

## SECTION 13: EMERGENCY MANAGEMENT

This section raises awareness about on-farm emergencies. Please be advised that there are many detailed resources available to you regarding farm animal emergency management. You are highly encouraged to review these resources to be prepared for the unexpected.

**KEY SOURCES:** (all available by conducting an internet search)

- Animal Health Emergency Management Project, 2019<sup>(1)</sup>
- Emergency Management Guide for B.C. Small Mixed Farms – B.C. Ministry of Agriculture, 2015<sup>(2)</sup>
- Emergency Management Guide for B.C. Pork Producers – B.C. Pork, 2013<sup>(3)</sup>
- Emergency Preparedness Tips. Fact Sheet. B.C. Ministry of Agriculture, 2019<sup>(4)</sup>

### 13.1 FARM HAZARDS – EMERGENCY PLANNING

Listed below are a few quick-facts about farm hazards compiled from the Emergency Management Guide for B.C. Small Mixed Farms – B.C. Ministry of Agriculture, 2015.<sup>(2)</sup>

HAZARD	THINGS TO KNOW
<b>FIRE</b> 	<ul style="list-style-type: none"> <li>• Never jeopardize personal safety to save an animal.</li> <li>• Panicked animals normally will not leave a barn on their own, because they do not fear fire.</li> <li>• Most animals are killed from smoke inhalation. Those who do survive rarely recover.</li> <li>• A structure can be completely engulfed in less than 6 minutes.</li> <li>• The vast majority of barn fires are preventable.</li> <li>• Livestock may become nervous, panicked, disoriented, and unpredictable near fire.</li> <li>• Livestock may wander into hot ashes and cinders left by burned grass or bush. They may become confused on a direction of escape and burn hooves or feet beyond recovery.</li> </ul>
<b>FLOOD</b> 	<ul style="list-style-type: none"> <li>• Never jeopardize personal safety to save an animal.</li> <li>• Unconfined animals can usually take care of themselves during a flood.</li> <li>• The farmer's goal is to keep livestock high and dry.</li> <li>• Your local Emergency Program Coordinator can provide up-to-date flood information and forecasts.</li> </ul>

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HAZARD	THINGS TO KNOW
<b>EXTREME HEAT</b> 	<ul style="list-style-type: none"> <li>• Extreme heat is generally more stressful to farm animals than extreme cold.</li> <li>• Animals will require more water during extreme heat/drought conditions – up to twice normal consumption levels.</li> <li>• Livestock should have access to natural or man-made areas that provide heat relief.</li> <li>• Signs of heat stress:             <ul style="list-style-type: none"> <li>– Increased respiration rate or panting and excessive salivation.</li> <li>– Elevation of head to make it easier to breathe.</li> <li>– Open mouth breathing.</li> </ul> </li> <li>• If animals are in heat-stress:             <ul style="list-style-type: none"> <li>– Contact local veterinarian immediately.</li> <li>– Move animals to the shade.</li> <li>– Offer plenty of cool, clean water.</li> <li>– Spray animals with cool water, especially on legs and feet, or stand them in water.</li> <li>– Increase air movement around animals.</li> </ul> </li> </ul>
<b>DROUGHT</b> 	<ul style="list-style-type: none"> <li>• Drought is a slow-onset emergency that can be highly destructive to your farm.</li> <li>• Dry conditions can lead to undrinkable or toxic water sources. Consider water quality testing.</li> <li>• Drought may result in increased grazing by livestock on toxic plants. Provide adequate forage or supplemental feed.</li> </ul>
<b>EXTREME COLD</b> 	<ul style="list-style-type: none"> <li>• Winter wind is usually a greater stress factor than cold temperatures.</li> <li>• Livestock dehydration is often a more important hazard than cold temperatures. Animals cannot drink snow.</li> <li>• Animals require additional feed to meet increased energy requirements.</li> </ul>
<b>MANURE</b> 	<ul style="list-style-type: none"> <li>• Ensure sufficient manure storage to accommodate up to 6 months accumulation.</li> <li>• Contain manure during transport to avoid spills.</li> <li>• Ensure manure is not carried onto public roads by equipment tires.</li> <li>• Establish buffers between manure handling and storage locations near and around watercourses. Refer to B.C.'s 2019 Agricultural Environmental Management Code of Practice (AEMCoP) for proper setback distances.</li> <li>• Have a manure spreading plan.</li> <li>• Ensure application equipment is maintained.</li> <li>• If possible, use air emission and odor reduction application practices.</li> </ul>
<b>UTILITY FAILURES</b> 	<ul style="list-style-type: none"> <li>• Things to consider:             <ul style="list-style-type: none"> <li>– Which critical equipment and facilities depend upon electrical power? Natural gas? Water?</li> <li>– What if these utilities are unavailable?</li> <li>– How long could you operate without the utility?</li> <li>– Are backup measures possible (e.g., generator)?</li> </ul> </li> </ul>

Source: Emergency Management Guide for B.C. Small Mixed Farms – B.C. Ministry of Agriculture, 2015<sup>(2)</sup>

## 13.2 SERIOUS ANIMAL DISEASE OUTBREAK – EMERGENCY PLANNING

The information below is provided by the Animal Health Emergency Management (AHEM) Project team:

Serious animal disease outbreaks are more severe than common animal health illnesses and can have significant impacts to trade and industry operations. They are recognized as the industry's greatest vulnerability because it is very likely that they often result in restricted or even banned Canadian exports, that in turn weakens our livestock sector, and undermines public trust. Even a small serious animal disease outbreak can have rippling impacts on farms across the country. Whether it involves a known or evolving disease, producers must stay informed and be aware of the signs and symptoms of serious animal diseases.

The purpose of this section is to help those on the ground to **understand, prepare** and **respond** to serious animal disease events. The following is an overview of the Producer Handbook developed through the AHEM Project specifically for small lot producers. The full document and other resources can be found at <https://animalhealth.ca/ahem/>.<sup>(1)</sup>

### 1. UNDERSTAND

A serious animal disease outbreak will put producers' livelihoods at risk. When an animal is unwell, there will be signs and it is your responsibility to determine whether this is an unusual event and what actions are appropriate. It is important to:

- **Share Concerns** – producers have a duty of care and a legal requirement to report all suspected cases of certain diseases. The key serious animal diseases for swine, and these are federally reportable, include African swine fever (ASF) and Foot-and-Mouth Disease (FMD).
- **Work Together** – disease outbreaks can have rippling effects and it is important that we work together – often across provinces and with other commodities – to prevent, prepare and respond.
- **Protect Others** – Canada's National Swine Farm-Level Biosecurity Standard can help safeguard your operation and the industry. Producer commitment to good animal husbandry, hygiene practices, vehicle management, and staff training is paramount.

## 2. PREPARE

Regardless of the type of emergency (e.g., disease, fire, flood, earthquake), by being proactive, your farm will be in a better position to respond and convey key details to emergency personnel as an emergency situation unfolds.

It is important to:

- **Know Your Objectives** – Do you have a plan to minimize risk and safety of people and animals directly involved? These can also help clarify a producer’s long-term goals with regards to restocking or exiting, in the event of a serious animal disease outbreak.
- **Have a Clearly Defined Farm Plan** – Do you have maps and property information that can help aid first responders? These will help in planning the response and containment strategies, for an outbreak on a given premises.
- **Document Your Work Cycles** – What regular activities occur on your farm? Could these be potential entry/exit points for disease, and will they require immediate time-sensitive decisions to ensure the well-being of animals on farm?
- **Assign Key Decision Makers** – Who are the primary and secondary contacts for your farm? A secondary contact is important, for those occasions when the primary contact is unavailable for critical decisions.
- **Keep Up-to-Date Inventory and Contacts List** – How many livestock are onsite? What is the supply on hand, for feed and other necessities? And who might need to be contacted in the event of an emergency?

## 3. RESPOND

Whether directly affected or not, operators may have distinct roles and responsibilities during a serious animal disease emergency. In the event of a serious animal disease outbreak, the Canadian Food Inspection Agency (CFIA) and/or the B.C. Ministry of Agriculture have authority to take measures in order to contain and eradicate the disease. The following steps may be taken to return the industry to a disease-free state.

### *Containment*

- Movement restrictions can be ordered by the federal or provincial government to prevent the further spread of a disease, and applied to specific areas as well as to animals, feed, and other vectors that can carry the disease. Permits or licences are required to move specific items on or off a farm premises. Voluntary cease movement may also be recommended by industry leaders, in the initial stages of an outbreak, in support of provincial or federal orders.

## 13.2 SERIOUS ANIMAL DISEASE OUTBREAK – EMERGENCY PLANNING

***Investigation and Tracing***

- Traceability plays an important role in containing and eradicating a disease and demonstrates the importance of Premises Identification (Premises ID). Premises ID may also be used to notify you of disease outbreaks in your area.

***Vaccination***

- Vaccination may be ordered to protect livestock and prevent the spread of disease. Producers ordered to vaccinate their livestock will follow a strict protocol under regulatory oversight. This is essential to satisfy international expectations and regain international market access.

***Depopulation and Disposal***

- Depopulation and disposal of carcasses may be ordered to stop disease spread and to protect the industry. The appropriate means and methods will be communicated to producers, after agreement with industry leadership.

***Financial Considerations***

- Producers may be compensated for some of their losses as a result of actions that are ordered to stop disease spread and protect the industry. As well, a suite of financial support programs offered through AAFC and the provincial government provides additional support.

***Cleaning and Disinfection***

- This is a necessary step in order to remove the designation of being an infected place, and a pre-requisite for restocking with healthy livestock. As well, it is an essential step that is required of all infected premises, if Canada's livestock industry is to regain disease-free status.

For more information about responding to serious animal disease outbreaks in small lot production systems, please visit <https://animalhealth.ca/ahem/> or contact the B.C. Ministry of Agriculture.

The development of this resource was completed as part of the Animal Health Emergency Management Project with funding provided by Agriculture and Agri-Food Canada (AAFC).



**13.3 SERIOUS ANIMAL DISEASE OUTBREAK: WHAT SHOULD I DO?** **KEY POINT CHECKLIST**

There are a few situations regarding animal health that should raise red flags:

- ANY suspicion of a serious or foreign animal disease.
- Multiple sudden deaths.
- Multiple pregnancy losses.
- Multiple sick animals.
- Abnormal neurological pig behaviour.
- A GUT FEELING THAT SOMETHING IS REALLY WRONG.

If ANY of these situations come up, follow these steps:

- 1) Remain calm.
- 2) Inform anyone on your property or working on the farm of your concern. Review and remind all, as to biosecurity protocols.
- 3) Call your veterinarian immediately and act on their advice.
- 4) Quarantine per veterinary advice:
  - Immediately stop ALL movements (e.g., animals, employees, family members, feed trucks, service providers, garbage, vehicles) to and from your farm.
  - Set up fencing or increased signage at your driveway to prevent any accidental traffic onto your farm.
- 5) Any dead animals should be stored somewhere on the farm safely (away from farm pets, predators, or other pigs) for the vet to inspect and collect samples for disease diagnostics.
- 6) Record everything you can (e.g., number of animals affected, when you noticed the problem, recent traffic on and off your farm).
- 7) Wait for further instruction from your veterinarian or government officials.

## 13.4 EMERGENCY PREPAREDNESS TIPS – ALL EMERGENCIES

Listed below are key tips in preparing for any type of emergency that may impact your farm.

These tips were sourced from an emergency management fact sheet titled Emergency Preparedness Tips – B.C. Ministry of Agriculture, 2019<sup>(4)</sup> and from the Emergency Management Guide for B.C. Pork Producers – B.C. Pork, (2013).<sup>(3)</sup>

- Be aware of the many types of emergencies (e.g., animal disease outbreak, fire, flood, earthquake, building collapse, chemical spills).
- You are responsible for the safety and security of your livestock and farm employees.
- You should have an emergency plan written out and discussed on your farm.
- It is your responsibility to have appropriate insurance coverage.
- You should consider your neighbouring farms when developing an emergency plan.
- Assign who is 1st and 2nd in command – in the unfortunate event you are faced with an emergency, you may need someone else to make many ongoing, day-to-day decisions.
- Make a list of emergency contacts (e.g., fire department, your vet, transport truckers, neighbours' phone numbers, Emergency Program Coordinator in the regional district or municipality).
- Have a Premises Identification (Premises ID) number and know your land location.
- Have a map of your farm, a farm plan.
- Make sure chemicals, tanks, electrical panels, barrels, and storage containers are correctly labeled.
- Remove trash often.
- Make sure wires, electronics, heat sources, and lamps are set up to prevent a fire risk.
- Have extra supplies on hand (e.g., towels, ropes, sandbags, plywood, tarps, buckets).
- Have a fire extinguisher.
- Control the growth of grass and weeds.
- Store chemicals safely.
- Ensure your property is accessible for emergency vehicles.

Sources: Emergency Management Guide for B.C. Pork Producers – B.C. Pork, 2013<sup>(3)</sup>  
Emergency Preparedness Tips. Fact Sheet. B.C. Ministry of Agriculture, 2019<sup>(4)</sup>

## 13.5 EMERGENCY MANAGEMENT FOR AGRICULTURE IN B.C.

For more detailed information on **Emergency Management for Agriculture in British Columbia, 2020**<sup>(5)</sup> please refer to: <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/business-market-development/emergency-management>

This site provides important information and links including:

- Emergency management roles and responsibilities.
- Livestock Relocation and qualifying for financial assistance in the event of an emergency.
- Business Insurance and Risk Management related to production insurance (PI), AgriStability (AS), programming for food safety, traceability, and crop loss.
- Foreign animal disease planning and response.
- Weather advisories and other incident information including wildfire maps, B.C. wildfire services, flood warnings and advisories, and river forecasting.

For more detail information on **Disaster Mitigation Programs in British Columbia**<sup>(6)</sup> please refer to: <https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/emergency-management-bc/bc-disaster-mitigation>

This site provides important information and links including:

- Funding programs for disasters.
- Wildfire mitigation.
- Drought information.
- Flood mitigation.
- Flood risk assessment.
- Flood mapping guidelines.
- Land use management.
- Dike management and safety.

**SECTION 13 REFERENCE LIST**

1. Canadian Animal Health Coalition. Animal Health Emergency Management (AHEM) Project (2019)
2. Emergency Management Guide for B.C. Small Mixed Farms. B.C. Ministry of Agriculture (2015)
3. Emergency Management Guide for B.C. Pork Producers. B.C. Pork (2013)
4. Emergency Preparedness Tips. Fact Sheet. B.C. Ministry of Agriculture (2019)
5. Emergency Management for Agriculture – B.C. Ministry of Agriculture (2020)
6. B.C. Disaster Mitigation Programs – British Columbia (2020)