



# Emergency Preparedness Guide

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# Introduction

We know it can happen here. In recent years, Albertans have faced floods, wildfires, tornados, and drought. More localized emergencies such as building fires and damage due to storms are relatively common threats to safety and property. All individuals are responsible for making preparations to keep their families and property safe during an emergency. Livestock producers have the added responsibility of ensuring emergency planning includes their animals. Given the size and special requirements of livestock, having resources on-hand and a plan in place is vital in minimizing the impact of emergency situations on human health, livestock welfare, and economic losses.

Individuals are the first link in an integrated response network. Depending on the nature and severity of the situation, response efforts may involve various departments within municipal, provincial, and federal governments, as well as community and non-governmental organizations. In the event of a disaster, the **Alberta Emergency Management Agency** (AEMA) will typically take a leading role in a variety of first response operations.

Managing emergencies and disasters is a cooperative effort, with the **role of individuals** to:

- Take action to prevent emergencies from occurring.
- Be prepared for the first 72 hours after an event.
- Minimize the effects of an emergency. The initial response to an emergency can significantly contribute to whether it is contained or escalates. Being able to make informed, rapid decisions, and having the right equipment on-hand can make all the difference.

## Purpose of this guide

There is no doubt that preparing for emergencies is important. However, taking action to develop a plan and knowing where to start may be overwhelming. The intent of this guide is to provide information about the importance of emergency planning, and to serve as a guide to some of the many resources and tools available to help you develop an emergency plan for your farm.

*A disaster or emergency can be any event that disrupts normal farm operations.*

*Examples include:*

- *Animal disease outbreaks*
- *Natural disasters e.g. tornado, flooding, wildfires, drought*
- *Human activity (intentional or non-intentional) e.g. activist activities, hazardous material spills, train derailments*

### **Emergency vs Disaster:**

*An **emergency** is an adverse situation requiring prompt response to save lives and protect property using existing resources and procedures. These are events that first responders (fire, police, EMS, utility companies, and parts of industry) respond to on a routine basis.*

***Disasters** are much more serious events that threaten or cause widespread losses and damage, and disrupt social structure and essential functions. Disasters exceed the capacity of a single organization to effectively respond to the situation.*

*Source: Alberta Public Safety Training  
[www.apsts.alberta.ca](http://www.apsts.alberta.ca)*

# Benefits of emergency management planning

## **By developing a documented emergency management plan, you protect:**

- Human health and safety
- Animal welfare
- The environment
- Farm economics, productivity, infrastructure and other assets

## **Creating an emergency management plan helps you:**

- Identify problem areas. By going through the planning process, you may discover unrecognized hazards that you can work to eliminate, for example, a lack of resources or items that can be put in place before an emergency occurs (e.g. equipment, training, supplies). As well, a careful review could lead to improvements that remove the hazard, e.g. faulty barn wiring.
- Know what to do. Emergency situations often develop very quickly, and the stress of the situation can lead to poor judgement resulting in avoidable losses. Pre-planning helps provide guidance during an emergency.
- Ensure everyone else knows what to do. Having a documented plan ensures everyone on the farm (e.g. family members, staff, neighbours) has access to information. Having easily accessible information such as contact lists and action plans may be invaluable if the owner/manager is absent during an emergency.
- Assist first responders. Having a plan that includes information specific to your property may help first responders more quickly contain a situation or protect them from injury.
- Show due diligence. An emergency plan adapted specifically for your farm demonstrates your commitment to managing risks and reducing losses. This can help make your farm a better risk to insure and help control the cost of your insurance premiums. An emergency plan also promotes safety awareness and shows your commitment to worker safety.
- Assist in defining insurance needs. Not all emergencies can be prevented. By identifying unavoidable risks, you can make more informed decisions about the specific insurance best suited to your farm.
- Recover from an emergency. Planning ahead increases your ability to anticipate and prepare for circumstances that could interrupt farm operations. This can help you get business back to normal more quickly after an event.

# Steps in creating a farm emergency response plan

Your emergency plan must be customized to your operation, based on the characteristics of your farm and production system.

There are four basic steps involved in creating your plan:

- Assessing risks unique to your farm
- Planning for the risks you've identified
- Ensuring others know about your plan
- Reviewing your plan periodically

## 1) Assess risks

**What disasters or emergencies are most likely to occur on your farm and/or which pose the greatest threats to your farm's viability?**

Effective emergency planning commonly uses a risk-assessment approach. This involves reviewing all potential hazards to prioritize planning for those that have a high risk of:

- **occurring** on your farm or in your area and/or
- causing a **significant threat** to human safety, animal welfare, assets or productivity.

For example, if your farm is close to a waterway that has flooded in the past and is at risk of future flooding, you would plan appropriately. If there are no waterways nearby, you would likely choose to focus your efforts on other hazards. Although the risk of a highly contagious disease, such as Foot and Mouth Disease, showing up on your farm is low, it could have a devastating impact on your flock and on livestock industries in general if not contained. Therefore, the occurrence of such a disease should be included in an emergency plan.

### **Hazards and Risks**

**Hazards** are potential or existing conditions that may cause harm to people, livestock, property and/or the environment.

**Risk** is the chance that a hazard will cause damage given a particular set of circumstances (e.g. the risk of a flooding hazard will fluctuate depending on proximity to waterways, weather conditions, etc.).



## 2) Make a plan

### What can you do to prevent, prepare for, respond to and recover from an emergency or disaster?

The next step is to develop a plan to effectively deal with the hazards you've identified. For each hazard, list measures you can take for:

- **Prevention/mitigation**

What can you do to reduce or eliminate the risk? These are steps taken in advance to reduce the chance that an emergency situation will occur (e.g. maintaining a high standard of biosecurity will greatly mitigate the risk of introducing or spreading diseases within your flock; fixing faulty wiring and implementing a 'no smoking rule' will reduce the risk of a barn fire).

- **Preparation**

What can you do before an emergency happens to minimize its effects? It is impossible to completely eliminate all hazards and risk. For example, there is no way to prevent a drought; however, you can take action to reduce its impact on your flock (e.g. good grazing management during normal years, maintaining a reserve of feed, reducing number of over-wintered stock).

- **Response**

What actions can be taken during an emergency to minimize effects? How quickly can your plan be implemented? For example, you might make the decision to evacuate your farm or relocate animals to a different location on your property.

- **Recovery**

How can operations be returned to normal as quickly as possible after an emergency? What can you learn from the incident that could be helpful to prevent or mitigate it in the future? For example, documenting damage and livestock losses after an event will help with insurance claims. Revising building or yard designs during rebuilding could help prevent or minimize problems in the future.

#### **Look for commonalities:**

*Using a risk-based approach can help you identify elements that are common to a number of situations. For instance, preparing for a power outage will help you plan for a number of different emergencies, such as winter storms, flooding or tornados. Using flock biosecurity principles will mitigate the risk of all forms of disease. Elements necessary for specific emergencies are added to your plan as needed.*



## Resources to help you plan

### Comprehensive guides

There are very extensive guides available to livestock producers that provide detailed checklists covering all aspects of emergency planning. Although not all areas will be relevant to every farm, these guides can be very helpful in raising issues and prioritizing actions. Two of the available guides are:

- **Planning for and Responding to Disasters in Canada** is an extensive guide developed by the Canadian Farm Management Business Council and the Canadian Federation of Agriculture. The guide includes checklists and worksheets for developing your emergency plan, <http://www.ablamb.ca/index.php/resources/emergency-preparedness>.
- The **AgReady Workbook**, developed by the Penn State College of Agricultural Sciences, provides a detailed checklist for prioritizing your action plan. The workbook may be downloaded from <http://extension.psu.edu/prepare/readyag>.

### Resources for specific situations

Additional resources to help you plan for specific situations and useful contacts within Alberta are listed in Appendix A of this guide.

### Requirements for all sheep farms

The specific aspects of individual emergency plans will vary. Certain elements, however, should be included in emergency planning for all sheep operations. These include:

#### Premises Identification Number

All livestock owners in Alberta are legally required to have a Premises Identification (PID) Number. Your PID Number is much more than a detail to be remembered when buying ear tags or medications; it is a vital link to the emergency response network. The PID system is part of livestock traceability in Alberta. In the event of a major disease outbreak, the traceability system would be used to help contain the spread of disease and to notify individuals regarding exposure risks. In recent years, the value of the PID system was demonstrated in Alberta during other disaster situations. During the 2011 wildfire in the Slave Lake area, emergency workers were able to notify evacuated livestock owners regarding care of animals that were left behind. During the 2012 pipeline breach that caused contamination of the Red Deer River, land owners downstream of the spills were notified of the situation quickly and directly.

Registering with the program and keeping your contact information current, including a contact number independent of your actual land location (i.e. off-site contact or cell phone number), are essential steps in keeping yourself and your animals safe during an emergency or disaster.

For more information on how PID numbers are used and to register, go to [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/trace12354](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/trace12354) or call the Ag Info line 310-FARM (3276).



## Rural Emergency Plan (REP)

This on-farm tool helps to ensure farm safety and directs personnel in emergencies. The REP is specifically designed for fire and hazardous material spills, but contains general information needed in many situations. It is suggested that the information is stored in a simple PVC tube holder and mounted in a location easily accessed by first responders, such as on the main power pole or other central area. It includes templates for a number of the elements that should be included in every emergency plan, such as:

- **Farm maps**

Maps can be very useful in locating 'runoff' pathways, buildings, storage areas of hazardous materials, feed storage, potential relocation sites (higher ground) and other important farm features. The template provided in the REP is for a hand drawn map; however, you could use an existing map or use free programs such as Google Earth or Google Maps to increase the ease of creating and accuracy of your map. Go to <http://www.google.com/earth/> to download Google Earth or go to [www.google.com/maps](http://www.google.com/maps) and locate your farm using the satellite view.

- **Inventory and location of hazardous materials and emergency supplies**

- **Emergency phone numbers**

Having a list of important numbers together in one location can save time during an emergency. Having these numbers available on your cellphone is convenient; however, printed hard copies located in conspicuous locations on your farm will help ensure everyone has access to this information. A contact list template is available with the REP materials, or see *Appendix E* of this guide.

- **Other key information emergency personnel might need to make fast and effective decisions**

Download the REP kit from <http://www.ruralemergencyplan.com/>.

## Individual animal identification and animal inventories

Individual identification is not legally required under the Canadian Sheep Identification Program (see *Appendix B*) until animals are moved from the farm of origin. However, there are many benefits to maintaining on-farm individual identification, including for emergency preparation. For example, if your animals are evacuated or otherwise mixed with animals from different farms, having permanent, unique identification will be beneficial.

Individual identification and record keeping also facilitate maintenance of animal inventory lists. Animal inventory lists are advantageous not only during response efforts but also in documenting losses for insurance claims.

## Staying informed

Having advanced warning of possible threats and staying informed of developments during an emergency are of critical importance. **Alberta Emergency Alert** is designed to provide critical, life-saving information to Albertans when emergencies or disasters occur. Alerts are provided through:

- Radio and Television
- Internet
- RSS Feed
- Social Media (Facebook, Twitter, etc.)
- Road Signage
- Alberta Emergency Alert App (provides direct notification to your personal device, e.g. cellphone, tablet)

For more information, current alerts and to sign-up for Alberta Emergency Alert app go to [www.emergencyalert.alberta.ca](http://www.emergencyalert.alberta.ca).

**Weatheradio Canada** is operated by Environment Canada's Meteorological Service and broadcasts weather and environmental information 24 hours a day in both official languages on seven dedicated frequencies within the VHF public service band. This permits the transmission of a tone and Specific Area Message Encoding (SAME) codes ahead of a warning message that will activate the Weatheradio receiver and alert you to an incoming important message.

**Emergency radio:** Given the potential for power outages during many emergencies situations, a reliable emergency/weather radio should be included in your emergency kit. Store extra batteries and choose a radio with an alternative charging method (e.g. hand-crank, solar). Radios are available with other useful features, such as flashlights and on-board battery packs for charging cellphones.

## Insurance

Not all emergencies can be prevented. Making sure you have the right insurance for your farm will help you recover and rebuild. See *Appendix C* for details on available publicly-funded programs and commercial insurance.

## Farm records and other important documents

Having farm records and other documents available after an emergency will greatly facilitate recovery efforts. Keep copies of farm records, animal inventories and other important documents (e.g. contact lists, insurance account numbers, wills, deeds) together in an easily accessible location in the event you need to 'grab and go' due to a fast moving emergency. Consider keeping copies of these documents in a secure off-farm location that is unlikely to be affected by local emergencies. Using 'cloud storage' (i.e. saving documents on-line through programs such as Dropbox and Google Docs) may be a practical option in some cases.

### **Family and personal kits**

We all have a role to play in emergency planning. Part of the responsibility for individual citizens is to ensure we have supplies (food, water, first aid materials) and equipment (emergency radio, flashlights etc.), for ourselves and our families for at least the first 72 hours after an emergency or disaster.

The *Personal and Family Disaster Preparedness Guide*, from **Albert Health Services**, will assist you and your family to be ready to face a disaster. To access the guide go to [www.albertahealthservices.ca/assets/healthinfo/HealthWellness/hi-hw-disaster-preparedness-guide.pdf](http://www.albertahealthservices.ca/assets/healthinfo/HealthWellness/hi-hw-disaster-preparedness-guide.pdf) or call 403 943-1203.

**Public Safety Canada** offers information for preparing a personal emergency kit at <http://www.getprepared.gc.ca/cnt/kts/index-en.aspx>.

### ***Code of Practice for the Care and Handling of Sheep***

The National Farm Animal Care Council Code of Practice is the 'go-to' document for industry-accepted practices in areas such as housing, feeding and veterinary care. Every sheep producer should have a copy of the Code. Download your copy from <https://www.nfacc.ca/codes-of-practice>.

## **3) Make your plan known**

Ensure everyone living or working on the farm is aware of the location(s) of copies of your emergency contacts, response plans and other important documents. Identify a location as the designated meeting spot in the event of an emergency. Consider talking to your neighbours about how you can help each other in the event of an emergency. If you have employees, make emergency response part of your training program.

## **4) Plan for review**

Once you have an emergency response plan in place, plan to review the information on a regular basis and at least annually. Farm infrastructure, animal inventories and contact information will evolve over time and these changes need to be recorded in your plan.

# Appendix A: Resources for specific situations

The sections below may be useful in helping you plan for specific emergency situations. This information is intended to provide a starting point; however, producers are also strongly encouraged to use the comprehensive guides noted on page 5, access the additional resources listed in each section below and consider aspects unique to their own farms when completing their planning.

## Animal welfare

- Report concerns of animal abuse or neglect to the **Alberta Society for the Prevention of Cruelty to Animals**, <http://www.albertaspca.org>, 1-800-455-9003) or contact your local RCMP.
- **Alberta Farm Animal Care (AFAC) ALERT line:** With the potential exception of disaster or emergency situations, animal welfare issues often develop over a period of time. ALERT is a 'producer-helping-producer' program designed to intervene in the early stages of welfare concerns to prevent the situation from becoming advanced. The ALERT line (1-800-506-2273) is available to anyone (general public, farming community, etc.) that has an animal welfare concern.

## Barn/structure fires

- Farm buildings can be particularly prone to fires, due to the highly combustible nature of stored feed and bedding, building ventilation, and storage of other flammable materials.
- Prevent or prepare for structure fires:
  - Complete the Rural Emergency Plan (see page 6).
  - Do not allow smoking in or around buildings.
  - Inspect electrical systems on a regular basis and correct any problems.
  - If possible, store hay and bedding in a dry, covered location away from the barn.
  - Ensure hay is properly dried before storing.
  - Keep fire extinguishers in convenient locations, such as by barn doors.
  - Keep a record of extinguisher inspection and refilling dates.
  - Regularly check any electrical appliances (e.g. heat lamps) for wear and dust accumulation. Only operate in safe locations.
  - Keep vegetation and debris cleared away from buildings.
- During a structure fire:
  - Call 9-1-1 and give details about the situation (e.g. if animals are involved, extent of fire).
  - Assess the situation; attempt to extinguish or contain small fires only if you are not in danger.
  - Do not enter a building if the roof has caught fire or if you are alone.
  - Take precautions against smoke inhalation and be aware that it can permanently damage lungs.
  - Evacuate any animals that are in the barn, if it is safe to do so.

- If possible, move animals to a fenced area away from fire and smoke, rather than turning them loose.
- Assess animals for injuries. Consult with a veterinarian for treatment options. Euthanize badly injured animals.
- For more information:
  - **Fire Smart Canada** has numerous resources including checklists for assessing the fire safety of buildings [www.firesmartcanada.ca/resources-library/c/manuals](http://www.firesmartcanada.ca/resources-library/c/manuals).
  - **Livestockwelfare.com** has links to several detailed resources dealing with barn fires and the aftermath of fires, including links to the extensive publication *Reducing the Risk of Fire on Your Farm* <http://www.livestockwelfare.com/emergency-response/>.

## Business continuity

- A business impact analysis (BIA) identifies time sensitive or critical processes and the financial and operational impacts resulting from disruption of those business processes. For an overview of BIA go to the Public Safety Canada website at <http://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/bsnss-cntnt-plnng/index-eng.aspx>.
- For more general information about business management see the Farm Manager page of the Alberta Agriculture and Forestry website, [http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/bus14419](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/bus14419) and Farm Management Canada, <http://www.fmc-gac.com/home>.

## Disease outbreaks

- Dealing with animal diseases is a part of everyday management for livestock producers. Most diseases encountered will affect a relatively limited number of animals and are unlikely to rapidly spread through the industry. Although it is essential to control diseases to maintain your flock profitability, the occurrence of most diseases is not considered an emergency situation. Certain diseases, however, are classified as reportable. These are diseases that are: highly contagious; pose a threat to human health; endanger trade; or are not currently endemic in Canada (e.g. Foreign Animal Diseases).
- It is essential that cases or suspected cases of reportable diseases are reported as soon as possible. Producers must be familiar with the signs of reportable diseases and take action immediately if they are concerned.
- Producers and veterinarians must report cases or suspected cases of federally reportable diseases to a Canadian Food Inspection Agency (CFIA) district veterinarian. The CFIA is designated as the lead organization in coordinating control efforts for these diseases. For information about federally reportable diseases and for CFIA offices in Alberta, go to [www.inspection.gc.ca](http://www.inspection.gc.ca).
- Information regarding Alberta's provincially reportable and notifiable diseases is available from the Alberta Agriculture website, [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/cpv12455](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/cpv12455).

- Information about Alberta's Foreign Animal Disease response plan is available from the Alberta Emergency Management Agency, [www.aema.alberta.ca/foreign\\_animal\\_disease\\_eradication](http://www.aema.alberta.ca/foreign_animal_disease_eradication), and the Alberta Veterinary Medical Association, <https://www.abvma.ca/Biosecurity/Foreign-Animal-Disease.asp>.
- The methods you use to control other diseases will help protect your flock, and the industry as a whole, from reportable diseases.
  - Working closely with your veterinarian will help tailor veterinary care to your flock's unique requirements and, in the event of a disease outbreak, save time in diagnosis and treatment.
  - Follow the recommendations in the *National Sheep Producer Biosecurity Planning Guide* to mitigate and respond to threats to flock health, <http://www.inspection.gc.ca/>, search for *sheep* and *biosecurity*.

## Drought / extreme heat

- Drought can severely affect a large number of farms and involve large areas of Alberta.
- Developing contingency plans and implementing management strategies can help off-set the impact of a drought on your farm. Even if there is adequate moisture for one growing season, we know Alberta is prone to dry spells and that the next year might be dry. Taking care of your resources in good years helps ensure resiliency for the future.
- Preparing for and responding to drought requires many factors and will depend on the farm situation. These factors may include soil, grazing and water management, feed procurement, and managing flock numbers.
  - Alberta Agriculture and Forestry (AF) has extensive information available to producers for mitigating the effects of drought before it happens and to respond to the situation when it occurs. The 'hub' for this information is *Options for Alberta Producers During Dry Conditions*, [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/dis12713](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/dis12713).
  - To directly access the *Drought Management Checklist*, go to [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/ppe1072](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/ppe1072).
  - Climate data and moisture reports and historical data are also available on the AF website to help producers monitor weather and climate situation, <http://www.agriculture.alberta.ca/acis/about.jsp>.
- Sheep are prone to heat stress. Prepare for periods of high temperatures by:
  - Identifying areas on your farm with natural shade, or construct shade areas using materials such as round bales, wagons, etc.
  - Shearing sheep at the appropriate time of year (preferably before the summer months to avoid sunburn or shear with a comb lifter).
  - Ensuring your water supply will meet increased needs (see the *Water and Feed Requirements* page 18).



- Becoming familiar with the alert levels listed in the *Livestock Humidity Temperature Index* in the *Appendix A* of the *Code of Practice*.
- During period of high ambient temperatures, producers should:
  - Move sheep to shaded areas.
  - Provide extra water. Monitor water supply and water delivery systems to ensure they are adequate.
  - Watch for signs that the water sources may be unsafe (e.g. blue-green algae in dugouts).
  - Avoid handling or moving sheep, or plan handling for cooler times of the day.
  - Watch for signs of heat stress (i.e. continual panting, rapid breathing, weakness, inability to stand, elevated rectal temperature).

## Evacuation and on-farm relocation

- There may be time during an emergency to move animals away from danger by either evacuating them off-farm or moving them to a safer place on-farm.
- Safely evacuating livestock needs to be a coordinated and well-thought out effort. There is typically little time to make arrangements during a crisis and your evacuation plan must be prepared in advance.
- Preparations include (for a full list, see the references below):
  - Arranging a suitable relocation site (e.g. local fairgrounds).
  - Making arrangements with livestock haulers, if needed.
  - Planning primary and secondary evacuation routes.
  - Purchasing extra supplies for the relocation site (e.g. livestock markers, feeding equipment, etc.).
  - Ensuring animals identification and vaccinations are up-to-date.
- Identify an area on your farm that can be used as a safe area, such as a pasture with:
  - no overhead power lines or poles,
  - no or few trees,
  - preferably no barbed-wire fencing,
  - open space with no debris, and
  - higher ground, if flooding is a threat.
- During an emergency (for a full list, see the references below):
  - Make the decision whether to evacuate your animals or move them to the on-farm site. Human safety needs to take priority, and there may be little time to make the decision.
  - If you do move animals off-farm, attempt to prevent or control co-mingling with other animals.
  - Before you leave, secure your farm as much as possible and turn off main utility switches.

- For further details see:
  - *Emergency Preparedness for Farm Animals*, Public Safety Canada, <http://www.getprepared.gc.ca/cnt/rsrscs/pblctns/frm-nmls/frm-nmls-eng.pdf>.
  - *Planning for Livestock Relocation During an Emergency*, BC Emergency Management, <http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/farm-management/emergency-preparedness/livestock-relocation>.

## Flooding

- Some areas of the province are at greater risk of flooding than others. To help determine the risk in your area assess local water sources for flooding potential and learn the history of your area. Contact your local municipal office regarding the flood preparedness for the area.
- Preparing for a flood (for full details, see references below):
  - Review your evacuation and power outage plans.
  - Complete the Rural Emergency Plan (see page 6).
  - If possible, routinely store sensitive materials (e.g. farm chemicals, feed, medications, fuel tanks) in safe, elevated locations.
  - Determine the safest location on your farm to move your animals.
  - Secure a safe source of drinking water.
- During a flood (for full details, see references below):
  - Check for updates from Alberta Emergency Alert (see page 7).
  - Implement your evacuation plan or relocate animals to safer areas within your farm.
  - Flooding may cause manure run-off and spills of other hazardous materials. Be aware that water contamination can be an issue; use only safe drinking water sources for yourself and your animals.
- For further details see:
  - *Farm Flooding Preparedness*, Alberta Agriculture and Forestry, [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/com14391](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/com14391).
  - Flood Preparedness document, Alberta Emergency Management Agency, <http://www.aema.alberta.ca/documents/ema/Floods.pdf>.
  - *Stay Safe: Rural Community Flood Preparation* and *Stay Safe: After a Flood* Alberta Water Portal, <http://albertawater.com/stay-safe/emergency-preparedness/rural-community-flood-preparation>.

## Livestock mortalities

- Emergency carcass disposal
  - Accidents and natural disasters can result in mass mortalities.
  - Contact your Municipal District or County for emergency carcass disposal assistance.
  - The Destruction and Disposal of Dead Animals Regulation allows more than 2500 kg (5500 lb.) of dead animals to be buried in a single on-farm burial pit under the direction of the Chief Provincial Veterinarian or a veterinary inspector.
- For further details see:
  - *Livestock Mortality Burial Techniques*, Alberta Agriculture and Forestry, [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex5310/\\$file/400\\_29-2.pdf](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex5310/$file/400_29-2.pdf).
  - *Pre-Selection of Mass Carcass Disposal Sites for Alberta Livestock Producers*, <http://www.albertabeef.org/uploads/LivestockDisposalInformationSheet-39.pdf>.

## Severe summer storms / tornados

- Alberta has its share of severe summer storms, including the potential for thunderstorms, hail and tornados.
- Prepare for severe weather:
  - Identify a safe area for livestock (e.g. pasture with few trees or potential for flying debris). There is generally less chance of injury if they are left outside rather than in a barn.
  - Learn how to keep yourself and your family safe in the event of a tornado (e.g. shelter in the basement, avoid windows). See the references below for more information.
  - Listen to weather and emergency alerts (see page 7).
  - Clear your yard site of material that has the potential to become flying debris in high winds.
  - Review your Power Outage plan (see page 17).
  - Lightning strikes can cause structure or grass fires. Review plans for dealing with fires (pages 9 and 18).
- During severe weather:
  - If there is time, move animals to the safe area.
  - Listen for alerts and weather updates, and follow recommendations for sheltering-in-place.
- For further details see:
  - Alberta Emergency Management Agency, *Get Ready for Tornadoes*, <http://www.aema.alberta.ca/personal-emergency-preparedness>.
  - Public Safety Canada – Regional hazards for Alberta, <http://www.getprepared.gc.ca/cnt/hzd/rgnl/ab-en.aspx>.

## Stress management

- Dealing with the aftermath of an emergency or with an on-going situation such as a drought will test the resilience of the strongest person. Alberta has a toll-free, confidential help line 1-877-303-2642 to help people deal with stress. More information is available on the Alberta Agriculture and Forestry website at [http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/faq8848](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/faq8848).

## Toxic spills / hazardous materials

- Spills of hazardous materials can result from farm chemicals, petroleum products stored on farm, breaches of oil or gas wells/pipelines, or from off-farm sources (e.g. traffic or railway accidents).
- Identify potential risks to your farm, such as proximity of highways/railways, locations of wells or pipelines, type of farm chemicals used, or fuel stored on farm.
- Preventing/preparing for toxic spills
  - Complete the Rural Emergency Plan (see page 6).
  - Prepare a spill kit appropriate for the types of materials you store.
  - If you store and use pesticides or other potentially hazardous chemicals, follow the recommendations in the *Beneficial Management Practices: Environmental Manual for Crop Producers in Alberta*, particularly the chapter on *Storage, Handling and Disposal of Agricultural Inputs* (see below for reference). Store the Material Safety Data Sheets for each chemical you use in an accessible location.
  - If you store fuel on farm, follow recommendations in the *Farm Fuel Handling and Storage* manual (see below for reference).
  - Review the *Beneficial Management Practices: Environmental Manual for Livestock Producers in Alberta* for details on managing and storing manure safely (see below for reference).
  - Be aware that under the *Alberta Environmental Protection and Enhancement Act* it is a legal requirement to report spills of hazardous materials. Penalties for non-compliance is a fine of up to \$100,000 and potential jail time.
- During an emergency
  - Your response will depend greatly on the type of material and volume of the spill.
  - Take safety precautions and respect manufacturer warnings regarding the use of protective gear.
  - As a general guideline, follow the response outlined in the Rural Emergency Plan (i.e. isolate affected area, wear protective gear, ventilate the area, stop further leaking, contain the spill area, report the spill, clean up the spill, decontaminate the spill area, dispose of or reclaim the waste). Details of how to contain and clean up spills are available in the reference below.

- Contact authorities immediately if you're unsure how to proceed or if the spill is larger than you can contain.
- Spills, including those relating to the oil and gas industry, are reported to the Energy and Environmental Emergency Response line 1-800-222-6514 or 310-3773.
- If there is an off-farm spill (e.g. train derailment or traffic accident), listen for Alberta Emergency Alerts (see page 7) and wait to be contacted by authorities regarding further action.
- For further details see:
  - *Beneficial Management Practices: Environmental Manual for Crop Producers in Alberta*, Alberta Agriculture and Forestry, [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex9483](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex9483).
  - *Farm Fuel Handling and Storage*, Alberta Agriculture and Forestry, [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex15198](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex15198).
  - *Beneficial Management Practices: Environmental Manual for Livestock Producers in Alberta*, Alberta Agriculture and Forestry, [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex13088](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex13088).
  - *Reporting Spills and Releases*, Alberta Environment and Parks, <http://aep.alberta.ca/about-us/compliance-assurance-program/documents/ReportingSpillsReleases-Feb04-2016.pdf>.
  - For details on containing and cleaning up after a spill go to <http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/pesticides-agriculture/pesticide-emergencies/pesticide-spills>.
  - If you have a non-emergency concern regarding a gas or oil well on your property, contact the Alberta Energy Regulator, [www.aer.ca](http://www.aer.ca). The Orphan Well Association works under the delegated authority of the Alberta Energy Regulator on reclamation of abandon wells, <http://www.orphanwell.ca>.
  - To find information about oil recycling programs in Alberta go to <http://usedoilrecyclingab.com>.
  - The Farmers' Advocate Office is available to aid and advise farmers and ranchers. Among other functions, the office mediates disputes between landowners and the energy industry regarding surface rights, and manages the Well Water Restoration or Replacement Program, [www.farmersadvocate.gov.ab.ca](http://www.farmersadvocate.gov.ab.ca).

## Traffic accidents involving livestock

- Information on livestock emergency response including *Accident Prevention and What to Do in a Motor Vehicle Accident Involving Farm Animals* can be found here: <http://www.livestockwelfare.com/emergency-response/>. This resource also provides links to videos demonstrating how to handle animals during an emergency.
- Alberta Farm Animal Care Livestock Emergency Handling Equipment trailers contain equipment to help capture stray animals and deal with livestock involved in an accident, natural disaster, building collapse or vehicle rollover. The trailers are stationed in 12 locations

around Alberta. Call 9-1-1 and request Emergency Livestock Handling Trailers. For more information, go to <http://www.afac.ab.ca/programs-events>.

- Canadian Livestock Transport offers a training program that includes information on emergency response, <http://www.livestocktransport.ca/en/>.

## Power outages

- Power interruptions can occur during many emergency situations. Producers need to have a plan for coping during power outages, particularly if daily operations (feeding, watering) are dependent on electricity.
- Prevent/prepare for power outages:
  - Keep battery powered flashlights in your emergency kit and in key locations on the farm.
  - See page 7 for staying informed and connected during a power outage.
  - Create a list of equipment that needs to be turned off or unplugged during a power outage.
  - Assess essential activities that require electricity (e.g. feeding, watering, heating, fencing).
  - If essential activities are heavily dependent on electricity purchase a generator and perform regular maintenance to ensure it will work when needed.
  - Keep a supply of fuel needed to power the generator.
  - Place generator according to manufacture recommendations (e.g. well ventilated area).
  - Consider purchasing smaller gas powered pumps for watering.
  - Trim overhanging tree branches away from power lines.
  - Use surge protectors to protect electrical equipment, particularly computers.
- During a power outage:
  - Turn off or unplug sensitive electrical equipment.
  - Contact Fortis Alberta to report the outage.
  - Ensure generators and any other equipment (e.g. propane heaters) are only used in safe, well ventilated areas.
  - Turn on equipment gradually when power is restored to prevent overload.
- For further details see:
  - Fortis Alberta has extensive information on coping during power outages, [www.fortisalberta.com/outages](http://www.fortisalberta.com/outages).
  - Locations of current power outages, <https://outagemap.fortisalberta.com>.



## Water and feed requirements

- Knowing the approximate water and feed requirements for your sheep will help you estimate the **minimum** supplies needed during an evacuation or if you are forced to leave your animals under a human evacuation order. **Be aware that these are estimates for emergency situations only; intake for both feed and water are typically much higher.** Under normal circumstances, it is highly recommended that producers provide rations balanced for nutrient requirements specific for each stage of growth or production.

Estimates of minimum water and feed requirements during emergency situations				
	Hay		Water	
	kg/day	lb./day	L/day	qt./day
Feeder Lamb	1.4	3	1.9	2
Dry ewe	1.4	3	2.8	3
Ewe with lamb(s)	2.3	5	3.8	4

Source: *Preparing the Farm and Farm Animals for Disasters*, <http://emergencypreparedness.cce.cornell.edu/family/Documents/PDFs/Farmanimalprepare.pdf>.

## Wildfires

- Wildfire is a relatively common threat in Alberta. Dry, windy conditions greatly increase the risk to forested areas and for grass fires to quickly become out of control. Extreme and dangerous situations can develop with little warning.
- Prevent/prepare for wildfires:
  - Contact your municipal office to learn about fire preparedness and prevention in your area.
  - Don't start your own wildfires—use a screen to cover burning barrels and take precautions, such as notifying your local fire department before you burn weeds, old bales, etc.
  - Respect seasonal fire bans.
  - Create 'fuel-reduced' areas for your livestock (i.e. ploughed areas or heavily grazed pasture that will slow the fire's progress).
  - Reduce vegetation from around buildings and feed storage by pruning or mowing.
  - Identify equipment that may be used for slowing a fire (e.g. harrow, plough, water truck, shovels).
  - Consider maintaining a supply of water that could be used for firefighting (e.g. water tank, cistern).
- During a wildfire:
  - Listen for alerts and be aware of changing conditions (e.g. wind direction).
  - Make the decision to implement your animal evacuation plan or to move animals to fuel-reduced areas on your farm.
  - In extreme cases, producers may cut fence lines to allow animals the freedom to avoid the fire. This is only done if there is no danger to people or traffic.

- Human safety takes priority over livestock and property. Be ready to evacuate yourself and your family quickly if you are threatened or an evacuation order is issued.
- For further details see:
  - Wildfires, <http://wildfire.alberta.ca>.
  - Environmental Emergencies, Toll Free: 1 800 222-6514
  - Report a Wildfire, Toll Free: 310-FIRE (3473), Call toll-free: 310-0000.
  - *Fire Smart*, Alberta Agriculture and Forestry, <http://wildfire.alberta.ca/fire-smart/default.aspx>
  - *Wildfire Evacuation: Are You Prepared*, <https://specialareas.ab.ca/wp-content/uploads/2015/02/PDF-Emergency-Management-Wildfires.pdf>.
  - *Wildfire and Before a Wildfire* Public Safety Canada, <https://www.getprepared.gc.ca/cnt/hzd/wldfrs-en.aspx>; <http://www.getprepared.gc.ca/cnt/hzd/wldfrs-bfr-en.aspx>.

## Winter storms / extreme cold

- Healthy sheep typically fare quite well in cold, dry conditions provided they are given access to appropriate shelter or windbreaks, left in full-fleece, and are in good health. Even healthy sheep will require extra feed to maintain body condition during periods of very cold temperatures.
- Extra precautions will be needed if:
  - sheep become wet and/or there is a high wind chill value, decreasing the insulation value of wool.
  - sheep have recently been sheared.
  - there are very young, old or compromised animals.
  - ewes have started lambing or are expected to start lambing.
  - there are extended periods of extremely cold temperatures.
- Preparing for severe winter weather:
  - Review your Power Outage plan (see page 17).
  - Create a 72 hour family kit (see page 8).
  - Have sufficient supplies of straw or other bedding.
  - Identify naturally sheltered areas or create sheltered areas (e.g. move round bales or wagons etc. to be used as windbreaks) that can accommodate all animals in the event of a winter storm.
  - Identify animals that may require extra care or housing inside (e.g. very young or old animals, freshly sheared, ewes close to lambing).
  - Prepare buildings you may use for indoor housing (e.g. assess roof snow load capacity, adequate floor space for animals, heat lamps/heaters, ventilation).
  - Take precautions to prevent water lines from freezing and have a backup plan for watering if they do freeze. Watering with snow is listed as an option in the Code of Practice, but only if there are adequate amounts of loose, clean snow and only for healthy, mature animals.

- During severe weather:
  - Listen for weather and emergency alerts (see page 7).
  - Move animals to sheltered areas.
  - Monitor animals closely for signs of hypothermia or frostbite.
  - Feed extra during periods of extreme cold.
  - Monitor water supplies and water delivery systems.
- For further details see:
  - *Severe Storms – What to do?* Public Safety Canada, <https://www.getprepared.gc.ca/cnt/rs-rs/pblctns/svrstrms-wtd/index-en.aspx>.
  - *Code of Practice for the Care and Handling of Sheep*, [www.nfacc.ca](http://www.nfacc.ca).

## Appendix B: Traceability in the sheep industry

The sheep industry has a mandatory livestock identification and traceability program. In the event of a disease outbreak this system allows for trace-back of animal movements to help determine which other animals or locations were potentially contaminated. In the event of a disease outbreak, this system helps determine what animals and locations were exposed to infected animals.

### Sheep/Lamb Owner's Checklist of Traceability Requirements

- Register and receive a PID number.
- Register any information changes in the PID system within 30 days.
- Apply Canadian Sheep Identification Program (CSIP) tags before animals leave the farm of origin.
- Provide PID Number when purchasing CSIP tags.
- Complete Alberta Livestock Manifest as required.
- Accurate record keeping including identification number, flock health treatments, parentage, dates (birth, death, sales etc.), and sales information.

For further details see: [http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/trace14214](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/trace14214).

# Appendix C: Business risk management and disaster assistance

## Government programs

There are a variety of government funded programs that provide disaster insurance and financial assistance to help rebuild after a disaster. Details of some of these programs are given below.

- **AgriRecovery** is a disaster relief framework that is part of a suite of federal-provincial-territorial (FPT) Business Risk Management (BRM) programs under *Growing Forward 2*. It is intended to work together with the core BRM programs to help agricultural producers recover from natural disasters. In Alberta, producers access these programs through the **Agricultural Finance Services Corporation** (AFSC) 1-877-899-2372, <http://www.afsc.ca/home.aspx>.

The three core FPT BRM programs are:

- **AgriInsurance** is an insurance-based program designed to assist producers experiencing production losses due to eligible perils, including severe losses resulting from disaster events;
  - **AgriStability** is a whole-farm, margin-based program that assists producers when they are facing severe margin (income) declines caused by circumstances such as low prices, rising input costs, and production losses; advances (interim payments) are available under the program to help with cash flow; and
  - **AgriInvest** is a savings account-based program where producer deposits are matched by governments; the funds in accounts are available to offset losses, help with cash flow needs, or support investments to help with managing business risks.
- In the event of a large-scale natural disaster, the Government of Canada provides financial assistance to provincial and territorial governments through the **Disaster Financial Assistance Arrangements** (DFAA), administered by Public Safety Canada (PS). Visit the Public Safety Canada website for more information, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rcvr-dsstrs/index-en.aspx>.
  - The **Disaster Recovery Program** (DRP) is administered by the Alberta Emergency Management Agency (AEMA). Under the Alberta Emergency Management Act the province provides disaster recovery assistance to residents, small business, agriculture operations, and provincial and municipal governments if:
    - The event is considered extraordinary.
    - Insurance is not reasonably or readily available.
    - There is evidence that the event is wide spread.Visit the AEMA website for more information: <http://aema.alberta.ca/assistance-and-recovery-support>.

- Compensation for losses due to reportable disease outbreaks is available in some circumstances through the Health of Animals Act. Go to the CFIA website for more information, [www.inspection.ca](http://www.inspection.ca).

For a full list of federal disaster assistance programs, visit the Public Safety Canada website, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rcvr-dsstrs/index-en.aspx>.

For a list of programs and services available in Alberta, go to the Agriculture and Forestry website, <https://www.agric.gov.ab.ca/app52/programsservices>. This page provides links to a wide range of programs, including *Growing Forward 2* and information about loans and financing. Several of the *Growing Forward 2* producer programs, such as *Biosecurity and On-Farm Stewardship*, may provide financial assistance to make improvements to farm infrastructure that, in turn, would improve aspects of farm emergency response.



## Appendix D: Farm emergency contact list

Farm Emergency Contact List		
Land Location and PID:		
Owner/Manager Emergency Contact:		
Name/Organization	Farm Account	Number/Contact
Doctor/Clinic		
Electrical Company		
Fortis		310-WIRE; 1-866-717-3113 www.fortisalberta.com
Electrician		
Emergency (Ambulance, Fire, RCMP)		9-1-1
Evacuation (Contact at site)		
Fuel Agent		
Health Link (24/7 Health Advice)		8-1-1
Insurance Agent		
Internet Provider		
Municipal Office		
Natural Gas Company		
Off-site Contact		
Plumber		
Police/RCMP (Local)		
Telephone Provider		
Trucker/Hauler		
Veterinarian (Farm)		
Staff		
Other Contacts		