

# EMERGENCY MANAGEMENT GUIDE for POULTRY FARMS

Prepared for the BC Ministry of Agriculture







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## Introduction

Emergencies can be devastating to a farming operation. This Emergency Management Guide provides a resource for poultry producers in British Columbia to prepare for the worst while striving for the best. It provides information on various natural and human-caused threats to any operation, as well as an opportunity for you to tailor responses that your farm would follow in the event of an emergency.



While most producers instinctively know what to do without opening a manual, documenting the actions needed to protect your farm is valuable for two reasons:

A farm emergency guide helps inform others how best to assist when needed, including family members, farm staff, neighbours, and first responders.

An emergency guide adapted specifically for your farm demonstrates the "due diligence" you have taken in managing your business risks.

This Guide has two divisions. The first offers general information, consisting of an Introduction, Key Messages, and an explanation of Core Concepts related to emergency management. In this portion of the Guide, you will find information on basic farm preparedness, insurance, response agency roles, carcass disposal, and poultry wellness after a disaster.

The second division contains a template that you can use to create your Farm Emergency Plan. It contains fill-ins or checkmark statements with three sections. It contains your farm's information, emergency contacts, and farm maps.

The second section also contains mitigation, preparedness, and response checklists addressing topics such as sound agriculture business management and farm safety, general farm emergency preparedness, response, and recovery.

The final section of your Farm Emergency Plan addresses eight hazards that may impact your operation.

The hazards are separated by tabs, containing preparedness and response action checklists that you can adapt to best fit your farm and business situation.

This also allows you to assemble specific "action items" as needed.





The Guide is designed to be placed in a three-ring binder so you can easily compile and adapt your Farm Emergency Plan. Updates and other materials can be added, or sections can be adapted for use in other farm manuals such as WorkSafe BC.

This format invites you to record your own plans for managing emergencies before, during, and after events occur. The goal is to have a Farm Emergency Plan that is simple enough for any family member or

farm employee to understand and use.

Hard-copies of this Emergency Management Guide are available through your nearest BC Ministry of Agriculture office. Electronic copies can be found at the Ministry of Agriculture's emergency planning page, https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/ business-market-development/emergency-management

The BC Ministry of Agriculture, Agri and Agri-Foods Canada, and other sponsors hope that this Emergency Management Guide will better prepare you to effectively manage risks to your poultry operation.

## **Key Messages**

- 1 Poultry producers are ultimately responsible for taking action to protect the flocks and the employees under their care and control.
- 2 Completion of a Farm Emergency Plan shows due diligence on the part of the farmer.
- 3 Producers must ensure they have appropriate insurance coverage.
- 4 Family members and employees should be made aware of the Farm Emergency Plan so they can respond appropriately during any emergency.
- 5 The poultry producer's first point of contact during an emergency should be the Emergency Program Coordinator in the regional district or municipality of residence.



An emergency is an event, outside the scope of normal farm operations, that requires prompt action. Farm staff may need to quickly coordinate resources to protect the health, safety and welfare of the people and animals, to limit the damage to property and the environment, and to manage the risk of animals or products that may leave the farm.

This Emergency Guide addresses some common hazards that might impact BC's poultry producers. The focus is on widespread emergencies, but completing a Farm Emergency Plan will help you prepare for emergencies specific to your operation.

## **Emergency Management Phases**

The ultimate purpose of emergency management is to save lives, preserve the environment and protect property and the economy. Emergency management is comprised of four interdependent components:

- <u>Prevention and Mitigation</u> to eliminate or reduce the risks of an emergency before it occurs in order to protect lives, property, the environment, and reduce economic disruption.
- <u>Preparedness</u> to be ready to respond to an emergency and manage disaster consequences through steps taken prior to an event, such as developing plans, agreements, and training.
- <u>Emergency Response</u> to act immediately before, during or after an emergency to manage its consequences.
- <u>Disaster Recovery</u> to repair or restore conditions to an acceptable level after a disaster. There is a strong relationship between sustainable recovery and mitigation of future disasters.

These four components may be undertaken sequentially or concurrently, but they are not independent of each other.

## **Prevention and Mitigation**

### Insurance / Risk Management



The consequences of a major emergency on an individual farm may be catastrophic. Some impacts cannot be prevented regardless of preparedness. Therefore, insurance plays an important role in protecting you from low-probability, high-consequence disasters such as floods, wildfires, earthquakes, or animal diseases. Farmers in BC have access to several approaches to managing their financial risks, as noted below. Refer to the specific links for program information.

## Federal/Provincial Risk Management Programs

The federal and provincial governments provide a suite of cost-shared risk management programs designed to build the productivity, profitability, and competitiveness of the agricultural sector in the province. The three programs are described below.

- <u>AgriStability</u>: AgriStability helps stabilize farm income by managing the risk of large income declines.
- <u>Agrilnvest</u>: Agrilnvest helps manage small income declines, and provides support for investments to mitigate risks or improve market income.
- <u>AgriRecovery</u>: AgriRecovery helps agricultural producers who are facing extraordinary costs in recovering from a natural disaster.

More information on these programs is available at:

https://www2.gov.bc.ca/gov/content/industry/ agriculture-seafood/programs



### **Commercial Insurance**

Private insurance is generally available to cover farm animal losses from emergencies, such as those addressed by this Guide. Coverage may include losses, such as poultry mortality or infrastructure damages (i.e., barns and equipment).

As an important step in managing risk, producers in BC should understand what is covered under their insurance policies and what may be excluded. For instance, are you covered for a tradesperson who becomes injured on your farm? Talk with your insurance broker or agent.

Several commercial insurers offer animal mortality coverage for broad perils, including accident, death, sickness, disease, and theft. Some companies offer limited coverage for animal mortalities caused by highway transport incidents, structure fire, or severe weather events such as lightning, windstorm, or hail.

The Insurance Bureau of Canada can help you find available and appropriate coverage for business losses through private insurance. Its member companies represent 90% of the property and casualty insurance market in Canada. Their website: <u>www.ibc.ca/</u>

Numerous other prevention and mitigation measures can be put in place to eliminate or reduce the risks of disasters on your farm. These are further detailed, with checklists, in the Farm Emergency Plan section of this Guide.



## **Emergency Preparedness**

Preparedness refers to the readiness to respond to an emergency through measures taken prior to an event. Preparedness includes identifying numerous groups from the public sector that may assist in the response, such as:

- Fire Department
- Police Department
- Local Government, i.e., municipalities and regional districts in BC
- BC Ministry of Agriculture (AGRI)
- Emergency Management BC (EMBC)
- BC Ministry of Environment (MOE)
- Canadian Food Inspection Agency (CFIA)

In British Columbia, government and private emergency agencies are focused on human lives. Poultry welfare in a disaster is the responsibility of the producers. Although some assistance may be available, farmers are responsible for the care of their flocks.

## Integrated Response Model

Emergencies are typically managed from the ground up, initially relying on citizens and the private sector until their capacities are exceeded, after which local and provincial authorities are involved until they are overcome, at which point federal government becomes involved.

Specific organizations may have legislated authority from the outset, depending on the emergency. For example, the Canadian Food Inspection Agency has legislated responsibility for responding to certain animal diseases.

The following diagram illustrates an overview of assistance available in an emergency response, beginning with the producer.



## **Emergency Response**

The response phase implements the producer's reaction to an incident or emergency. The goal of this phase includes, but is not limited to, the following.

- Ensure safety and health of personnel.
- Safeguard flocks, as much as possible.
- Contain damage to farm facilities and equipment.
- Stabilize the farm's operational, service, and public image impact of the event.
- Communicate information to the appropriate authorities.



Examples of actions and measures you can take in planning your farm's response to an emergency or disaster include the following:

- Develop response procedures to minimize harm to personnel and poultry.
- Prepare plans to control and mitigate damage to facilities and equipment.
- Create a crisis communication plan to identify how information will be managed and communicated.

Examples of emergency response planning include plans for responding to:

 Natural disasters (earthquakes, floods, droughts, extreme winter storms, and diseaserelated events)

- Human-induced disasters (animal rights activists, sabotage, strikes)
- Technological disasters (chemical leaks, toxic spills, hazardous waste contamination, environmental concerns, and equipment failures)

Incidents may cause a temporary or partial interruption of activities with limited or no farm facility damage (e.g., minor fire within the poultry barn).

Alternatively, a major incident could result in severe barn destruction, personnel injury, loss of the flock, and extended business interruption.

Most situations fall between these extremes. However, incidents often start small and escalate in severity if not properly managed.

## Mass Carcass Disposal

Emergencies that affect farm animals in British Columbia can result in the need to dispose of carcasses and associated tissues. Flooding, wildfires, severe weather, animal disease outbreaks, and other hazards may challenge poultry producers as well as local, provincial and federal agencies to rapidly develop or implement plans for disposal.

Consult with the BC Ministry of Agriculture for your farm's poultry disposal options, both during ordinary bird mortality and in a mass disposal event.



Available disposal options differ throughout the province. Common mortality in the flock also differs from mortality caused by federally or provincially reportable diseases. Suitable disposal methods will depend on the presence and type of disease, your farm's location, and other circumstances.

The preferred disposal option for poultry carcasses is composting. Your veterinarian, the CFIA, or the Ministry of Agriculture can provide complete disposal guidance. Your municipal or regional

district Emergency Program Coordinator is also aware of your disposal options.

Additional information on Agricultural Waste Management is available on the BC Ministry of Environment website at:

https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agriculturalland-and-environment/waste-management/agricultural-waste-managementpractices

## **Disaster Recovery**

The recovery phase concentrates on restoring farm operations to their pre-disaster conditions and recovering from the economic impacts of a disaster.

Disaster recovery includes such activities as repairing or rebuilding a damaged or destroyed barn, replacing its contents, and returning poultry, equipment, and other farm assets.



Recovery costs may be beyond the capabilities of the producer, requiring insurance or other outside financial assistance.

A current asset inventory will allow for quick identification of lost or damaged assets. Asset lists are often required by insurance companies and government financial assistance programs to help offset the financial impact that producers may face.

There is also a strong relationship between sustainable recovery and mitigation of future disasters. The recovery period is often the best time to design for protection against future threats.

## **Mitigation**

Recovery after an emergency is an excellent opportunity to consider measures to mitigate against future disasters.

Examples might include relocating farm assets to a safer area on the farm, rebuilding new structures on higher ground in a flood-prone area, or rebuilding in a cleared section and utilizing fire-resistant materials where wildfires are possible.



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**Template Farm Emergency Plan** 

# **Emergency Plan for**

Farm

Premises ID:

## **Contact Information**

Every emergency plan should include basic information about the operation to help outside organizations provide appropriate assistance. While there is no need to reproduce farm information you may have elsewhere, ensure the following details are readily available.

Farm Name		Premises ID
Address		
Directions		
Office phone	Mobile	Email
Owner's Name		
Address (if different from above	)	
Home phone	Mobile	Email
Manager's Name (if different fro	om above)	
Address		
Home phone	Mobile	Email
How many individuals are norma	ally on the farm?	
Record here the names and pho	one numbers of family, staff	, and tenants on the farm:
Other information		

## **Emergency Contacts**

Contacting outside agencies and organizations for assistance is one of the most important actions when emergencies strike. Many farmers today carry important contact information on their mobile devices. A printed list of emergency contacts may allow family members or staff to make important contacts on behalf of the owner/ operator.

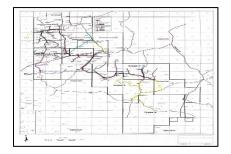
Organization	Name	Telephone
RCMP / Local Police		9-1-1
Ambulance		9-1-1
Fire / Rescue		9-1-1
Spill Reporting		1-800-663-3456
Poison Control		1-800-567-8911
Municipal or Regional District Office		
BC Min. of Agriculture, Local Office		
Veterinarian (local)		
Veterinarian (provincial)		1-800-661-9903
Regional Agrologist		
Range Agrologist		
BC Min. of Environment, Local Office		
Emergency Program Coordinator (local)		
Feed Supplier		
Friend / Neighbour		
Friend / Neighbour		
Out-of-Province Contact		
Faith-Based Organization		
Fuel Dealer		
BC Poultry Association		604-625-6400

Organization	Name	Telephone
Insurance Agent		
Internet Provider		
Machinery Dealer		
Natural Gas Company		
Plumbing / Heating		
Electrical Company		
Electrician		
Telephone Provider		
Tenant		
Employee		
Towing Service		
Trucker / Hauler		
Other		

## Mapping

A mental map may be all you require for day-to-day operations. However, dealing with actual emergencies often calls for assistance from others who may not share your knowledge of the farm.

Detailed maps are essential for engaging response agencies, such as the local fire department, flood response teams, or the BC Wildfire Services.



A map is also indispensable in planning for emergencies. It can show the relationship between hazards on your land, such as flooding, and your assets. Maps help you develop practical response steps, such as moving animals to high ground or to areas of natural shelter.

It can be a challenge to prepare maps that are easily understood and can be readily shared with others, such as workers, neighbours, or first responders. Here are a few ideas:

- Existing Maps: One simple way to include an existing map in your Emergency Management Guide is to photograph or scan it, and include a printed copy in this binder. For instance, if you participate in the Environmental Farm Plan Program, you may already have a map of your farm and operations, which you could add to your Farm Emergency Plan.
- **Obtain a Map**: You may be able to obtain a map of your farm acreage from your marketing board, your local government office such as the municipality or regional district, or from a provincial agency.
- Google Earth: You may wish to create a new map using readily available resources, like Google Earth. Google Earth is a free, downloadable program that allows you to zoom in to each section of your farm and to tag, label, and draw a boundary around a piece of property. To download Google Earth, see: www.google.com/earth/
- **DataBC**: The provincial government offers a number of useful files that can be used with Google Earth. One service is the DataBC site. It can show with accuracy the boundaries of your private, rented, or leased land. Note that this feature is only available in Google Earth, not Google Maps. The DataBC site can be accessed at: <u>www.data.gov.bc.ca/</u>

#### Sample

Farm

Map

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Approximate Scale: 1/4 in. = 10 ft.

#### Legend (sample)

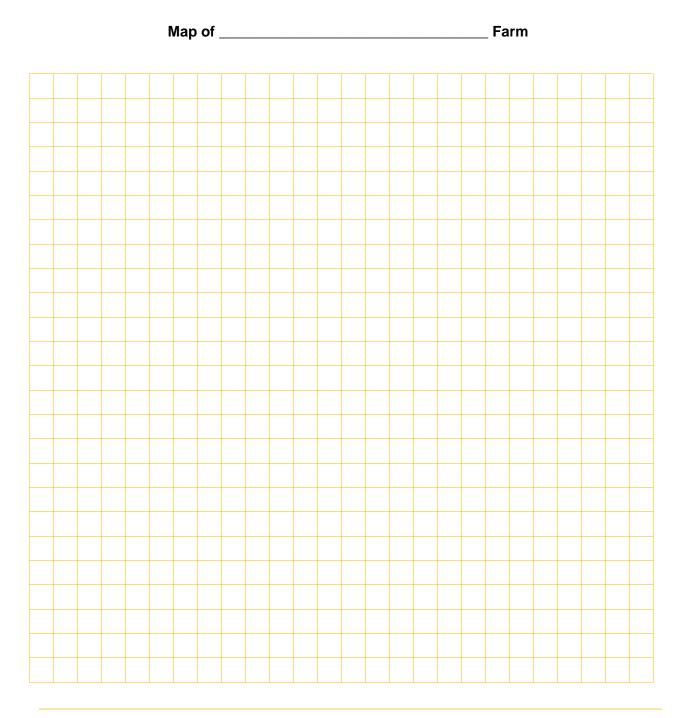
- Property boundaries (owned; leased)
- Structures (i.e., house, sheds, storage buildings and yards, barns, with exits)
- Roads and farm access points; railways
- Watercourses (ponds, streams. wetland, with flood boundaries)
- Utility lines and shut-off points (i.e., electricity, pipelines, oil or gas, water)
- Water wells
- High risk areas (fuel storage, pesticide storage, manure storage)
- Safety and response equipment (fire extinguishers, spill and response kits)
- Slope of land
- North Arrow
- Scale

## Mapping

Maps contains simple features and symbols that communicate the essentials of your farming operations – locations of possible farm hazards, utility shutoffs, safety equipment, and general guidance for emergency responders. Depending on your operation, you may consider one map of the farmstead and a second map of the farm and surroundings.

and to be

The following grid may assist in sketching the farm, if appropriate maps do not exist.



## **General Emergency Management Considerations**

The following four components contribute to an effective emergency management plan on your farm. Check any actions that apply. This checklist is not exhaustive, and you will think of other actions specific to your poultry operation.

## **Prevention and Mitigation**

Hazard mitigation is any action taken to eliminate or reduce the long-term risk to life and property from natural or technological hazards.

The farm and buildings should be surveyed to determine mitigation procedures based on the hazard risk. Some examples of hazard mitigation include:



- Farm structures should comply with the National Farm Building Code of Canada.
- Barns and buildings subject to the National Building Code should be rebuilt or repaired to that standard.
- Farm buildings are constructed or moved to high ground as protection against flooding.
- Homes and barns are equipped with straps or ground anchors to withstand severe winds.
- Glass windows and doors are replaced or boarded with sturdy material.
- Trash piles and burial sites are kept tidy or moved to where they present no hazard.
- Toxic chemicals, such as pesticides and herbicides, are stored in secured areas.

Mitigation may be farm and hazard-specific. To prevent standing water from collecting in the immediate vicinity of poultry houses, flood mitigation on your farm might include the following actions.

- Dig channels and place absorptive vegetation to redirect and avoid standing water.
- Adhere to building setbacks to avoid the water's edge.
- Construct levees or permanent barriers to control flooding.
- Drain ponds that could cause flooding and keep them below critical levels.
- Drainage furrows are kept sodded.
- □ Other ideas on your farm:

## **Business Management**

Running a poultry business means expecting the unexpected. However, when events out of the ordinary occur, the resulting damage to your business can be catastrophic if you don't have a plan in place. Emergencies can result from hazards (i.e., fires, floods, disease) or be human-induced (i.e., information loss or identity theft).

While we can't control the weather or stop other people's actions, we can take steps to minimize farm business risks. Three suggestions are:

- Farm Facility Security Measures
- Farm Information Security Measures
- Appropriate Insurance

## Farm Facility Security Measures

The degree of security for facilities will depend on the location of your farm and your level of comfort. Check the following physical security measures in place for your farm.

- □ I have a fence around the property.
- □ I have security gates at all access points.
- □ I have motion lights around the yard/buildings.
- □ I have a security alarm for the office.
- □ I have locks on office and barn doors.
- Other: \_\_\_\_\_\_

## Farm Information Security Measures

Organizing your office and proper filing of paper, electronic files, and reports can minimize time spent looking for information before, during and/or after an emergency. Checkmark the farm measures in place:

- □ I have surge protection for all my computers.
- I regularly back up files to an external drive or use online storage.



Historical paper production records are secured in a safe place.

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- □ I keep original or important papers in a fireproof safe or safety deposit box.
- □ Computer passwords are accessible to family and staff who might need them.

### Appropriate Insurance

While no one likes to pay insurance premiums, it is a comfort to know that all will not be lost in a single incident. A farm business must weigh the risks and benefits of commercial insurance. Indicate by checkmark the following insurance provisions in place for your farm.

- □ I have meet regularly with my insurance provider to discuss my farm's insurance options.
- □ I have sufficient insurance for my present farm operation.
- □ I have recorded the process for notifying my insurance representative of a loss event.

### Farm Safety

An effective health and safety program can protect your family, farm workers and workplace from preventable injury and damage. Reduced worker injuries and equipment damages keeps your staff on the job, and avoids unnecessary costs to the business. AgSafe offers numerous farm health and safety resources at: <u>http://agsafebc.ca/</u>.

Also see the "Hazardous Material" tab of this Guide.

Checkmark the following safety measures in place at your farm:

- Family and employees work in accordance with the Regulations for Occupational Health and Safety in Agriculture (WorkSafeBC).
- At all times, appropriate safety measures are used.
- Only qualified personnel are allowed to operate machinery or equipment.



- Chemicals are only handled by someone who is properly trained and/or under the direction of someone who is trained.
- Extra riders are not permitted on motorized equipment.
- □ "Horseplay" is not allowed in work areas.
- Alcohol or drug use is not allowed during work hours.
- Appropriate personal protective equipment is available and worn.
- □ All injury and property damage accidents are reported promptly.
- □ Family and employees use safety apparatus and protection required for farm equipment.
- U Workers follow instructions, do not take chances, and ask if they are unsure of a task.

All unsafe conditions or hazards are reported to me or the farm manager.

## **Emergency Planning**

Preparing for an emergency saves time and can reduce damage to your farm. Although it may be impossible to guess which measures will be most effective, past emergencies point to the following items. Check the items that are in place for your farm:

- □ I have information on hazards affecting the farm:
  - Disasters that are most likely to affect my farm
  - □ Areas of the farm that are most vulnerable
- I know the warning signals for my area and will stay alert for emergency broadcasts.
  - BC Emergency Alerting System on radio or TV
  - Weather radio alerts
  - Other news sources radio, television, internet
- □ I have stockpiled supplies for protection, including:
  - □ Sandbags and plastic sheeting in case of flood
  - Lumber and plywood to protect windows
  - Extra fuel for tractors and vehicles
  - □ Fire extinguishers in barns and vehicles
- □ I have identified protected areas (e.g., higher elevation for flood, open fields for wildfire) if needed, where I can move:
  - Animals other than poultry
  - Equipment
  - □ Feed, grain, pesticides, herbicides
- □ I have made a safe environment for my poultry, including:
  - Assess the stability and safety of barns and other structures.
  - □ Remove dead trees or other debris around poultry facilities.
  - □ Remove or secure any loose items, such as lumber or feed troughs.
  - Assure wiring for heat lamps or other electric equipment is safe and away from flammable materials.
- □ I have prepared family and employees, including:
  - Device the set of the
  - □ Keep them informed of the farm emergency plan, and review with them regularly.
  - □ Establish a phone tree with contact information for all employees.
  - □ Establish an out-of-area contact.
- □ I have a list of contacts that may be able to assist in an emergency, including:

### Quick Disaster Readiness Checklist

- Poultry health and vaccination records up-todate and filed.
- ✓ Farm animal inventory is current.
- Cash is available for emergency purchases (credit cards may not work)
- ✓ Animal feed is on hand for 2 weeks.
- ✓ We have a secondary source for water supply.
- Emergency equipment and first aid supplies are available.
- We have arranged to partner with other producers.
- ✓ We have coordinated plans with the local government and agricultural groups.

- **D** Businesses that provide farm services
- □ Agriculture associations active in the region
- Neighbours

## **Emergency Response**

Emergency response is specific to the event that has impacted your farm operation, and is detailed in a separate section of this Guide. The following checklist identifies general procedures that should be enacted when responding to any emergency. Checkmark the elements of your farm emergency response plan.

### 1. Rescue, evacuate and render aid

- □ I will evacuate anyone injured, and minimize the danger of further harm.
- I will render aid in accordance with my level of first aid training.
- □ I will implement facility shut-down procedures in an emergency (i.e., electrical power, natural gas).
- I will use emergency response equipment to prevent further damage to people, property, and farm assets, if appropriate and safe to do so.

### 2. Report and request assistance

### Quick Facts - During a Disaster

- Both farm animals and humans can become disoriented during a disaster.
- The proper management approach will vary with each type of disaster.
- Farm animal management priorities during a disaster should focus on immediate safety.
- □ I will inform local emergency responders or any damage or injury at the farm, including:
  - Location
  - Victims and nature of injuries
  - Details of emergency (type, extent, etc.)

### 3. Manage other family, workers, etc. that remain on farm.

- I will provide information to farm personnel about the emergency and any safety measures.
- □ I will provide guidance for next steps in emergency response.

# 4. Contact others who are associated with farm (i.e., owner, manager, neighbors, if applicable).

- □ I will provide information regarding the emergency.
- □ I will request further assistance, as required.

# 5. On their arrival, I will direct emergency response personnel to the site of the emergency.

- □ I will provide location of victims or facilities that require attention.
- □ I will provide factual information to direct and assist responders.
- □ I will cooperate when requested or ordered, and will assist to the fullest extent possible.

## **Disaster Recovery**

Several specific actions will assist a farm that is in recovery after a disaster strikes. Check the actions below you would like to accomplish in disaster recovery.

- I will ensure safety is established at all damaged facilities.
- I will take appropriate measures to prevent further damage.
- □ I will enact standard biosecurity procedures.
- I will inspect and analyze the extent of the damage to the farm facilities.

### **Quick Facts - After a Disaster**

- Management priorities should include getting the operation normalized.
- Post-disaster recovery should lead to pre-disaster mitigation
- I will make an assessment of all damages, and take photos and video recordings if possible.
- □ I will record the estimated loss values for insurance claim purposes.
- □ I will determine if the facility is safe for both poultry and employees.
- □ I will ensure site security.



# **Common Farm Hazards**

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## **Poultry Disease**

## Summary

Some farm diseases are significant because they are highly contagious, spread rapidly, and cause severe animal illness. In Canada, they are often called foreign animal diseases (FADs). The effect on poultry producers can be devastating and result in loss of income, public confidence, restrictions on movement, and disruption of trade. Animal disease outbreaks can cost British Columbia producers millions of dollars. Even an outbreak in another province or country can impact the supply chain within BC.



#### **How Animal Disease Spreads**

<u>Direct contact</u>: Entry of disease agent into open wounds, mucous membranes, or skin; may occur by contact with blood, saliva, nose-to-nose contact, rubbing, or biting from an infected animal.

<u>Mechanical transfer</u>: Transfer by inanimate objects (e.g., vehicle, clothing, footwear).

<u>Aerosol</u>: Infectious droplets passed through the air from one animal to another.

<u>Ingestion</u>: Consumption of disease agent in contaminated feed or water or by licking or chewing contaminated objects.

<u>Vector-borne</u>: Spread by insects, rodents, birds (i.e. flies, starlings, mites, rats).

### **Disease Definitions**

<u>High Consequence Farm Animal Disease</u> – A disease that poses a significant threat to animal agriculture in Canada for several reasons. It spreads rapidly and infects a large number of animals; has a high economic impact; negatively impacts domestic and/or international trade; results in severe disease or death in most infected animals; can infect multiple species; is difficult to detect; cannot be prevented through vaccination; and/or, can infect and cause disease in humans.

<u>Emerging Disease</u> – A disease that is relatively new, has increased in occurrence, or has spread to new locations or species. High Pathogenic Avian Influenza (HPAI) is an example.

<u>"Exotic" or Foreign Animal Disease</u> – A disease not currently found in Canada, but is present in other parts of the world, thereby making it a potential biological threat to Canadian farms.

The BC Poultry Association has published the BC Poultry Biosecurity Reference Guide to assist poultry producers in developing biosecurity plans. It is organized around 19 Mandatory Standards adopted by the BC poultry industry. Follow this link:

https://bcbhec.com/wp-content/uploads/2015/03/BiosecurityProducerManualDecember2012.pdf

## **Mass Carcass Disposal Options in BC**

Carcass disposal may be a challenge for poultry farms because provincial regulations apply to disposal, even for a small number of carcasses. A distinction must be made between common mortality and death caused by federally or provincially reportable diseases, since regulation requirements may differ in the latter. Mass Carcass Disposal will be required if a notifiable disease outbreak occurs in a poultry operation. Contact your veterinarian, the CFIA, or the BC Ministry of Agriculture immediately if you suspect a disease outbreak.

## Resources

#### **CFIA Reportable Diseases**

http://www.inspection.gc.ca/animals/terrestrialanimals/diseases/reportable/eng/1303768471142/1303768544412

### College of Veterinarians of BC

https://www.cvbc.ca/

### BC Environmental Farm Plan Program

http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/programs/growingforward-2/environmental-farm-plan

## **Poultry Disease**

## Emergency Plan for \_\_\_\_\_

Farm

## **Prevention and Biosecurity**

- □ I isolate new introductions or returning animals.
- □ I monitor my animals for illness, including:
  - Observing animals daily for signs of sickness.
  - Identifying sick animals should be as soon as possible.
  - Contacting my veterinarian immediately.
- □ I implement strict biosecurity measures on my farm, including:
  - □ Restricting access to my property and my poultry.
  - □ Only allowing essential workers and vehicles on the premises.
  - □ Prohibiting visitors near animals unless absolutely necessary.
  - Ensuring that I, all personnel, and allowed visitors have clean footwear (disposable boots), clothes (coveralls), or other protective clothing.
- □ I clean and disinfect, including:
  - Cleaning and disinfecting clothes, shoes, equipment, vehicles and hands after contact with animals.
  - □ Cleaning and disinfecting premises and equipment regularly.
  - □ Not sharing equipment unless items have been cleaned and disinfected.

### Response

- I will contact my local veterinarian; alternates are the Provincial Animal Health Center or CFIA District Office.
- □ I will isolate birds and will not move any birds, material or equipment out of the affected barn or off the farm.
- I will cooperate with veterinarians and officials, and follow guidance to prevent disease spread.
- I will monitor the flock for signs of illness, and report any observations to my veterinarian or the Animal Health Center.
- I will obtain disposal guidance from my veterinarian, the CFIA or the Ministry of Agriculture.





## Mass Carcass Disposal

Disposal options will depend on specific conditions of the farm at the time of emergency. The Ministry of Agriculture may have updated information from GIS mapping as to disposal suitability in the region. Before initiating any carcass disposal activity, be sure to meet compliance requirements and obtain authorizations. Your municipal or regional district Emergency Program Coordinator and the BC Ministry of Agriculture can provide guidance.

### Preparation

My preparedness steps for poultry disposal include the following:

- I have a plan for dealing with poultry mortality.
- I have consulted with my veterinarian or the Ministry of Agriculture to determine what disposal methods are allowable.
- I have consulted with my veterinarian or the Ministry of Agriculture to identify appropriate disposal locations.
- I have reviewed my disposal plan with a representative, such as my Regional Agrologist or local Emergency Coordinator.



□ I have 24/7 contact information for my veterinarian in the event a disease outbreak or the suspicion of a disease.

### Response

My response steps for poultry disposal include the following:

- □ I will immediately consult with my veterinarian, the CFIA, or the Ministry of Agriculture if an avian disease is suspected or confirmed, and before any disposal activity.
- □ I will ensure my poultry disposal method complies with appropriate local government bylaws, provincial and federal regulations.
- □ I will record deaths, numbers, disposal location, disposal method, and other details.

### **Notes**

## **Structure Fire and Wildfire**

## Summary

Fires can be devastating to a farm. Within several minutes, precious animals can be lost, as well as thousands of dollars in woodlots, forage, equipment and infrastructure. Although some structure fires are related to wildfires, the vast majority are not.

## **Structure Fires**

All farm buildings, sheds, and residences are exposed to possible loss from fire. Farm structures usually contain plentiful materials to serve as fuel,



and are typically well-ventilated. A heat source to ignite a fire can take many forms, such as

It is important to remove fuel sources from around the barns to minimize fire risk, due to the challenge of moving large numbers of poultry. spontaneous combustion of bedding, litter, or hay; exposed wiring from carelessness or gnawing by a pest; unsecured heat appliance; engine exhaust spark; lightening; etc. Almost all structure fires are preventable. Many routine protection and prevention techniques can reduce the risk of a structure fire.

## **Wildfires**

Wildfires can spread at an astonishing rate. In British Columbia, approximately half of the wildfires are caused by human activities and half occur naturally from lightning strikes. If your farm is anywhere near a wildland region, sooner or later you will likely contend with the spread of a wildfire.

Your first line of defense for any fire is knowing steps to minimize risks and reduce losses on your farm.

## **Smoke Inhalation**

Smoke inhalation from either wildfire or structure fire causes immediate irritation to the lining of a bird's respiratory system. Damage can occur within a few minutes in areas of high smoke concentrations, or within hours in areas with low smoke concentrations. Most farm animals die from the smoke inhalation, not from the fire.



## Resources

### Wildfire Loss Prevention

http://bcwildfire.ca/Prevention/

## Current Wildfire Situation http://bcwildfire.ca/

Wildfire Information:

1-888-3FOREST (1-888-336-7378)

### **Emergency Management BC**

#### Four things to know about barn fires

- 1. Never put personal safety in jeopardy during a barn fire.
- 2. In 3-4 minutes, the barn can fill with smoke. Most farm animals die from smoke inhalation.
- 3. A structure can be completely engulfed in less than 6 minutes.
- 4. The vast majority of barn fires are preventable.

http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-responserecovery/fire-safety/wildland-urban-interface-fire-information

### FireSmart Manual

http://www.bcwildfire.ca/Prevention/firesmart.htm

### Additional information to consider adding to this binder:

- Contacts for wildfire and structure fire response
- Current asset inventory lists

# Structure Fire and Wildfire

# Emergency Plan for \_\_\_\_\_ Farm

# Structure Fires

# Preparation

My preparedness steps for structure fire include the following:

- □ I have prohibited smoking in and around the barns.
- I have inspected electrical systems regularly and correct problems.
- □ I have removed accumulated dust from electrical fixtures, heaters, etc. on a regular basis.
- □ I have kept the number of appliances at a minimum in the barn.
- □ I have space heaters and heat lamps only for when someone is in the barn and am sure birds cannot reach them.
- □ I have installed portable fire extinguishers near the exits to all buildings and have them recharged when necessary.
- I have ensured that all farm workers and family members know where extinguishers are located and how to use them.

# Response

My response steps for structure fire include the following:

- □ I will evacuate employees/ visitors to agreed safe meeting place.
- □ I will notify the fire authority immediately.
- □ I will assess the fire. I will attempt to contain or extinguish a small fire only if this can be done safely.

# Wildfires

# Preparation

My preparedness steps for wildfire include the following:

- □ I have reviewed the wildfire history in my area, such as with neighbours, local emergency coordinator, forestry, etc.
- □ I have identified and maintained the equipment (i.e., harrow, plow, water truck, tools) needed to fight an approaching grassfire or wildfire.
- □ I have cleared vegetation and wood debris within 10 metres of any farm structure on a regular basis.

- □ I have reduced vegetation and wood debris within 30 metres of farm structures by thinning and pruning on a regular basis.
- □ I have identified water sources that could be used for fire suppression.
- □ I have ensured litter or hay is dry before storing, in a dry, covered area, if possible.

# Response

My response steps for wildfire include the following:

- □ I will listen to the local radio or television for situation developments and instructions.
- □ I will follow evacuation orders and prioritize my family's safety.
- □ If I have proper equipment, I will attempt to build firebreaks near my farm boundaries, but only if this can be done early and with caution.

# Flooding

### **KEY MESSAGES**

- 1. Your goal is to keep your poultry flocks high and dry.
- 2. Your local Emergency Coordinator can provide up-to-date flood information and forecasts.
- 3. Flood mitigation is much more effective than flood response for poultry operations.

### Summary

Floods can impact both poultry flocks and human health. Producers can plan more effectively after assessing the flood risk on various parts of the operation.

Response options for flooding will depend on several factors, such as current snow load, ground conditions, and the current or forecasted temperatures and precipitation. Response options will also depend on local topography, number and types of poultry houses on the farm, and present method of manure disposal.

# Resources

#### **River Forecast Centre**

https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikesdams/river-forecast-centre/

#### **Emergency Management BC**

http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery

### Flood Preparedness

https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/businessmarket-development/emergency-management/freshet-and-flood

#### Floodplain Maps

Floodplain maps are available for your area at the BC Ministry of Environment website: <u>https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/</u> <u>drought-flooding-dikes-dams/integrated-flood-hazard-management/flood-hazard-management/floodplain-mapping</u>

#### Additional information to consider adding to this binder:

- Ministry of Environment floodplain map.
- Location on farm map indicating where poultry could be moved in a flood threat, if feasible

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# Emergency Plan for \_\_\_\_\_

Farm

# Preparation

My preparedness steps for flooding include the following:

- I have reviewed flooding potential in my area with the municipal or regional district Emergency Program office.
- □ I have investigated the option of sheltering poultry on higher ground or in other buildings.
- □ I have identified others who could assist in moving my flock on short notice, if applicable.
- □ I have adequate poultry flock consumables on hand above the flood plain, if applicable.
- □ I have considered marketing birds that are approaching market weight.
- I have identified high ground to move equipment (i.e., motors, tractor, tools, pesticides, fertilizer or other chemicals.
- □ I have the ability to shut off electrical power to areas where flooding is possible.
- □ I will reduce manure in pits, if used, to the half-way point to prevent the bottom of the pit from breaking due to hydrostatic forces from flood.
- I will spread manure on the land at least two weeks prior to the expected flooding of those fields, if applicable.
- □ I have ensured generator(s) are operational, on high ground, and extra fuel is on hand.
- □ I have ensured wellheads are protected, if applicable.

# Response

My response steps during flooding include staying informed by:

- Listening to the radio or television for situation developments and instructions.
- □ Knowing which local stations report flood levels and warnings.
- □ Following evacuation orders, and ensuring my family's safety.
- Knowing that early and immediate action is required to move poultry in rising water situations.

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# **Extreme Weather and Temperature**

# Summary

Extreme temperatures include severe winter weather, high temperatures, and possible drought. These conditions may contribute to extra stress on poultry. Extreme weather events (e.g., storms, high winds, heat, lack of rainfall) may also result in subsequent emergencies, such as fires, flash floods, and utility outages.

Poultry cannot wait for water, feed, heat, and

ventilation. Normal feeding may be interrupted during an emergency. Depending on feed availability and open roads, suppliers may prioritize which farms to service first. The correct feed may not always be available, and you may have to compromise. It may be necessary to ration feed, feeding only enough for maintenance and reducing the hours of daylight in the houses.

### **Extreme Heat**

Extreme heat can be hazardous to your poultry operation. Water sources are often limited during the precise time when water needs increase. Reduced production and heat-related illnesses can occur. Protect your flock during extreme heat situations.

#### **Extreme Heat Key Messages**

- Extreme heat is generally more stressful than extreme cold.
- Poultry require more water during extreme heat / drought conditions.



#### **Drought**

Drought is a slow onset emergency that can be devastating to your poultry operation. Water quantity and quality may be compromised, and consider testing if you suspect undrinkable water or toxicity.

Automatic waterers should be tested regularly. An alternate water supply system is prudent. Planning ahead can protect the health and well-being of your flock.



# **Extreme Cold / Winter Conditions**

Extreme cold challenges delivery systems, including water, feeding, heating, and ventilation.

Backup arrangements should be in place, and emergency generators should be maintained regularly.

Heavy snows may accompany extreme

#### **Extreme Cold Key Messages**

- Poultry may require additional feed to meet increased energy requirements.
- An alternate poultry house heating and watering source is prudent.
- Emergency generators should be tested regularly.
- The snow load capacity of your poultry houses should be known.

winter conditions. You should be aware of the snow load capacity of your poultry structures, as is shown by the picture below.

# Resources

BC Ministry of Environment - Drought Info

https://www2.gov.bc.ca/gov/content/ environment/air-land-water/water/droughtflooding-dikes-dams/drought-information/

### Government of Canada

http://www.getprepared.gc.ca/indexen.aspx





# Additional information to consider adding to this binder:

• Plans for water, sheltering, and feeding during extreme temperatures

# **Extreme Weather and Temperature**

# Emergency Plan for \_\_\_\_\_

Farm

# Extreme Heat / Drought

### Preparation

My preparedness steps for extreme heat include the following:

- □ I have cool sheltering available:
  - Ensure fans, evaporative systems and other cooling equipment are in good working order.
  - Reduce radiant heat in the poultry barn with adequate ceiling insulation.
- □ My flock always has access to cool, clean water:
  - □ Check the water delivery system periodically for proper functioning.



- □ Shade any above ground water lines or storage to keep water cool.
- □ I have adequate ventilation:
  - □ Install fans; open windows or roof ventilation to increase air movement in buildings.
  - □ Cut tall grass and weeds outside the poultry barns.
- □ I have prepared for possible power outages:
  - Recognize that overloaded energy systems due to high temperatures can result in outages.



### Response

My response steps for incidents of extreme heat/drought include the following:

- □ I will provide cool, clean water:
  - □ Check water delivery systems regularly.
  - Monitor the water temperature and keep it cool. If possible, keep water storage in a shaded area.
- □ I will keep poultry at the appropriate temperatures:
  - □ Cool the flock with sprays or mists of water, if feasible.
  - Avoid overcrowding and reduce number of birds in an area.
  - □ Shift feeding to evening after peak temperatures, if applicable.
  - Limit the handling of the flock, and let birds rest during the heat of the day.
  - Avoid transporting birds during days of extreme temperature.
- □ I will monitor flocks for signs of dehydration and heat stress.

# **Extreme Cold / Winter Conditions**

### Preparation

My preparedness steps for extreme cold include:

- Arranged for feed supplies and alternate routes, in case of road closures.
- Assured all generator units are functioning, with adequate fuel.
- □ Identified alternate sources of generator fuel.
- □ Considered back up water supply system.
- □ Installed alternative heating source, if required (see Utility Outage section).
- Planned for personal needs (i.e., stored food) during prolonged road closures.

For poultry house preparation, I have considered if:

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- □ Shutters, doors, windows are designed to keep out cold and wind.
- Alternative heat sources are on standby and can be safely placed
- □ Floor space for birds is sufficient
- □ Additional bedding is available
- □ Ventilation is adequate and unobstructed

### Response

My response steps for incidents of extreme cold and winter weather include:

For Emergency Feeding, I will:

- □ Ensure feed is available to all the flock.
- Check that mechanical feeding equipment is functioning properly.

For Emergency Water, I will:

- Ensure adequate water is available and accessible.
- Implement secondary watering system, if necessary.

For Emergency Heat, I will:

### **Heat Stress**

There are many signs of heat stress in poultry. Three common signs are

- open mouth panting
- wing spreading
- squatting close to the ground

By adjusting the position of their feathers, the birds are trying to lose heat. By gasping they are losing water in their breath and cooling themselves by evaporation from the surface of the lungs.

- Implement secondary heat source, if necessary, making sure it is not a safety hazard.
- □ Ensure heat is reaching the entire flock.

For Animal Welfare, I will:

- □ Ensure flock floor space is adequate.
- Monitor flock for signs of illness, dehydration, symptoms of cold weather, and seek vet care.
- Record flock death numbers, and dispose of animal carcasses appropriately (see Animal Disease section.)
- □ Record losses and apply for insurance reimbursement, if eligible.

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# Earthquake

# Summary

The western portion of British Columbia contains an earthquake zone where more than 1,200 small earthquakes are recorded each year. There is a real risk that one of these could be "the big one." It could happen at any time of the day or night; on a weekend or a workday, in any season and in any weather.

# What to expect during an earthquake

Small or Moderate Earthquakes:

- These may last only a few seconds and represent no emergency risk.
- Minor rattling of objects may occur.
- You may feel a slight quiver under your feet.
- If you are close to the earthquake source, you may hear a loud bang followed by shaking.



### Large Earthquakes:

- These events can last up to several minutes and constitute a natural disaster if the magnitude is sufficiently large.
- The ground or floor will move, perhaps violently, possibly making you feel dizzy and/or unable to walk.
- If you are far away from the source, you might see swaying buildings or hear a roar.
- Furnishings and unsecured objects could fall over, slide across the floor, or be thrown with damaging force across the room.
- Windows may break, fire alarms/sprinkler systems may activate, and power may go off.

# Resources

### Government of Canada

http://www.getprepared.gc.ca/

### Emergency Management BC

http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-responserecovery/preparedbc/know-the-risks/earthquakes

# Additional information to consider adding to this binder:

- Family Earthquake Response Plan
- Farm map, including earthquake awareness (i.e., farm hazards, utility cut-offs, family assembly area)

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# Emergency Plan for \_\_\_\_\_

Farm

# Preparation

My preparedness steps for earthquake include the following:

- □ I have an earthquake response plan that includes family and employee safety, and contains information on farm readiness.
- □ I know the probability and expected intensity of an earthquake at my farm site.
- □ I know the stability of the soil throughout my farm (i.e., soft soils that are prone to liquefaction, subject to fault rupture).
- □ I know which of my farm structures are seismically sound and which are vulnerable.
- □ I am aware of secondary or complicating natural hazard exposure on my farm (i.e., landslides, rockfalls, flooding).
- I know where the vulnerable locations are in farm structure. (e.g., windows, heavy objects, tall storage that could tip).
- I have secured, strapped, or braced equipment, pumps, tanks, piping, cabinets, and storage racks, or relocated heavy items to lower shelving.
- I have basic emergency gear (i.e., sturdy shoes and protective clothing, axes, pry bars, chain saw, fire extinguishers, battery-operated radio, portable generator) stored in an accessible location.

A Sixth Sense

Certain farm animals can 'sense' upcoming seismic activity seconds before shaking starts. Have heightened awareness for an earthquake if, as a group, your poultry, pets, or other farm animals exhibit unusual behavior.

- I know where shut-off valves are for natural gas, electrical power, water, etc. I have instructed farm workers and family members regarding how to turn off these utilities.
- □ I have discussed farm and home earthquake insurance with my insurance provider.

# Response

My response steps during an earthquake include the following:

- If I am outdoors, I will stay outside and away from buildings, trees, power lines, and other structures. I will drop to the ground and cover my head.
- If I am indoors, I will drop under something that is stable and solid, cover my head and torso, and hold onto the object that I am under.



- □ After the shaking has stopped, I will wait another minute. I will exit carefully and get away from buildings and tall structures.
- □ I will stay calm. I will treat injured persons first myself, then others.
- □ I will put on sturdy shoes and protective clothing.
- I will check for utility failures and hazards. (i.e., fires, gas leaks, downed power lines, chemical spills)
- □ If I smell natural gas or see damaged utility services, I will turn the appliance off at the source, if possible.
- I will suppress small fires if I have the proper extinguishers or water sources, if safe to do so. If I'm in doubt, I will call local fire department.
- □ If everyone is safe, I will call my out-of-town emergency contact to report family status.
- □ If I have nearby neighbours, I will check in and assist them as necessary.
- I will check my farm buildings for structural damage and hazards. (i.e., weakened walls, broken glass). I will enter only if safe.
- □ I will check my poultry, realizing that their behavior may be erratic.
- □ I will assess the feasibility to stay at the farm. If not, I will make plans for family members and poultry according to my emergency plan.

# **Hazardous Materials**

# **Summary**

Farmers may have to deal with hazardous materials accidentally spilled on or near their land, such as agri-chemicals, fertilizers, and petroleum products. Farm operators have a responsibility to protect the environment and the public, as well as their operations after a spill.

You must be aware of regulations that apply to safe farm operation and provide a safe workplace. Knowledge of a few basics can go a long way toward meeting these responsibilities.



# Spill Reporting Requirements

Spill amounts above the following volumes must be reported to Emergency Management BC at 1-800-663-3456:

Material Spilled	Reportable Amounts
Fertilizer spills, granular or liquid	Greater than 50 kg or 50 L
Pesticide spills	Greater than 5 kg or 5 L
Petroleum spills	Greater than 100 L
Manure spills	Greater than 200 kg or 200 L

An on-farm spill kit should include the following items:

- 1. Personal Protective Equipment (chemical-resistant), i.e., gloves, footwear, apron, coveralls, eye protection, respirator
- 2. Containment "snakes" or "tubes" for liquids
- 3. Absorbent materials (i.e., absorbent clay, kitty litter, fine sand, sawdust, vermiculite)
- 4. Plastic cover for dry spills
- 5. Spray bottle filled with water to mist spills
- 6. "Caution tape" to isolate the area
- 7. Shovel, broom, and dustpan
- 8. Heavy duty disposal bags with ties; Duct tape
- 9. Sturdy plastic container and lid to store kit
- 10. A permanent marker to label contents



# **Off-farm Spills**

Farmers may also be impacted by a spill of hazardous materials nearby. Most farms have highways, railways, or pipelines nearby. After a spill, local emergency response organizations will be helpful in identifying the materials involved and advise farmers on response actions, including possible evacuation.



### Workplace Hazardous Materials Information System (WHMIS)

WHMIS is a Canada-wide system that has been developed to provide information about the safe handling and storage of hazardous materials.

WHMIS programs include appropriate product labeling and handling, worker education and training, procedures identified for safe handling, storage, disposal and emergency cleanup, and an annual program review.

Material Safety Data Sheets (MSDS) are information sheets that should be readily available for any controlled product used on the farm.

All farmers should take a WHMIS course and have a WHMIS program in place. More information can be found at <u>http://www.agsafebc.ca/</u>

### Resources

AgSafe

www.agsafebc.ca/

#### **Emergency Management BC**

http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery

### WorkSafeBC

http://www2.worksafebc.com/Portals/Agriculture/Home.asp

### BC Environmental Farm Plan Program

https://www.bcac.bc.ca/ardcorp/program/environmental-farm-plan-program

#### BC Ministry of Agriculture Manure Spreading Advisories

https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment/ soil-nutrients/nutrient-management/manure-spreading-advisories

### Additional information to consider adding to this binder:

• WHMIS and MSDS sheets place in accessible file, or in a separate binder.

# **Hazardous Materials Release**

# Emergency Plan for \_\_\_\_\_

Farm

# Preparation

My preparedness steps for management of hazardous materials include the following:

- □ I have a list of the controlled products and hazardous materials on my farm.
- I know the packaging label information on proper use, handling, and actions in case of a spill.
- I have a copy of the Material Safety Data Sheets (MSDS) for all chemicals used, and I keep copies in an accessible location.
- I have noted locations for chemical storages, fuel tanks, fertilizer storage, etc. on a farm map.
- □ I have a Spill Kit and keep it in a location that is accessible by farm workers.
- My farm workers have been trained on the response procedures for a spill and know where spill kit is located.
- I have fire extinguishers in appropriate locations, easily accessible to all workers.
- I use appropriate containers to store my chemicals.
- After using application equipment, I ensure that valves are closed, hoses empty, and pumps are turned off.
- □ I keep my application equipment clean.
- I inspect equipment routinely in case of a leak.
- □ I keep a record of inspections and repairs.

Response

My response steps to a hazardous material spill include containing, controlling, and cleaning up, including:

- Approach a spill from a safe direction, upwind or upstream.
- Attempt to identify the type of product involved, if safe to do so.
- Avoid chemical spills that are reacting (i.e., hissing, bubbling, smoking, gassing, or burning).

Manure Storage and Handling Manure is a valuable by-product of poultry operations. Manure storage and handling is essential, and pollution problems must be avoided. Some considerations are:

- Ensure storage is available to accommodate 6 months.
- Contain manure during transport to avoid spills.
- Ensure manure is not carried onto public roads by equipment tires.
- Establish buffers between manure handling and storage locations near and around watercourses.
- □ Have a manure spreading plan.
- Ensure application equipment is maintained.
- □ If possible, use air emission and odor-reduction application practices.

- □ Call 9-1-1 if the spill is too big to control and clean up.
- □ Contact Emergency Management BC at 1-800-663-2345 if spill volume exceeds the reportable amounts.
- □ Move the Spill Kit to a safe location near spill.
- Put on Personal Protective Equipment: Gloves, footwear, apron, disposable coveralls, eye protection, and respirator.
- □ If possible, stop the spill from spreading. Take appropriate steps, such as:
- □ Place leaking container in larger container.
- □ Close valves, etc.
- Use absorbent material, sandbags, or dig a trench to contain spills.
- □ Use barriers to keep people and animals out.
- □ Stay at the spill site until someone comes in relief.
- □ I will clean up the spill, including:
- Spread absorbent material on the spill area, but avoid using sawdust. Strong oxidizing chemicals can combust and become a fire hazard.
- Sweep and scoop all material; work from the outside toward the inside to reduce spread.
- Scoop material into a drum or container lined with a heavy duty plastic bag. Repeat until the spill is soaked up.
- Seal the bag. Double bag, label clearly, and dispose of properly.
- For spills on soil, apply activated charcoal immediately for minor spills.

#### **Spill Safety**

- If my eyes have been contaminated, I will wash with running water at least 15 minutes.
- If others have been contaminated, I will help them wash first and will wash myself after.
- □ I will call 9-1-1 if anyone is incapacitated.
- For larger spills, dispose of top 5-10 cm of soil; cover area with 5 cm of lime and fresh top soil.
- Contact your municipality or regional district for information on safely disposing of contaminated material.

# **Utility Failure**

# Summary

Utility outages can result from a variety of events, such as severe weather, wildfire, or other hazards addressed in this Guide. Preparation and appropriate response will minimize the impact of prolonged outages, and can protect your equipment and your poultry.

# Know Your Farm Equipment



<u>Electricity</u>: Much of the farm's equipment probably requires supplied electrical power. Power may be interrupted during conditions such as a heat wave or severe winter storm, when certain equipment is essential. A farm equipment list may help prioritize the off-and-on sequence of electrical appliances during an outage.

#### **Farm Utilities**

- Which critical equipment and facilities depend upon electrical power? Natural gas? Water?
- ✓ What if these utilities are unavailable?
- How long could you operate without the utility?
- ✓ Are backup measures possible?

<u>Natural Gas</u>: Natural gas does not have an odour, so a chemical that smells like rotten eggs is added as a safety measure. Natural gas leaks can then be detected in low concentrations. Be sensible about natural gas usage and always turn off gas appliances when the rotten egg odour is present. Make sure all rooms that use natural gas have adequate ventilation.

Water: Water is, of course, essential to survival. Following a disaster, clean drinking water for your flocks may not be available. Your regular water source could be cut-off or compromised through contamination. Prepare yourself by considering an alternative source of water that will meet the

needs of your family and farm during an emergency.

Farmers should consider the length of time their operations can function without electricity, natural gas, or water. Backup measures will reduce the risk to your flock during these events. Consider showing the location of all essential equipment, utility shut-offs, and storage facilities on the Farm Map.

### **Resources**

### BC Hydro Power Outages Map

https://www.bchydro.com/outages/orsMain.jsp

### Enbridge Gas Outage

https://www.enbridgegas.com/contact-us/

### Fortis BC Power Outage

http://fortisbc.com/Safety/EmergencyPreparedness/Pages/Power-outages.aspx

# Additional information to consider adding to this binder:

- List of equipment that should be turned off during an electrical storm or outage.
- Back-up measures to provide essential services for your flocks.

# **Utility Failure**

# Emergency Plan for \_\_\_\_\_

Farm

# **Electrical Power Outage**

# Preparation

- I have prepared my farm for utility failure in the following ways:
- □ I test my backup generator(s) regularly.
- I keep sufficient fuel to operate generators for at least seven days.
- I have ensured electrical panels are wellmarked and breakers can easily be turned off.



- □ I have tested the connection of my backup power with critical electrical equipment.
- □ I have installed protection devices for three-phase equipment and have written reset instructions.
- □ I have identified the equipment that should be turned off during a power outage and have recorded the sequence for turning on.
- I have determined emergency feeding procedures for use during a power failure, if applicable.
- □ I have identified back up measures needed to provide heat for poultry, if applicable.
- I keep battery-operated lights (flashlights, lanterns) easily accessible and have fresh batteries.
- My contact list includes emergency phone numbers, i.e., energy suppliers and electricians.
- I have ensured sensitive electronic equipment has surge protectors and/or battery backups.
- □ I frequently back-up my computer files.

# Response

Procedures for responding to a power outage affecting my farm include the following:

- □ I will turn off sensitive and/or non-essential equipment asap.
- □ I will contact the power provider to set up re-connection as soon as possible.
- □ I will connect back-up generator(s) or other power source to critical equipment.
- □ I will ensure poultry have access to food and water.
- □ I will ensure alternate forms of barn heat or ventilation are in place, if applicable.

# Natural Gas Leak

# Preparation

I have prepared the farm for a possible natural gas leak or shut-down in the following ways:

- □ I have posted shut-off instructions near turn-off valves, and all workers have read them.
- Everyone on the farm knows the smell of natural gas.
- □ I have installed carbon monoxide alarms, as needed, and workers know the signs of carbon monoxide poisoning.
- Emergency phone numbers for utilities are posted in every farm building.

### Response

My response to a natural gas leak or shut-down at the farm includes the following:

- I will act quickly and remain calm. I will not try to put out a natural gas fire myself.
- I will go outside. As I exit, I will leave open the door open and any windows that may already be opened.
- I will move away from the source of the leak at right angles to the prevailing wind.
- I will move my family and workers safely away from the building.
- Once away, I will call the gas company, 911 or my local fire department immediately.
- □ If I have knowledge of the source of the leak, I will meet emergency responders when they arrive on-site.
- □ I will not return inside until allowed by response personnel.

# Water Supply Interruption

### Preparation

In preparing for possible water supply interruption for the farm, I have completed the following tasks:

□ I have looked at the history of water supply interruptions in my area to determine the water shortage risks that my farm may face.



### Precautions During a Natural Gas Leak

- □ No smoking; no flames
- □ No starting of vehicles
- No creating a spark from switches:
  - electronics
  - appliance
  - lights
  - motors

- I have alternative sources of water to meet poultry needs, including surface water, downhill piping, or hauling water.
- □ I have alternative source to supply water, in case of an outage.
- □ I have ways to increase my storage capacity as a buffer to a water supply interruption.
- □ I have tested the alternative water system for reliability, quality, and sufficiency.

### Response

The following procedures will be followed in response to a water supply failure affecting the farm:

- I will contact my water supplier or utility provider as soon as possible to restore power supply.
- I will initiate my alternative water delivery method.
- I will monitor my poultry houses to assure the backup system provides adequate water quantity and quality.



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# **Farm Animal Transport Accidents**

Several risks are associated with transporting farm animals. Drivers should be aware of the risks and have a plan in place to deal with an accident. The welfare and safety of the producer, driver, responders, passers-by, and animals will improve dramatically by being prepared for an accident and understanding how to effectively respond.

Accidents involving poultry or livestock can be very serious, especially if they are injured, scared, and released onto the roadway. A prepared driver will be able to respond effectively to a highway incident and lessen its economic and physical impact.



Some considerations while loading farm animals for transport are:

- Load the trailer so weight is equally distributed and low-centred.
- If you have a split load and drop off some animals at one stop, move the animals to • redistribute the weight properly.
- To help prevent load shifting, do not take corners too fast. •
- The centre of gravity for your poultry hauler may be different than other freight hauled commercially. Different trailer designs will also have different centres of gravity and will change in relation to the type of animal Farm Animal Highway Accident transported.

# **Poultry Behavior in Highway Accidents**

The movement of farm animals differs because of the diverse risk factors involved. Some characteristics of poultry during transport are:

- Poultry frighten quickly when in close contact with people and will react hysterically.
- Poultry are difficult to contain and handle. Try not to startle them.
- The best roadside containment and herding aids for poultry are construction or snow fences.

# **Statistics**

- 59% of accidents occur between midnight and 9:00 AM.
- 56% of all accidents documented involved cattle.
- 27% involved hogs, 11% involved poultry.
- 84% of the trailers roll on the right hand side.
- 80% were single vehicle accidents.
- 85% were caused by driver error. •
- 1% of reported accidents indicated weather as the cause.

# **Resources**

Farm Animal Council <u>http://www.bcfacc.ca/</u>

Canadian Livestock Transport Certification Program http://www.livestocktransport.ca/en/

# Additional information to consider adding to this binder:

• Copy of Livestock and Poultry Transport Accident Plan

# Farm Animal Transport Accident

# Emergency Plan for \_\_\_\_\_

Farm

# Preparation

If I transport poultry on a highway, I have an Emergency Plan on board. This Plan includes:

- □ Emergency contact sheet with 24-hour phone numbers for RCMP, fire and rescue, insurance companies, veterinarian, dead stock services, etc.
- □ A list of resources that could be mobilized in the event of a rollover accident (i.e., panels or snow fences for containment, stock trailers, etc.).
- Emergency response equipment including flares/traffic triangles, fire extinguisher and spill kits. A camera is useful.
- □ Paperwork in an easily accessible area of the truck cab.

# Response

If I am the driver involved in a farm animal highway incident and uninjured:

- I will call 911 if the accident occurs on a public roadway, or emergency assistance is required for an on-farm accident. I will advise the operator of:
  - location of the accident
  - status of the poultry
  - any known hazards
- □ I will set out emergency warning devices asap.
- □ I will phone the insurance companies for both the vehicle and the poultry, if applicable, and provide with the following information:
  - accident location
  - any injuries
  - condition of poultry
  - position of trailer
  - number of vehicles involved
  - if first responders are on scene yet
- If damage is minor, the trailer is upright and there are no injuries or escaped birds, I will take photos and record names and addresses of people involved, and witnesses.
- □ I will not move poultry off the truck or trailer until a containment vehicle or suitable area is available.

The driver, farm owner and producer have no legal jurisdiction at a traffic accident scene in Canada.

They will often be utilized to assist at accidents, but operate solely under the command of police and fire officials.

- If the trailer is damaged and birds have escaped, I will try to direct them to an area far away from traffic.
- □ I will take photos of the accident as soon as possible. Photographs should include:
  - road conditions
  - vehicle damage
  - trailer position
  - the overall accident scene
  - skid marks
  - curves, intersections
  - where the vehicle left the road
- I will take all necessary precautions to provide as much protection and comfort for the animals as possible.
- □ I will release statements only to people of authority.
- □ When first responders arrive, I will advise them of the accident, such as human injuries, status of birds, any known hazards, and knowledge of any response support on the way.
- □ I will respect the chain of command. I understand that Police and Fire / Rescue will take command of the incident scene.

# **Additional Resources**

This Guide complements other emergency guides, reports, and documents that may be of interest. Some useful resources may be accessed through the websites listed in this section.

Agriculture and Agri-Food Canada Programs

http://www.agr.gc.ca/eng/programs-and-services/?id=1362675650980

### AgSafe Safety Materials

http://agsafebc.ca/

### BC Biosecurity Reference Guide for Non-Supply Managed Poultry

http://www.protectmyflock.ca/pmf/wp-content/uploads/2014/12/Biosecurity-Guide-for-Non-Supply-Managed-Poultry1.pdf

### BC Biosecurity Reference Guide for Non-Supply Managed Poultry http://www.protectmyflock.ca/pmf/wp-content/uploads/2014/12/Biosecurity-Guide-for-

http://www.protectmyflock.ca/pmf/wp-content/uploads/2014/12/Biosecurity-Guide-for-Non-Supply-Managed-Poultry1.pdf

BC Hydro Power Outages Map

https://www.bchydro.com/outages/orsMapView.jsp?WT.ac=hp\_mh\_outmap

### BC Livestock Watering Handbook

https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-landand-environment/water/water-supply-conservation/livestock-watering-handbook

### BC Ministry of Agriculture, Animal Health Center

http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-andcrops/animal-health/animal-health-centre

BC Ministry of Agriculture, Livestock Relocation, Emergency Management Planning Tools

https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/business-market-development/ emergency-management/livestock-relocation

BC Ministry of Agriculture, Sustainable Agriculture Management https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/programs

### BC Ministry of Environment – Agricultural Waste Management

https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-landand-environment/waste-management

### BC Ministry of Environment – Drought Information

https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikes-dams/ drought-information/

### BC Poultry Biosecurity Reference Guide

https://bcbhec.com/wp-content/uploads/2015/03/BiosecurityProducerManualDecember2012.pdf

### Canadian Livestock Transport Certification Program http://www.livestocktransport.ca/en/

CFIA Avian Influenza Outbreak Response

http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/ai/what-to-expect-if-your-animals-are-infected/eng/1334853795705/1334853885674

### CFIA Reportable Diseases

https://www.inspection.gc.ca/animals/terrestrial-animals/diseases/ reportable/2019/eng/1329499145620/1329499272021

Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys (2015 Draft).

https://www.nfacc.ca/codes-of-practice/chickens-turkeys-and-breeders

#### Current Wildfire Situation in BC

https://www2.gov.bc.ca/gov/content/safety/wildfire-status/

#### DataBC

### www.data.gov.bc.ca/

#### **Emergency Management BC**

https://www2.gov.bc.ca/gov/content?id=526B5F8334E849F38AE4F9CE922AFE2Da

### Emergency Management BC, Disaster Financial Assistance Program <u>https://www2.gov.bc.ca/gov/content?id=C2DD8985217D41BA9BA3F3D772D39A02</u>

#### Environmental Farm Plan Program

https://ardcorp.ca/programs/environmental-farm-plan/

### **FireSmart Manual**

www.bcwildfire.ca/Prevention/firesmart.htm

#### Flood Preparedness for Agriculture

https://www2.gov.bc.ca/gov/content?id=1701F5AD8F774A69A3C0B7B84E3E3715

#### Fortis BC Power Outage

https://www.fortisbc.com/safety-outages/preparing-for-emergencies/power-outages

### Google Earth

www.google.com/earth/

#### Insurance Bureau of Canada

www.ibc.ca/

#### National Farm Building Code of Canada

https://nrc.canada.ca/en/certifications-evaluations-standards/codes-canada/ codes-canada-publications/national-farm-building-code-canada-1995

#### **On-Farm Contingency Plan**

https://www.bcac.bc.ca/sites/bcac.localhost/files/Ardcorp\_Program\_Documents/EFP/ Contingency%20Plan%20-%20Template%20for%20On%20Farm%20Planning.pdf

### Premises ID

https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/programs/premises-id

### Wildfire Loss Prevention

https://www2.gov.bc.ca/gov/content/safety/wildfire-status/

### WorkSafe BC

http://www2.worksafebc.com/Portals/Agriculture/Home.asp