberculosis (bovine TB), Rift Valley Fever (RVF), or Bluetongue that have the potential to cripple the industry indefinitely. More information about these specific diseases can be found in **Schedule 3**.

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* (Ontario).

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.

QUICK FACT

In a 2016 national survey of livestock associations in Canada, 97% indicated that their sector was vulnerable to disease-related emergencies.
– *Animal Health Emergency Management Project (2016)*

FEDERALLY REPORTABLE DISEASES

- Anaplasmosis
- Anthrax
- Bluetongue
- Bovine Spongiform Encephalopathy (BSE)
- Bovine Tuberculosis (Bovine TB)
- Brucellosis
- Contagious Bovine Pleuropneumonia
- Cysticercosis
- Foot-and-Mouth Disease (FMD)
- Lumpy Skin Disease
- Rift Valley Fever
- Rinderpest
- Trichinellosis
- Vesicular Stomatitis

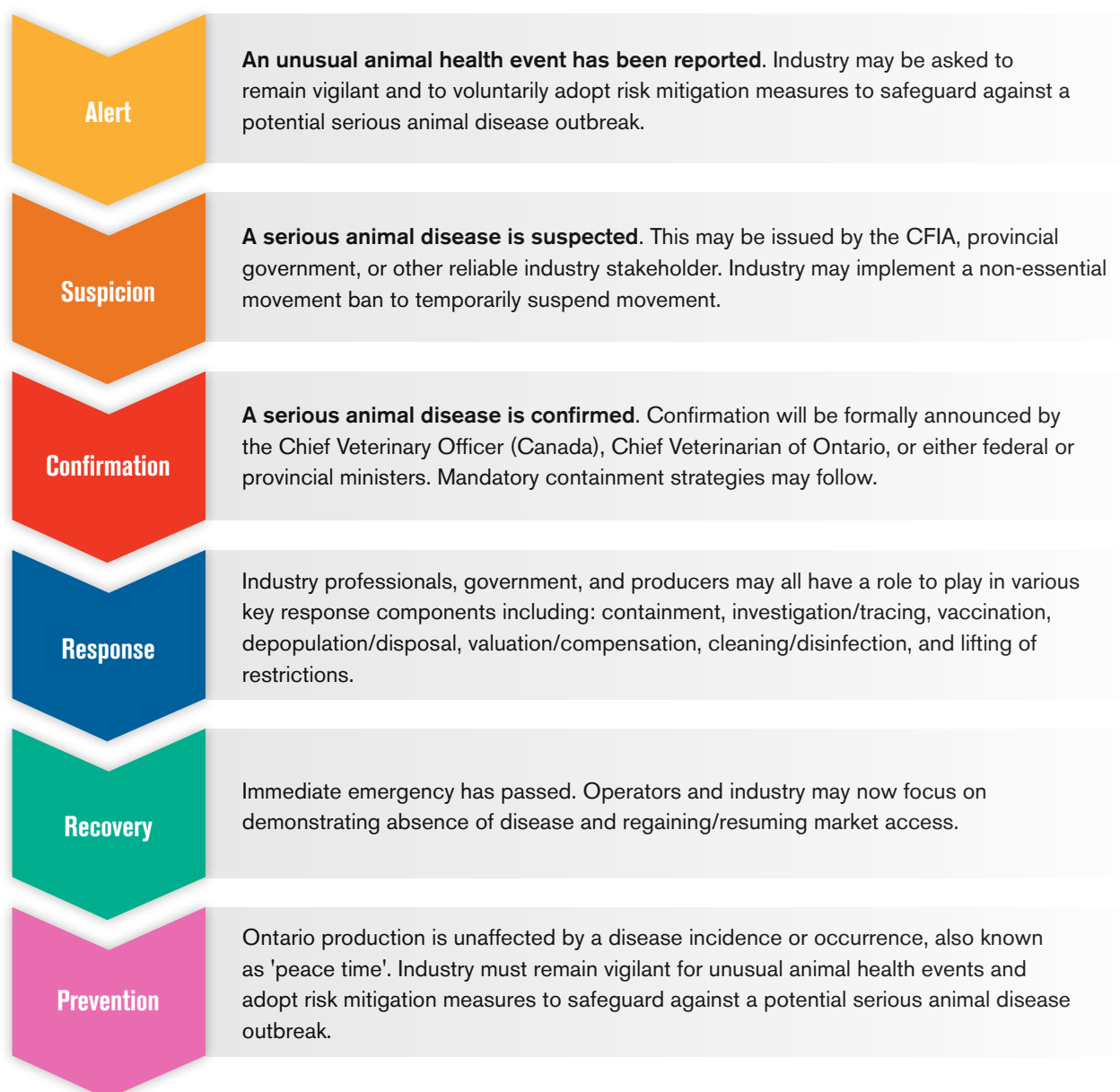
PROVINCIALY IMMEDIATELY NOTIFIABLE DISEASES

- Botulism
- Coxiellosis (Q Fever)
- Influenza
- Listeriosis
- Salmonellosis
- Verocytotoxigenic Escherichia coli
- All federally reportable and notifiable rabies
- Disease caused by any toxic substance that is a threat to animal or human health
- More information can be found at www.omafra.gov.on.ca/english/livestock/vet/disease_pre.html

Emergency Phases

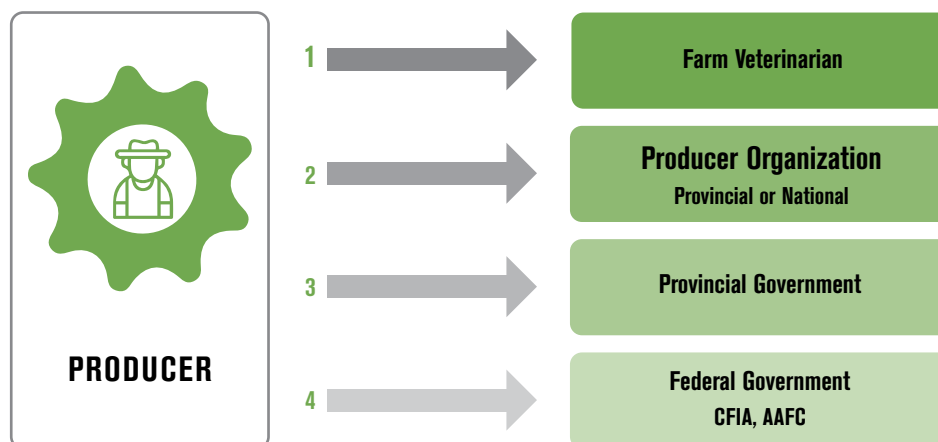
A disease-related sector-wide emergency will generally move through the following six key phases – some of which are more involved than others. Depending on the disease and particular incident, some phases may occur quickly and go unnoticed, while others may extend over a period of time due to heightened 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 OMAFRA Livestock Disease Control and Prevention page at www.omafra.gov.on.ca/english/livestock/vet/disease_pre.html



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. From there, you may be referred to the relevant government agency.



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)**
- **Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)**

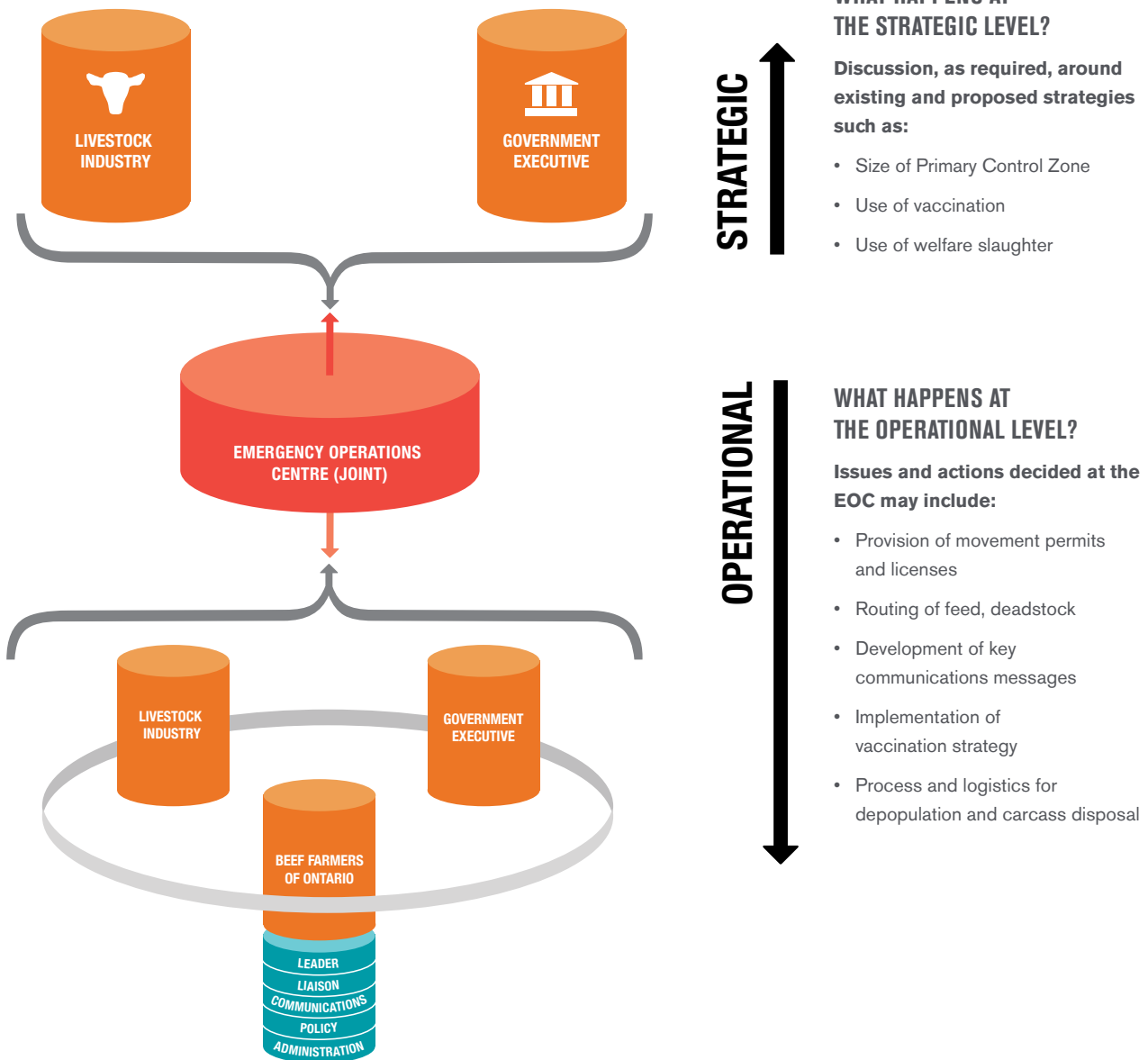
These agencies are supported by Agriculture and Agri-Food Canada (AAFC), Emergency Management Ontario (EMO) and Public Safety Canada (PSC). If the disease is zoonotic (affecting humans as well as animals) the response will involve the Public Health Agency of Canada and the provincial Ministry of Health.

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.

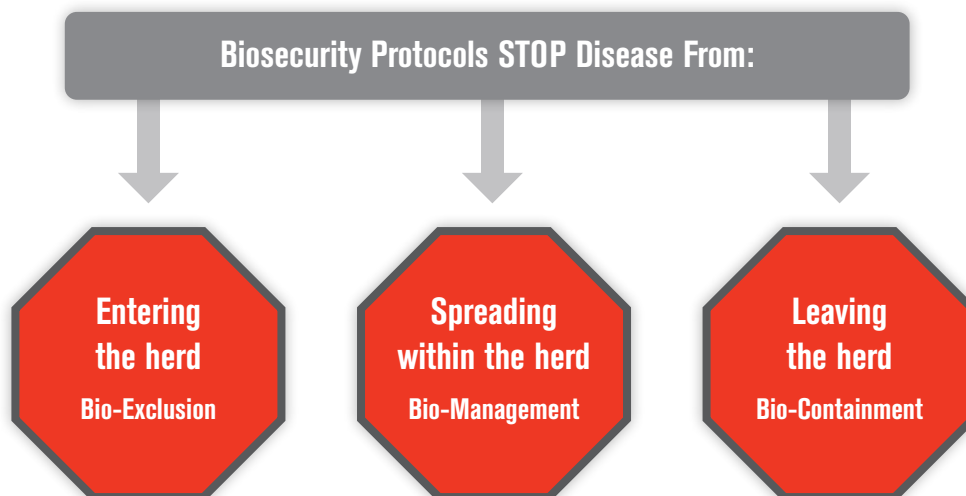
Everyone within the EOC/JEOC works together using the **Incident Command System (ICS)**. This command and control system is used to manage emergencies of all types throughout most of North America and the rest of the world. ICS integrates a combination of facilities, equipment, personnel, procedures 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 Beef Sector



Biosecurity

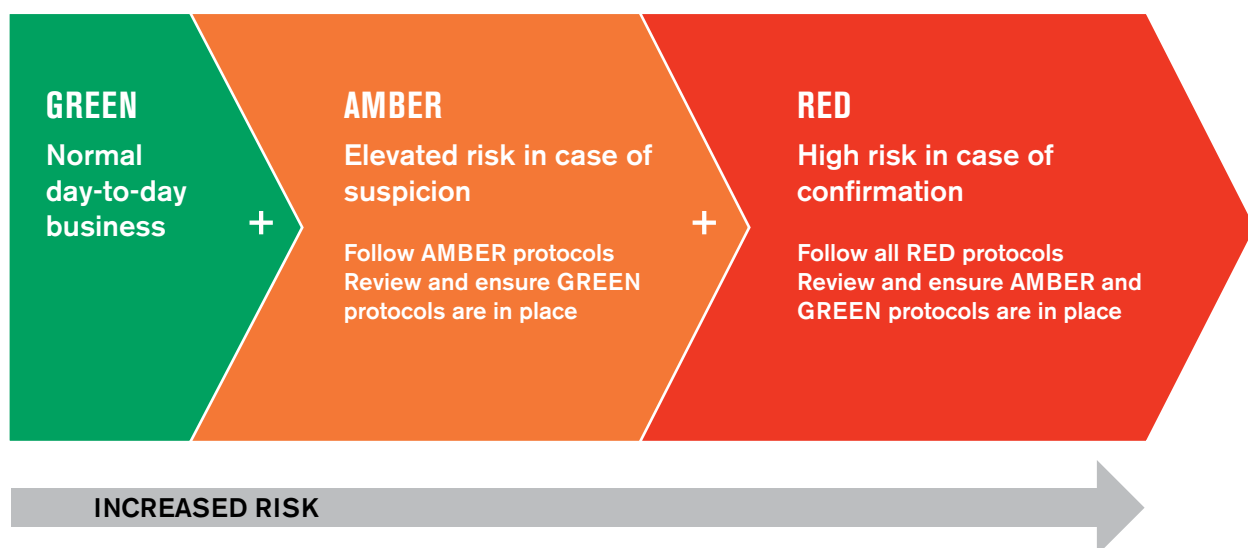
As a producer, you are in a unique position to prevent disease exposure and transmission. By knowing and implementing the appropriate biosecurity measures you are not only helping to protect your farm, but also ensuring the health and vitality of Canada's beef industry.



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.

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

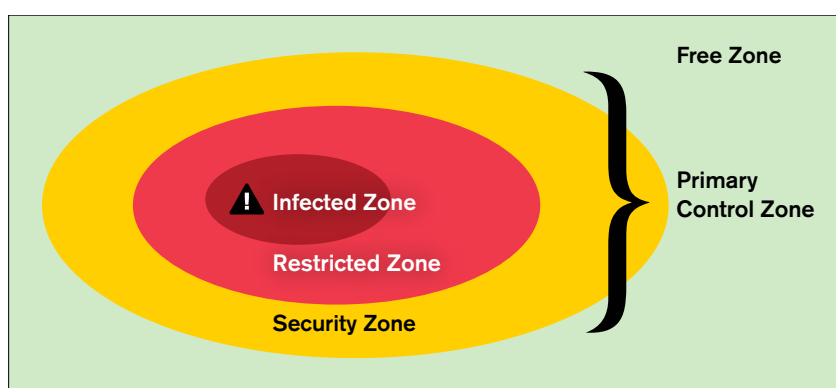
- Surrounds Infected Zone
- Extends a minimum of 10 km beyond an infected premises
- Multiple or larger zones may be declared when additional infected premises are involved
- Less restrictive movement controls

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 Cattle', a typical Ontario cow-calf operation that is facing an outbreak of Foot-and-Mouth Disease (FMD). We also have 'DEF Cattle', a 275 head cow-calf operation that is located within the trading area and potentially at risk.

PLEASE NOTE THAT THIS IS AN EXAMPLE ONLY.

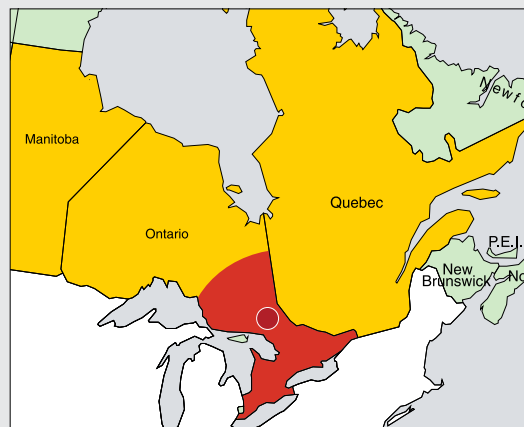
On Friday, after noticing that a number of animals are limping and have backed off feed, ABC farm staff proceed with protocol for an **unusual animal health event** (see **RESPOND** section) and contact their local veterinarian to come and look at the animals.

The veterinarian suspects FMD, a federally reportable disease, and notifies the regulatory authority (CFIA). A senior veterinary officer with the CFIA visits the farm very shortly afterwards, clinically diagnoses FMD and declares that ABC Cattle 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 Ontario, Quebec, and Manitoba.

Infected Zones have now been declared around several **infected premises** as the outbreak has grown from the original case located near St. Charles and Markstay. The Ontario Provincial Police (OPP) 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 Guelph.



A larger **Restricted Zone** extends around all of the **Infected Zones** (shown in red on the map). Specific permits are required for all livestock and livestock-related movements within/to/from/through this **Restricted Zone**. These are also being enforced by OPP.

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 too are enforced by police.

With the CFIA's operational restrictions now in place, cows or calves are not moving anywhere in Eastern 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 dairy 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 Cattle is a 275-head cow-calf operation located within the **Restricted Zone** near Chatsworth in southwestern Ontario. DEF Cattle's herd are all raised on DEF's premises and adjacent pastures.

To protect the cattle, **movement controls** and **biosecurity protocols** requested by Beef Farmers of Ontario, OMAFRA 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 Cattle and is overseeing farm staff who are vaccinating animals according to a strict protocol.

While DEF Cattle staff continue to vaccinate and monitor their herd, a **depopulation order** has been issued and **depopulation** of cows on ABC Cattle and other **infected premises** has commenced. All cows 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 burial sites.

Valuation teams sent to the **infected premises** are establishing a fair market value on a per cow basis based on pre-outbreak prices for the different classes of cattle 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. Infected community pastures also require a fallow period and the fence posts need to be disinfected before animals can return. 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 disease-related 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.

Notes:

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 family, 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



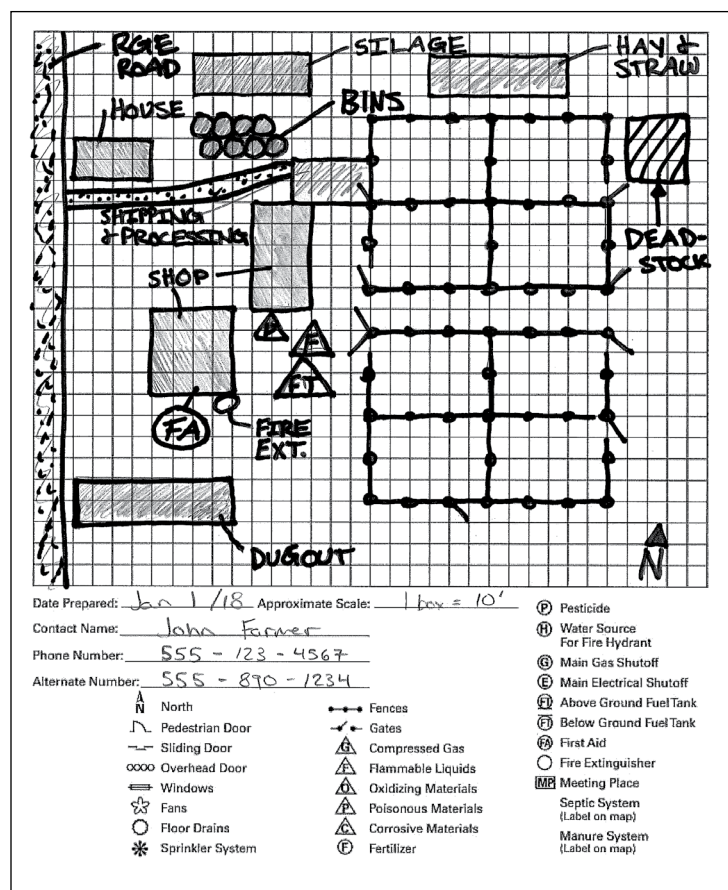
First responders need to know the unique features of your farm and where key items are located. Not only does this help to ensure their safety, it enables them to address unexpected events at your operation. Responders will be far more effective, with less risk to life, if they can consult a farm plan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

- Scale
- Buildings
- Recognized symbols
- Scrape out pile
- Hazardous materials
- North arrow
- Meeting place
- Mortality storage
- Access routes/barriers
- Potential contaminants
- Manure pits



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.

For more information and guidance on creating your farm plan, visit www.omafra.gov.on.ca/english/engineer/barnfire/safetysketch.htm

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 **Canadian Beef Cattle On-Farm Biosecurity Standard**. 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.

VISITOR CONTROL CHECKLIST	
	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.
	Use the Visitor Risk Assessment Guide to identify and manage the different potential risks associated with the range of visitors, equipment or vehicles entering the farm on a daily basis.

CROWN LAND

Exercising visitor controls on crown land is challenging since producers cannot prevent people from accessing public areas. To discourage access during a disease outbreak, producers may post signage to warn visitors about the dangers of spreading disease and encourage people to request access prior to entry.

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:
 - **Animal Health and Welfare Branch / Office of the Chief Veterinarian for Ontario** – Provincial lead for animal health-related emergencies.
OMAFRA Agricultural Information Contact Centre 1-877-424-1300
 - **CFIA District Veterinarian / Chief Veterinary Officer** – National lead for animal health-related emergencies. Ontario Regional Office 226-217-8555
- Other emergencies:
 - RCMP (911)
 - Emergency Management Ontario

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

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 made 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 #: _____

Veterinarian: _____ Cell: _____

If any of the following indicators are observed, then the farm's veterinarian will be contacted immediately to investigate 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

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:

- **Sudden onset of clinical signs** – such as those listed table below with high morbidity (large number of animals affected or mortality)
- **Rapid spread** – the symptoms have spread quickly between pens/barns or within a herd
- **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

Cattle


<p>Blisters/Vesicles/Erosions</p> <ul style="list-style-type: none"> • Lips, dental pad, nostrils, tongue, muzzle • Excessive salivation • Coronary bands • Teats • Ocular and nasal discharge 	<p>Gastro-intestinal</p> <ul style="list-style-type: none"> • Sudden vomiting • Diarrhea • Loss of appetite 	<p>Reproductive</p> <ul style="list-style-type: none"> • Sudden or higher than expected abortions and stillbirths
<p>Brain/Nervous System</p> <ul style="list-style-type: none"> • Incoordination • Depression • Hypersensitive to sound and touch, twitching, tremors 	<p>Lameness</p> <ul style="list-style-type: none"> • Severe and rapid spread within a pen or barn 	<p>Respiratory</p> <ul style="list-style-type: none"> • Laboured or heavy breathing • Sudden onset of cough
<p>Deaths</p> <ul style="list-style-type: none"> • Sudden or higher than expected 	<p>Production</p> <ul style="list-style-type: none"> • Sudden and significant weight loss • Sudden reduction in milk production • Sudden reduction in feed and water consumption 	<p>Skin</p> <ul style="list-style-type: none"> • Circular, raised, firm and painful nodules or lumps on the skin
<p>Fever (rectal temp)</p> <ul style="list-style-type: none"> • Beef cow 39.1 °C • Dairy cow 39.3 °C 		

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



Farm Name: _____ PID #: _____

1. Notify 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 other cattle

2. Call Veterinarian and Act on Advice, for example

Isolate sick animals

Submit samples for diagnosis

Stop 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 _____

3. Identify a Primary Contact within your organization. This will be the point person or coordinator to be available for key decisions

4. Notify external contacts, if recommended by your veterinarian

Farm veterinarian to notify regulatory authority as/if appropriate

- CFIA District Veterinarian called (suspect reportable disease)
- Chief Provincial Veterinarian

Self-declaration by producer to industry association and neighbouring livestock producers (depending on suspected disease)

- Beef Farmers of Ontario
- 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 for communication from:

- Beef Farmers of Ontario
- OMAFRA
- CFIA
- Canadian Cattlemen's Association
- National Cattle Feeders Association

QUICK TIPS

- ✓ *Distinguish rumour from fact*
- ✓ *Be aware of sector-wide triggers*
- ✓ *Share information*
- ✓ *Take care of yourself and your staff*

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**.

NOTICE OF SUSPICION RESPONSE PROTOCOL



Farm Name: _____ PID #: _____

WHO:

CFIA, provincial government, or provincial 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, OMAFRA, BFO and CCA 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.

PRODUCER SELF DECLARATION



If an unusual animal health event were to evolve into a disease-related sector-wide emergency, professionals in your industry association (Beef Farmers of Ontario), 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.

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 self-declaring, 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.

CONFIRMATION RESPONSE PROTOCOL



Farm Name: _____ PID #: _____

WHO:

CFIA's Chief Veterinary Officer or Chief Veterinarian of Ontario issues formal notice of 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, OMAFRA, BFO and CCA 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.



CUSTOM OPERATOR /COMMUNITY PASTURE RESPONSIBILITIES

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

Most contracts provide the operator or pasture manager 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 **Owner Advisory 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 cattle and other 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 on many operations. This is particularly important for children, as they cannot remain on the premises after an evacuation order has been given.

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. Visit Ontario mental health and addiction services at www.ontario.ca/page/mental-health-services. Or call Crisis Services Canada 1.833.456.4566 or visit www.crisisservicescanada.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 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.

QUICK TIPS

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

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



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 long-term 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.

MOVEMENT RESTRICTIONS

The Ontario Provincial Police and other national, provincial or municipal enforcement services may be tasked with enforcing movement restrictions. Failure to comply with permit or license restrictions may result in fines and/or legal action.

Whether restrictions are voluntary or mandatory, full compliance is essential. In addition to minimizing the impact of the potential outbreak, it shows our trading partners that we are responding quickly and effectively to the situation.

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 in close association to the 'Infected Place' may also be affected.

The Biosecurity Guidebook for Ontario's Beef Producers or the Canadian Beef Cattle On-Farm Biosecurity Standard on the CFIA website are good starting points for determining appropriate on-farm biosecurity measures.

BIOSECURITY PROTOCOL (SAMPLE)



Farm Name: _____ PID #: _____

GREEN +	AMBER	+	RED
<p>Normal day-to-day</p>	<p>Use of this AMBER Elevated Risk biosecurity protocol should be reviewed when:</p> <ul style="list-style-type: none"> • 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 <p>What to Do:</p> <ul style="list-style-type: none"> • 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 		<p>Use of this RED High Risk biosecurity protocol should be reviewed when:</p> <ul style="list-style-type: none"> • 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 <p>What to Do:</p> <ul style="list-style-type: none"> • STRICTLY adhere to the biosecurity standard

FARM ACCESS

GREEN +	AMBER	+	RED
<p>Normal</p>	<ul style="list-style-type: none"> • 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 		<ul style="list-style-type: none"> • Additional as recommended at time of confirmation

SICK ANIMALS

GREEN +	AMBER	+	RED
<p>Normal</p>	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • No contact of other animals after treating sick animals • Change of outerwear/footwear • Wash hands before and after treatment 		<ul style="list-style-type: none"> • Additional as recommended at time of confirmation

INCOMING/OUTGOING TRAFFIC

GREEN	+	AMBER	+	RED
Normal		<ul style="list-style-type: none"> Ensure disinfection prior to entering farm and before leaving Have drivers consider additional biosecurity protocols Document truck movements on and off the farm. Ensure drivers are recording dates and times of farm pick ups 		<ul style="list-style-type: none"> No incoming livestock Postpone arrivals and departures pending more information on outbreak and conditions under which animals may be moved

STAFF

GREEN	+	AMBER	+	RED
Normal		<ul style="list-style-type: none"> 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 		<ul style="list-style-type: none"> 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		<ul style="list-style-type: none"> Designate specific staff to handle and remove animals from pens Instruct staff to wash hands and clothing after handling deadstock Ensure separation from other farm practices for equipment Refer to depopulation and disposal section for more information about deadstock burial Monitor key websites for information and recommendations (e.g., BFO, CCA, OMAFRA, CFIA and AAFC) 		<ul style="list-style-type: none"> No pick up of deadstock on-farm Additional as recommended at time of confirmation

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

GREEN	+	AMBER	+	RED
Normal		<ul style="list-style-type: none"> No visitors No external animals, vehicles or personnel beyond main office/delivery area 		<ul style="list-style-type: none"> Additional as recommended at time of confirmation

Response

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	HOW	WHERE and WHEN
<ul style="list-style-type: none"> • Incubation period • Time of onset (first signs) 	<ul style="list-style-type: none"> • Location and spatial distribution • Species and numbers • Economic and social relationships on the farm • Supply and disposal practices • Disease prevention systems • Hygiene 	<ul style="list-style-type: none"> • 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.

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.

QUICK TIPS

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

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 operation and receive a PID, call 1-888-247-4999 or visit:

www.omafra.gov.on.ca/english/food/foodsafety/traceability/howtoget-pin.htm

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:

- 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 cattle 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 OMAFRA 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 vaccination protocol is provided on the next page.

QUICK TIPS

- ✓ *Understand your duty to comply with orders*
- ✓ *Take direction from your appointed Site Supervisor*
- ✓ *Follow the CFIA's dosage guidelines*
- ✓ *Ensure staff are familiar with vaccination technique and requirements*

MASS VACCINATION PROTOCOL (SAMPLE)



Farm Name: _____ PID #: _____

Farm owner/manager to review and accept the vaccination protocol with a site supervisor appointed by CFIA or OMAFRA, 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 OMAFRA

All personnel agree to apply protocol as directed by CFIA or OMAFRA 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 OMAFRA 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

Response

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. If 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 OMAFRA will provide regulatory oversight.

Depopulation and disposal 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, 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
<ul style="list-style-type: none"> • Free bullet • Captive bolt (penetrating or non-penetrating) • Electrocutation (single or two-stage) • Injection 	<ul style="list-style-type: none"> • Burial at a central location and/or approved secondary landfill sites • Incineration • Rendering • Processing for food (depending on the disease)

Farm personnel will have a role in both depopulation and disposal processes. Staff with cattle handling skills and equipment familiarity will be guided by an OMAFRA or CFIA appointed site supervisor. Using internal 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 OMAFRA is essential. In order to regain domestic and international market access, CFIA and/or OMAFRA will need to state with certainty that prescribed depopulation and disposal protocols have been carried out in strict compliance with the conditions specified by international animal, public health, and environment authorities.

While the CFIA or OMAFRA 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.

Ontario producers wanting to familiarize themselves with additional information this topic encouraged to review the following:

- Disposal of Dead Animals regulation under *The Nutrient Management Act*
www.ontario.ca/laws/regulation/090106
- Ontario Environmental Farm Program – workshops are hosted periodically throughout the year
www.omafra.gov.on.ca/english/environment/efp/efp.htm
See the Ontario Soil and Crop Improvement Association website for more information
www.ontariosoilcrop.org/oscia-programs/workshops-webinars/environmental-farm-plan

MASS DEPOPULATION AND DISPOSAL PROTOCOL (SAMPLE)



Farm 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 OMAFRA	Owner/ Manager
Follow directives from the regulator's designate (site supervisor) who will provide regulatory oversight and instructions regarding: <ul style="list-style-type: none"> • Species/class involved • Depopulation and/or disposal protocols (method and means) • Record-keeping requirements, etc. 	All personnel
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	
Follow personal biosecurity requirements as prescribed and which may include any or all of the following and other requirements: <ul style="list-style-type: none"> • 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	

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:

- 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 current limit for beef cattle is up to \$4,500 for non-registered animals and up to \$10,000 for registered animals.

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 made available by the Beef Farmers of Ontario. Industry associations may also assist in the administration of the valuation process, particularly if multiple premises are involved.

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.

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 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 as determined in the valuation
What special attributes might be considered that add value?	Organically raised, specialty breeds, purebred lines, pregnant animals, etc.
How long does payment take?	In recent outbreaks compensation has been 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.

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.

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 e.g: Canadian Cattle Identification Agency Radio Frequency Identification (CCIA RFID)?

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 premises 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 funds 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	AgriRecovery	AgriInvest
Covers losses associated with increased feed costs or reduced revenue from sale of livestock	Disaster relief on a case-by-case basis	Provides a 'savings account' for producers that may cover small income declines

Ontario producers can learn more about the Ontario Disaster Relief Assistance Program (ODRAP) by visiting www.mah.gov.on.ca/Page13722.aspx

Response

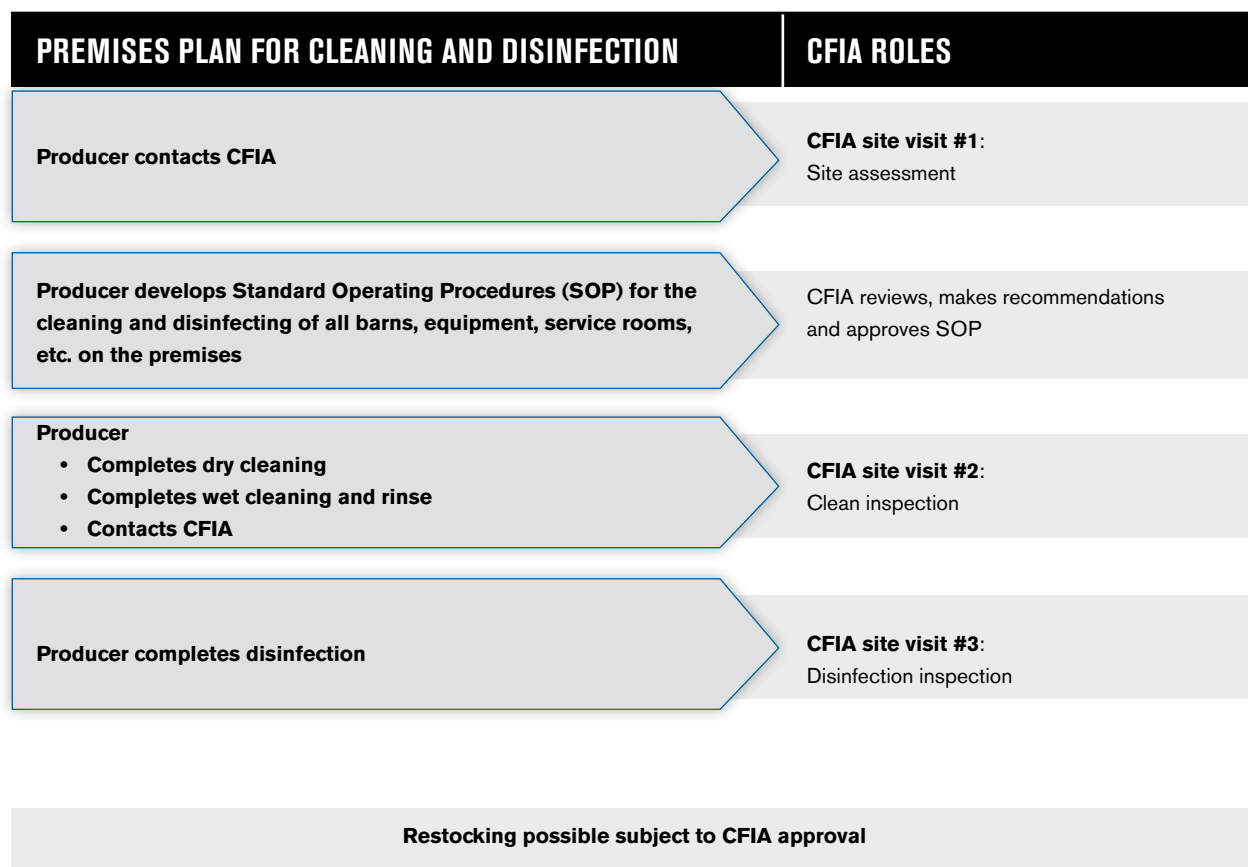
6. CLEANING AND DISINFECTION

In the event that a serious animal disease is reported 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 Place' until cleaning and disinfection are completed to the satisfaction of the province or CFIA. After that time, restocking can begin to take place.

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



QUICK TIPS

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

During a disease event the CFIA or AAFC will provide producers with clear guidance for cleaning and disinfection instructions. 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.

CLEANING AND DISINFECTION CHECKLIST
IDENTIFY <ul style="list-style-type: none">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
DEVELOP <ul style="list-style-type: none">A list of area(s) or equipment that are difficult to cleanEntry and exit procedures
DETERMINE <ul style="list-style-type: none">Application method and required equipmentAppropriate methods of cleaning – dry and wet, including application method and required equipment

Response

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 OMAFRA 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. BFO will communicate changes to conditions and sector-wide disease-related emergency status to members and others within the 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, beef and livestock industries felt the impact of product unavailability, shortages and impeded flow. Adaptability and quick decision-making proved integral in handling the unexpected and reducing negative impacts.

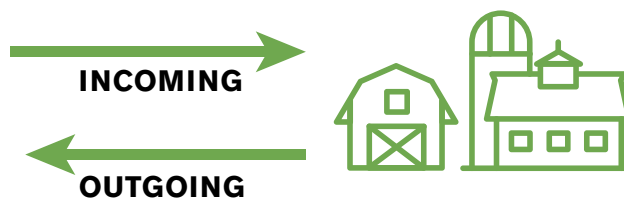
The purpose of this section is to highlight some of the potential disruptions to business operations along with strategies that producers may use to help manage the ripple effect. The information included in this section has been developed to support you in assessing risk, planning in advance, and responding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

- Outgoing shipments of livestock
- Incoming supply of livestock (e.g., replacement heifers, bulls, calves)
- 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 on or off your farm?

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.



The process for obtaining the necessary permits will be communicated to producers through industry associations.

Every effort will be made by industry associations (national and/or provincial) to work with government in maintaining business workflow. Movement restrictions and conditions for movement will be outlined by government and communicated to producers through their respective industry associations through the appropriate communication channels (email, teleconference, meeting, online town hall virtual video or audio conferencing, etc.).

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 the beef industry 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 cattle farms might include:

- Altering diets and feed programs to slow growth (maintenance rations)
- Selling livestock
- Utilizing available pasture or pens
- 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

Euthanasia can be a very challenging topic for producers to address as they are responsible for maintaining the health and wellness of their livestock. Interruptions in business workflow could result in the inability to sell or move newborn animals. This may leave producers with unforeseen operational and financial challenges and limited options.

The ***Code of Practice for the Care and Handling of Beef Cattle*** provides guidelines for euthanasia. The Codes are developed through the National Farm Animal Care Council (NFACC) and are available at www.nfacc.ca.

The recommended methods of humane on-farm euthanasia for beef farms are:

- Gunshot – caliber of rifle is specified in the beef cattle Code and will depend on the size of animal
- Penetrating captive bolt
- Non-penetrating captive bolt
- Injection with barbiturates and other drugs (administered by a licensed veterinarian)

For more information refer to the *Code of Practice for the Care and Handling of Beef Cattle*.

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.

BFO is committed to advocating on behalf of the beef industry as a whole and providing producer support. If you have any questions or concerns about the information contained in this document please contact:

Beef Farmers of Ontario

130 Malcolm Road
Guelph, ON N1K 1B1

Phone: 519-824-0334

Fax: 519-824-9101

Email: info@ontariobeef.com

www.ontariobeef.com

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

SCHEDULE 1. GLOSSARY AND DEFINITIONS

Glossary

AAFC	Agriculture and Agri-Food Canada
BFO	Beef Farmers of Ontario
BSE	Bovine Spongiform Encephalopathy
Bovine TB	Bovine Tuberculosis
CBSA	Canada Border Services Agency
CCA	Canadian Cattlemen's Association
CCIA RFID	Canadian Cattle Identification Agency Radio Frequency Identification
CCVO	Council of Chief Veterinary Officers
CFIA	Canadian Food Inspection Agency
CVO	Chief Veterinary Officer
ED	Executive Director
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 Plan	Foreign Animal Disease Emergency Support Plan
FMD	Foot-and-Mouth Disease
HAA	Health of Animals Act – federal
ICS	Incident Command System
JIC	Joint Information Centre
MCSCS	Ministry of Community Safety and Correctional Services
NERT	National Emergency Response Team
NCFAD	National Centre for Foreign Animal Disease
OCPV	Office of the Chief Provincial Veterinarian
OFMEM	Office of Fire Marshal and Emergency Management
OMAFRA	Ontario Ministry of Agriculture, Food and Rural Affairs
OIE	Office International des Epizooties/World Organisation for Animal Health
OPP	Ontario Provincial Police
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
RVF	Rift Valley Fever

Definitions

Animal health emergency	<p>An outbreak or epizootic of a serious animal disease requiring immediate action to contain, control and eradicate the disease, including:</p> <ul style="list-style-type: none"> • 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	<p>Confirmation of disease by National Centre for Foreign Animal Disease on samples obtained at the farm by CFIA staff by:</p> <ul style="list-style-type: none"> • 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)	<p>Site of decision-making, leadership and management for the event are administered using the Incident Command System. May be implemented on a (N) national, (P) provincial or (R) regional basis, in which case it will be preceded by the letter N, P, A or R.</p>
Emergency Management Committee	<p>During an emergency, an industry organization's Emergency Management Committee is authorized to make decisions on behalf of the organization. The committee may be comprised of Chair/President, General Manager/Executive Director, Vice Chair/President or Animal Health Committee Chair, and/or other executive members or staff as required; a quorum of three is required. All members have voting rights. Decisions require a majority. Meetings will be chaired by the Chair/President and decisions recorded.</p>
EOC Director of Field Operations Centre	<p>The person named as EOC Director responsible for the Emergency Operations Centre and responsible for the management of disease control or eradication operations.</p>
Infected Place	<p>A place declared infected pursuant to the federal <i>Health of Animals Act</i>.</p>
Livestock Market Interruption Strategy	<p>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.</p>
Local Authority	<p>The council of a city, town, village, local government or Indigenous group.</p>
Plant and Animal Health Strategy (PAHS)	<p>The strategy of government, industry, academia and other stakeholders to strengthen Canada's protection of plant and animal health by collaboration, innovation and risk prevention.</p>
Production Area	<p>The operation's corrals, pens, barns, and pastures where livestock are or may be kept.</p>

<p>Reportable diseases</p>	<p>Reportable diseases are outlined in the <i>Health of Animals Act</i> and <i>Reportable Diseases Regulations</i> 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.</p> <p>Foreign Animal Diseases (FAD) are reportable diseases that are not found in Canada.</p> <p>Note: Provinces may also have a reportable disease list that may include diseases that are not in the federal <i>Reportable Diseases Regulations</i>.</p>
<p>Serious animal diseases</p>	<p>Serious animal diseases are diseases that are more severe than common animal health illnesses and that can have significant impacts to trade and industry operations.</p>
<p>Special premises</p>	<p>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.</p>
<p>Suspect Case</p>	<p>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.</p>
<p>Trade(ing) Area</p>	<p>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.</p>

Notes:

Ruled lines for taking 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 | <ul style="list-style-type: none">• 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 | <ul style="list-style-type: none">• 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.

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

Resources

**Report a wildfire: Northwest and Northeast Region
call 310-FIRE (3473)**

**South of the French and Mattawa rivers call 911
Forest fires Ontario www.ontario.ca/page/forest-fires**

*This material has been adapted from the
BC Emergency Management Guides*

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
2. The farmer's goal should be keeping livestock high and dry
3. 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

Response

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).

Foot-and-Mouth Disease (FMD)

DESCRIPTION & SYMPTOMS

A federally reportable viral disease causing fever and vesicles (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.

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

- Cattle 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, low milk production in dairy cows, 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



Teat lesion



Tongue Lesions

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.

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 but poses a significant risk to the health of our livestock industry. Although animals may recover from FMD, international borders are closed to countries that are affected by this disease. If FMD were to occur in Canada, the loss of international exports would result in a significant market interruption resulting in a sector-wide emergency for several years.

Bovine Spongiform Encephalopathy (BSE)

DESCRIPTION & SYMPTOMS

BSE is a 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 co-ordination 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.



Struggling to stand

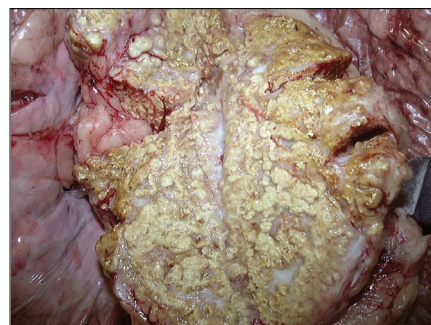


Bovine Tuberculosis (Bovine TB)

DESCRIPTION & SYMPTOMS

Bovine TB usually has a prolonged course, and symptoms take months or years to appear. The usual clinical signs include:

- Weakness
- Loss of appetite
- Weight loss
- Fluctuating fever
- Intermittent hacking cough
- Diarrhea
- Large prominent lymph nodes



Lung lesions

It is also important to know that the bacteria can lie dormant in the host without causing disease.

HOW IS IT SPREAD?

Bovine TB is typically spread by aerosol from diseased animals to other commingled animals. It may also be spread from diseased animals to others who subsequently share their bedding and feed grounds.

HOW IS BOVINE TB CONTROLLED/ERADICATED?

Bovine TB is a persistent disease that is difficult to control or eradicate from any herd. As well, it can exist in a latent state for months or years, making eradication difficult.

Canada has employed a 'test and slaughter' approach to Bovine TB confirmation in domestic cattle. Confirmation of Bovine TB in any herd would likely result in extensive testing for several years with all animals being slaughtered.

WHY IS BOVINE TB A CONCERN?

Bovine TB is different from the disease in humans, however it is still a human health concern.

Canada has come close to attaining a bovine TB disease-free status in domestic cattle but the disease still exists at a very low level in some isolated wildlife populations, e.g., Riding Mountain National Park (elk) and Wood Buffalo National Park (buffalo).

Occasional interaction has resulted in a very infrequent and limited number of cases in domestic cattle. These few cases to date have not impacted our exports as our trading partners continue to consider us to be 'disease-free'. Additional cases and the potential loss of disease-free status for bovine TB in cattle would result in significant and costly testing requirements for international trade and for the population at risk.

Despite these usually manageable impacts and costs, Bovine TB can have significant impacts on the country's industry as a whole and certainly has significant and at times devastating impacts and costs to individual producers affected.

Rift Valley Fever (RVF)

Given recent rapid spread of African Swine Fever across Asia, Rift Valley Fever is now on the radar. This disease is a concern due to its potential for shift in locale as has been observed with other diseases like Bluetongue Virus which travelled northward into various parts of Europe.

DESCRIPTION & SYMPTOMS

RVF is a virus, evident in young calves that develop a fever, become weak and die very suddenly. The mortality rate in young animals is very high (more so than in adult animals). Adult cattle may have nasal discharge, excess salivation, and loss of appetite, weakness, or diarrhea.

Adults (moderately susceptible):

- May be low-grade or acute infection
- Fever lasting 24–96 hours
- Dry and/or dull coat
- Lachrymation, nasal discharge and excessive salivation
- Anorexia
- Weakness
- Bloody/fetid diarrhea
- Fall in milk yield
- Abortion rate may reach 85% in the herd

Calves (highly susceptible):

- Fever (40–41°C)
- Inappetence
- Weakness and depression
- Bloody or fetid diarrhea
- More icterus than in lambs

HOW IS RVF SPREAD?

RVF is spread by infected midges, similar to other diseases such as Bluetongue.

WHY IS RVF A CONCERN?

Migration of other diseases northward with changing climates has resulted in speculation that the presence of RVF might at some time be confirmed off the continent. Confirmation in Canada would initially result in border closures from the international community and the U.S.

Bluetongue (BTV)

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

DESCRIPTION & SYMPTOMS

While the blue tongue that gives the disease its name occurs only in small number of cases, other BTV signs include:

- Fever
- Widespread hemorrhages of the oral and nasal tissue
- Excessive salivation
- Nasal discharge

In acute cases:

- The lips and tongue become swollen and this swelling may extend below the lower jaw
- Lameness, due to swelling of the cuticle above the hoofs
- Emaciation, due to reduced feed consumption because of painful inflamed mouths

HOW IS IT SPREAD?

The virus cannot be transmitted between susceptible animals without the presence of the insect carriers. The incidence and geographical distribution of bluetongue depends on seasonal conditions, the presence of insect vectors, and the availability of the susceptible species of animals. The insect carriers, biting midges, prefer warm, moist conditions and are in their greatest numbers and most active after rain.

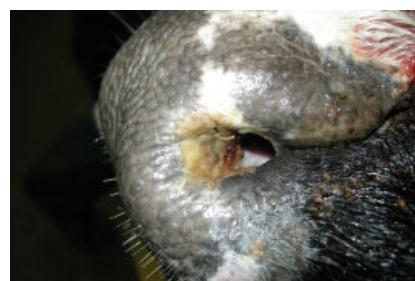
Persistence of the virus

Bluetongue virus does not survive outside the insect vectors or susceptible hosts. Animal carcasses and products such as meat and wool are not a method of spread. Survival of the virus within a location is dependent on whether the vector can overwinter in that area.

Control strategy

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
- Zoning to define infected and disease-free areas
- Some animals may need to be destroyed for welfare reasons as it is not possible to eradicate the bluetongue vectors



Notes:

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 #: _____

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

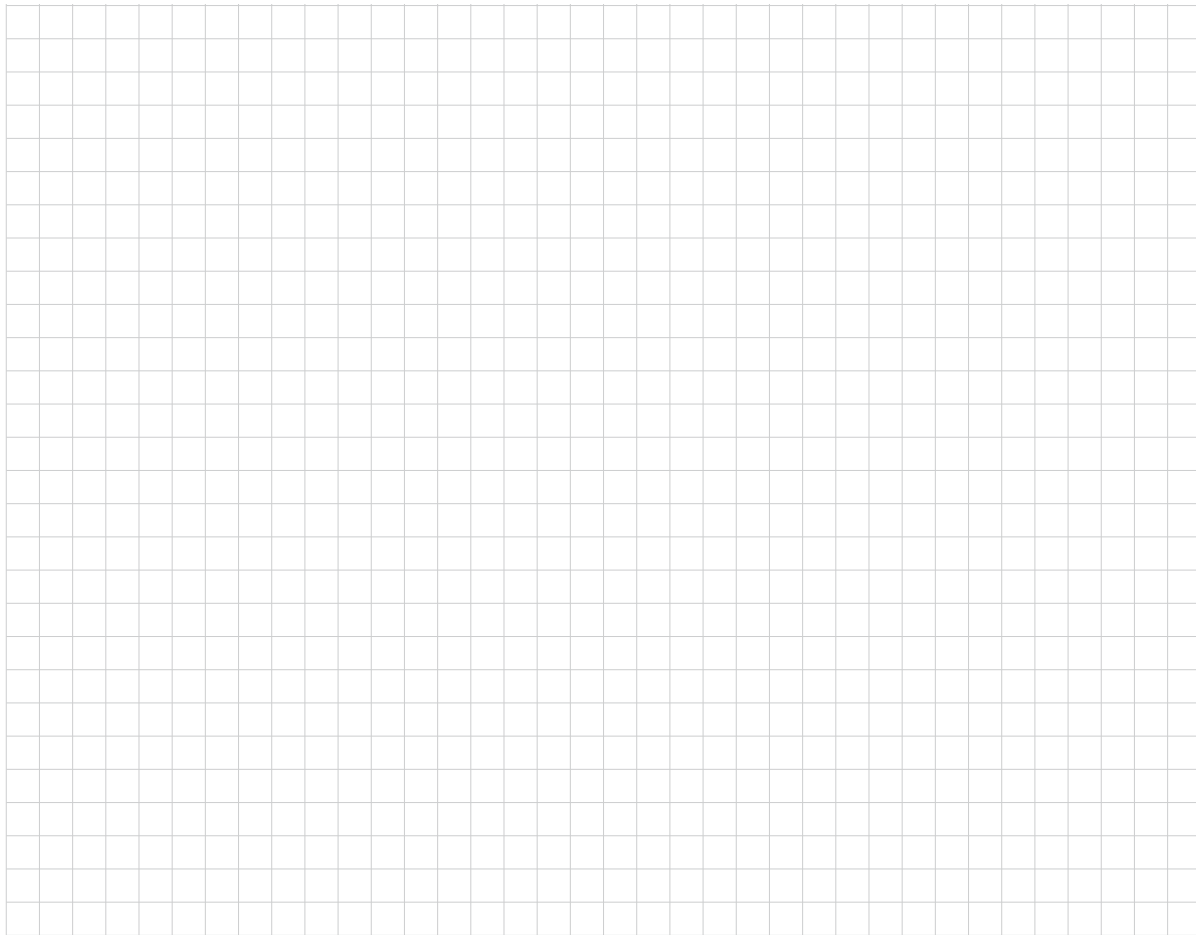


FARM PLAN GRID

Farm Name: _____ PID #: _____

Legal Land Description: _____ Address: _____

One Time Capacity: _____ Normal Operating Capacity: _____



Date Prepared: _____

Approximate Scale: _____

Contact Name: _____

Phone Number 1: _____

Phone Number 2: _____

- N North
- V Visitor Parking
- S Staff Parking
- Fences
- /— Gates
- △ G Compressed Gas
- △ F Flammable Liquids
- △ O Oxidizing Materials
- △ P Poisonous Materials
- △ C Corrosive Materials
- F Fertilizer
- ⊙ P Pesticide
- ⊙ H Water Source for Fire Hydrant
- ⊙ G Main Gas Shutoff
- ⊙ E Main Electrical Shutoff
- ⊙ FT Above Ground Fuel Tank
- ⊙ FA First Aid
- ⊙ Fire Extinguisher
- ⊙ MP Meeting Place
- Septic System (label location)
- Manure System (label location)

Farm Work Cycle



TYPICAL WORK CYCLE

Farm Name: _____ PID #: _____

ACTIVITY	FREQUENCY	QUANTITY
<i>Example: Feed Delivery</i>	<i>Daily</i>	<i>2 loads @ 15 Mt per load</i>
Feed Delivery		
Shipment of Animals		
Movement of People		
Calving Check (Seasonal)		
Other Traffic		
Pregnancy Check		
Husbandry Protocols (vaccinations, dehorn, etc.)		
Other		

Farm Inventory



FARM INVENTORY OF PEOPLE AND EQUIPMENT

Farm Name: _____ PID #: _____

PEOPLE

Number of people living here:	_____	Number of people employed:	_____
Number of disabled persons:	_____	Nature of disability:	_____
Number of heavy-duty equipment operators:	_____	Number of stockmen (excl. owner/operator):	_____

GRAZING AREA SUMMARY

Legal Land Description	Head on Land	Legal Land Description	Head on Premises
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Feed Storage/Bin	Inventory/Capacity
_____	_____
_____	_____
_____	_____

EQUIPMENT & RESOURCES ON HAND (Description, 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:

STAFF CONTACT LIST



Farm Name: _____ PID #: _____

Name	Title	Contact Phone	Contact Email	Lives on Farm (Y/N)	Owns Animals (Y/N)	HD Equip. 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			
Beef Farmers of Ontario		519-824-0334	info@ontariobeef.com
Canadian Cattlemen's Association		403-275-8558	feedback@cattle.ca
Natural Resource Conservation Board		780-422-1977	info@nrcb.ca
Canadian Cattle Identification Agency (CCIA)		1-877-909-2333 Toll Free	info@canadaid.ca
Utilities			
Electricity Supplier			
Internet Provider			
Telephone Service			
Natural Gas			

continued >>

>> EXTERNAL CONTACT LIST CONTINUED

**Government Offices**

CFIA Emergency Line		1-877-814-2342	
Chief District Office		204-945-7684	
Animal Health Laboratory University of Guelph			
OMAFRA (local office)			
Ministry of the Environment and Climate Change			
Emergency Management Ontario			
Municipal Office			

Service Providers

Deadstock Provider			
Fuel			
Insurance Broker			
Feed 1			
Feed 2			
Feed 3			
Livestock Transporter			
Electrician			
Plumber			
Lenders			

Livestock Owners

Visitor Log and Risk Assessment Guide



VISITOR LOG

Farm Name: _____ PID #: _____

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.)

Date	Name	Company	Contact Number	License Plate No.	Comments	Previous livestock/farm contact? (Y/N)	Entered Production Area? (Y/N)	Animal Contact? (Y/N)

VISITOR RISK ASSESSMENT GUIDE



Farm Name: _____ PID #: _____

RISK CATEGORY	CRITERIA	DESCRIPTION	EXAMPLE	BIOSECURITY REQUIREMENTS
LOW	Within the past 14 days: <ul style="list-style-type: none"> • 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 decides to stop by for a visit	<ul style="list-style-type: none"> • Record visits
MODERATE	Within the past 14 days: <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Minimize access to production area • Prevent all but essential contact to livestock • Before access is permitted, ensure clean footwear/clothing/ tires/surfaces, all visibly clean of organic matter
	Within the past 14 days: <ul style="list-style-type: none"> • 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	
	Neighbouring livestock operator	Producer who shares a fence-line with your operation		
HIGH	Within the past 14 days: <ul style="list-style-type: none"> • Livestock contact at multiple operations 	<ul style="list-style-type: none"> • Individuals who travel from or are transported from farm to farm • Individuals who enter the production area and have direct contact with livestock or manure 	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 <ul style="list-style-type: none"> • Prevent all but essential access to the production area or contact with livestock • Before access or contact is permitted, ensure: <ul style="list-style-type: none"> • Tires/surfaces are visibly clean of organic matter • The person wears clothing and footwear dedicated to the operation, or wears fresh coveralls or clean clothing and disinfects footwear • The person disinfects off-farm equipment or tools contacting livestock, or provide site specific tools
	Other livestock operator (including employee)		Custom manure cleaning operators and equipment that may transport manure from one production area to another	
	Persons from other countries where reportable diseases are a concern		Personnel who work with livestock at their own or another operation	
	Person who has handled sick or segregated animals at this or other operations		Personnel working with animals in the segregation or sick facility	

Unusual Animal Health Event Indicator Protocol

UNUSUAL ANIMAL HEALTH EVENT INDICATOR PROTOCOL



Farm Name: _____ PID #: _____

Veterinarian: _____ Cell: _____

If any of the following indicators are observed, then the farm's veterinarian will be contacted immediately to investigate 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

UNUSUAL ANIMAL HEALTH EVENT INITIAL RESPONSE PROTOCOL



Farm Name: _____ PID #: _____

1. Notify 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 other cattle

2. Call Veterinarian and Act on Advice, for example

Isolate sick animals

Submit samples for diagnosis

Stop 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 _____

3. Identify a Primary Contact within your organization. This will be the point person or coordinator to be available for key decisions

4. Notify external contacts, if recommended by your veterinarian

Farm veterinarian to notify regulatory authority as/if appropriate

- CFIA District Veterinarian called (suspect reportable disease)
- Chief Provincial Veterinarian

Self-declaration by producer to industry association and neighbouring livestock producers (depending on suspected disease)

- Beef Farmers of Ontario
- 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 provincial 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, OMAFRA, BFO and CCA 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 Chief Veterinarian of Ontario issues formal notice of 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, OMAFRA, BFO and CCA 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 as 'the Animals'

Species: _____

Approximate number: _____

PID #: _____

Location: _____

In the town of: _____ Province of: _____,

hereafter referred to as 'the Province,' and duly represented as a livestock producer by the following association

_____ hereafter referred to as 'the Association.'

I, (owner name) _____, hereby authorize the Canadian Food Inspection Agency and/or the Government of Ontario to share confidential details about my operation during the course of a disease investigation with the Association as necessary, with the understanding that this information will only be used to aid in the investigative process.

I agree to release the Association from any and all claims I may have as a result of the disclosure of the disease information as set out in this Direction, provided that such disclosure shall not apply with respect to any negligent or intentionally wrongful act of omission on the part of any of the Recipients.

I further agree to allow the Association to utilize and share such confidential information about my operation during the disease outbreak and investigation, as it determines to be in the best interests of the industry at large.

Dated at _____, in the province of _____,

this _____ day of _____, 20 _____.

Witness' Signature

Owner's Signature

Definition of Terms:

Inventory Owner: Individual or Corporation that is the legal owner of the animals located at the premises identified.

Premises: Location of the barn/barns or pastures at which the disease testing has taken place.

PID#: Provincial Premises Identification Number assigned to each livestock production premises within the province.

Emergency Communication to Owner Template (Custom Operations/ Community Pasture)

EMERGENCY COMMUNICATION TO OWNERS (CUSTOM OPERATION/COMMUNITY PASTURE)



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 (reference to specific contract section):

Contact information:

Non-Essential Movement Ban Protocol / Voluntary Cease Movement

NON-ESSENTIAL MOVEMENT BAN PROTOCOL



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 long-term 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)

Farm Name: _____ PID #: _____

GREEN +	AMBER	+ RED
<p>Normal day-to-day</p>	<p>Use of this AMBER Elevated Risk biosecurity protocol should be reviewed when:</p> <ul style="list-style-type: none"> • 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 <p>What to Do:</p> <ul style="list-style-type: none"> • 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 	<p>Use of this RED High Risk biosecurity protocol should be reviewed when:</p> <ul style="list-style-type: none"> • 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 <p>What to Do:</p> <ul style="list-style-type: none"> • STRICTLY adhere to the biosecurity standard

FARM ACCESS

GREEN +	AMBER	+ RED
<p>Normal</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Additional as recommended at time of confirmation

SICK ANIMALS

GREEN +	AMBER	+ RED
<p>Normal</p>	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • No contact of other animals after treating sick animals • Change of outerwear/footwear • Wash hands before and after treatment 	<ul style="list-style-type: none"> • Additional as recommended at time of confirmation

INCOMING/OUTGOING TRAFFIC

GREEN	+	AMBER	+	RED
Normal		<ul style="list-style-type: none"> Ensure disinfection prior to entering farm and before leaving Have drivers consider additional biosecurity protocols Document truck movements on and off the farm. Ensure drivers are recording dates and times of farm pick ups 		<ul style="list-style-type: none"> No incoming livestock Postpone arrivals and departures pending more information on outbreak and conditions under which animals may be moved

STAFF

GREEN	+	AMBER	+	RED
Normal		<ul style="list-style-type: none"> 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 		<ul style="list-style-type: none"> 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		<ul style="list-style-type: none"> Designate specific staff to handle and remove animals from pens Instruct staff to wash hands and clothing after handling deadstock Ensure separation from other farm practices for equipment Refer to depopulation and disposal section for more information about deadstock burial Monitor key websites for information and recommendations (e.g., BFO, CCA, OMAFRA, CFIA and AAFC) 		<ul style="list-style-type: none"> No pick up of deadstock on-farm Additional as recommended at time of confirmation

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

GREEN	+	AMBER	+	RED
Normal		<ul style="list-style-type: none"> No visitors No external animals, vehicles or personnel beyond main office/delivery area 		<ul style="list-style-type: none"> Additional as recommended at time of confirmation

Mass Vaccination Protocol

MASS VACCINATION PROTOCOL (SAMPLE)



Farm Name: _____ PID #: _____

Farm owner/manager to review and accept the vaccination protocol with a site supervisor appointed by CFIA or OMAFRA, 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 OMAFRA

All personnel agree to apply protocol as directed by CFIA or OMAFRA 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 OMAFRA 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 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 OMAFRA	Owner/ Manager
	Follow directives from the regulator's designate (site supervisor) who will provide regulatory oversight and instructions regarding: <ul style="list-style-type: none"> • Species/class involved • Depopulation and/or disposal protocols (method and means) • Record-keeping requirements, etc. 	All personnel
	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	
	Follow personal biosecurity requirements as prescribed and which may include any or all of the following and other requirements: <ul style="list-style-type: none"> • 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	

