ONTARIO PORK

On-Farm Emergency Response Planning Guide

Third Edition, 2023

This manual encourages farmers to take a critical look at their agricultural operation and assess potential risks. It will guide you through creating an individualized emergency response plan for your farm.

The emergency response templates in this guide must be edited to reflect your farm operation and premises.

IN CASE OF EMERGENCY

YOU ARE AT:

Farm Name: _____ Phone: _____

Full Address (including Fire #): _____

County/Twp.: _____ Lot/Concession: _____

Directions to this location: _____

_____

_____

Alternative Contact: _____ Phone: _____

Contributors

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Swine Health Ontario

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Acknowledgement

Information for this guide was pulled from many sources, some of which are listed in Appendices 2 and 3 in addition to citations throughout. Selected resources are also provided in their entirety on the USB stick that accompanies this guide. See list in Appendix 2.

Disclaimer

This document is intended to be used as a guide to emergency planning and response. The authors and the Ontario Pork Producers' Marketing Board do not take responsibility for the application of any or all suggestions, advice, or information contained in this document. Professional advice should be obtained for any emergency or disaster situation.

This guide provides a general overview of potential emergencies, natural or man-made disasters, which may arise on your farm premises and suggested response procedures. It is extremely important that you consider your particular circumstances and farm practices when developing your personalized farm emergency response plan. **You must adapt/edit all templates for emergency response procedures to reflect your farm operation and premises.**

Photo Contributors

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First Edition
2017

Second Edition
2020

Third Edition
2023

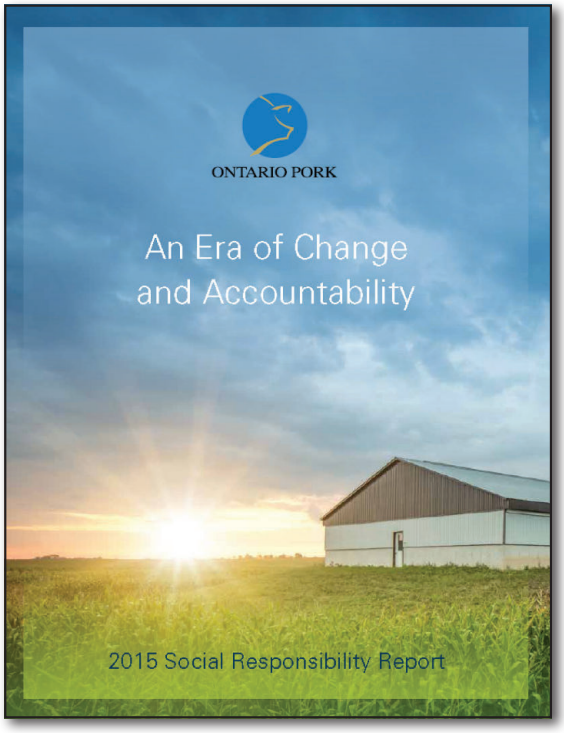
Ontario Pork Producers' Marketing Board

The views expressed in the On-Farm Emergency Response Planning Guide are the views of the authors and of the Ontario Pork Producers' Marketing Board and do not necessarily reflect those of the governments of Canada and Ontario. The Governments of Canada and Ontario, or their directors, agents, employees, or contractors will not be liable for any claims, damages, or losses of any kind whatsoever arising out of the use of, or reliance upon, this information.

This project was funded in part through *Growing Forward 2 (GF2)*, a federal-provincial-territorial initiative. The Agricultural Adaptation Council assists in the delivery of *GF2* in Ontario.
The Canadian Agricultural Partnership (the Partnership) is a federal-provincial-territorial initiative.
The Agricultural Adaptation Council assists in the delivery of the Partnership in Ontario.

Ontario Pork On-Farm Emergency Response Planning Guide

Ontario Pork released our inaugural Social Responsibility Report in 2015, making us the first livestock commodity group in the province to commit to setting benchmarks in areas that measure economic, environmental, social, and governance performance based on global measurement standards.



Our social responsibility process is being measured through six dimensions with a set of commitments in each: farm management, economic performance, environmental stewardship, animal care and food safety, relationships with the community, and workers' well-being.

The workers' well-being dimension relates to providing competitive working conditions, maintaining fair labour relations, and ensuring a safe working environment. The development of an on-farm emergency preparedness manual is one of our key commitments. Having a well thought out, written plan will enhance on-farm worker safety, help farmers protect the welfare of their livestock, and continue to be viable even in the face of disastrous events.

The producer survey, conducted as part of our Social Responsibility Report preparation, indicated that despite past events (1998 Eastern Ontario ice storm, 2003 power blackout, 2013 ice storm, disease outbreaks such as PRRS and PEDv, local tornadoes, barn fires, etc.) many people have still not taken steps to comprehensively prepare for future situations. Some may have an Environmental Farm Plan and/or a farm biosecurity plan but not a robust and overall emergency response plan.

Any incident involving agricultural communities, whether naturally occurring or man-made, accidental or intentional, will greatly impact the individuals, farms and businesses in these affected areas as well as impact local, provincial and national economies. Farmers and rural communities need to prepare for these emergency events to prevent or minimize the impact on human and animal health as well as animal and crop production.

The On-Farm Emergency Response Planning Guide has been developed as an all-hazard resource with the hope of raising awareness of the natural and man-made threats to farming operations which will, in turn, lead farmers to develop proactive response plans for their operations. The intent of this guide is to focus on the primary resources required in an emergency and is in no way a substitution of ongoing training for farm owners and employees (e.g. health and safety, machinery operation, pesticide use, etc.). While our resource has been tailored specifically to pork operations, it could easily be adapted for use by other commodities and we are willing to make it available to any interested agricultural group.

For additional copies of this guide, an electronic version is provided on the USB stick that accompanies this guide, copies can be downloaded from our website (ontariopork.on.ca/Resources) or contact:

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Table of Contents

All of the templates have been provided in fillable form on the USB stick that came with this Guide. As well, the complete Guide and the templates can be downloaded from the Ontario Pork website ontariopork.on.ca/Resources.

Note: The scope of the guide is quite broad, touching on many different types of potential emergency situations. Several of the disaster types are the focus of more detailed manuals or guides. Appendix 2 gives you a list of documents included on the USB stick that go into greater detail regarding some of the topics covered in this guide.

Section 1

Importance Of Emergency Response Planning

Importance Of Emergency Response Planning

Disasters do not only happen in flood plains, near an earthquake fault line, or in a coastal area. They can happen anywhere and include: barn fires; hazardous material spills; disease outbreaks; extreme isolated weather occurrences; prolonged power outages; gas leaks; personal injuries; and, train derailments, some of which may necessitate evacuation.

Emergency preparedness is important for all animals, but it is particularly important for livestock because of the animals' size and the requirements needed to shelter and transport them. It is imperative that farmers be prepared to protect their livestock, whether by evacuating or by managing the emergency conditions on-farm.

Keep in mind that you may not be present when an event occurs on your farm. This fact alone highlights the need to include all pertinent information about your animals, farm property, family members and farm workers in written form and in an easily accessible location.

Why write out a plan?

Pork producers are responsible for the safety and security of their employees and livestock. While most farmers may feel that they would instinctively know what to do without the need to work through a guide and write down an emergency response plan, documenting the actions needed is valuable for several reasons:

- Your plan can be written when time is available for contemplation and to look up contact information, calculate and record animal inventory numbers, and consider response options under non-stressful conditions.
- Pre-planning also includes storing information electronically in a central location and with a second back-up copy stored off-site.
- An emergency guide for the farming operation helps inform others on how best to assist during an emergency, including family members, farm staff, neighbours, and first responders.
- Working through the process of writing an emergency response plan will help the producer assess the potential risks and identify where they can improve practices or mitigation efforts. A little time spent adopting some proactive measures now may save a lot of time and money should the farm experience an emergency in the future.
- A documented emergency response plan will set out processes and procedures for dealing with specific situations so that time and resources are used most effectively and efficiently at the time of the emergency.
- It is important to be prepared with information to assist emergency responders and others who may be called upon to assist with an emergency such as a fire, flood or when a disease outbreak happens. Many of these individuals may have little experience or knowledge of the workings of a farm.
- An emergency response plan adapted specifically for your particular farm demonstrates the "due diligence" you have taken in managing your risks and protecting your family, workers and livestock. Share your plan with your insurance provider; it may reduce your assessed risk level.

- Although it is not possible to plan for all possible scenarios, the plans and activities that you develop will help to reduce your level of risk and, therefore, improve your sustainability. Be sure to share your plan with family members, staff and service providers as appropriate.

Human safety is paramount and must always be the prime consideration when responding to an emergency situation.

Section 2

How To Use This Guide

How To Use This Guide

The following section, section 3, provides a self-assessment checklist to get you thinking about potential hazards around the farm and emergency prevention measures you could take to mitigate risk. The checklist can be completed either before you write your emergency response plan (to help identify risk) or afterwards to double-check that you have covered everything in your protocols.

Section 4 focuses on identifying various natural and manmade hazards which could lead to an emergency situation on your farm. For each hazard, points to consider for preventing, preparing for and responding to that type of emergency are given followed by a template to assist you in developing a response procedure.

Appendix 1 provides fillable templates for the key information pieces to include in your response plan such as a farm map and important contacts list. Electronic fillable versions are also on the USB stick that came with this guide or can be downloaded from the Ontario Pork website ontariopork.on.ca/Resources.

NOTE: You must adapt/edit all templates for emergency response procedures to reflect your farm operation and premises.

STEPS IN PREPARING YOUR PLAN

1. Complete the self-assessment prevention checklist in section 3.
2. Take any corrective action identified when completing the self-assessment prevention checklist.
3. Read the points to consider for the various hazards in section 4.
4. Fill in the template for your response procedure for each hazard (hand written or fill in electronic version, save and print off).
5. Fill in the contact lists, charts, inventories, etc. in appendix 1 (hand written or fill in electronic version, save and print off).
6. For more information, consult the supplemental documents on the USB stick or on-line resources listed in Appendix 3.
7. All material is also available for downloading from the Ontario Pork website ontariopork.on.ca/Resources.

The scope of the guide is quite broad, touching on many different types of potential emergency situations. Several of the disaster types are the focus of more detailed manuals or guides. Appendix 2 gives you a list of documents included on the USB stick that go into greater detail regarding some of the topics covered in this guide.

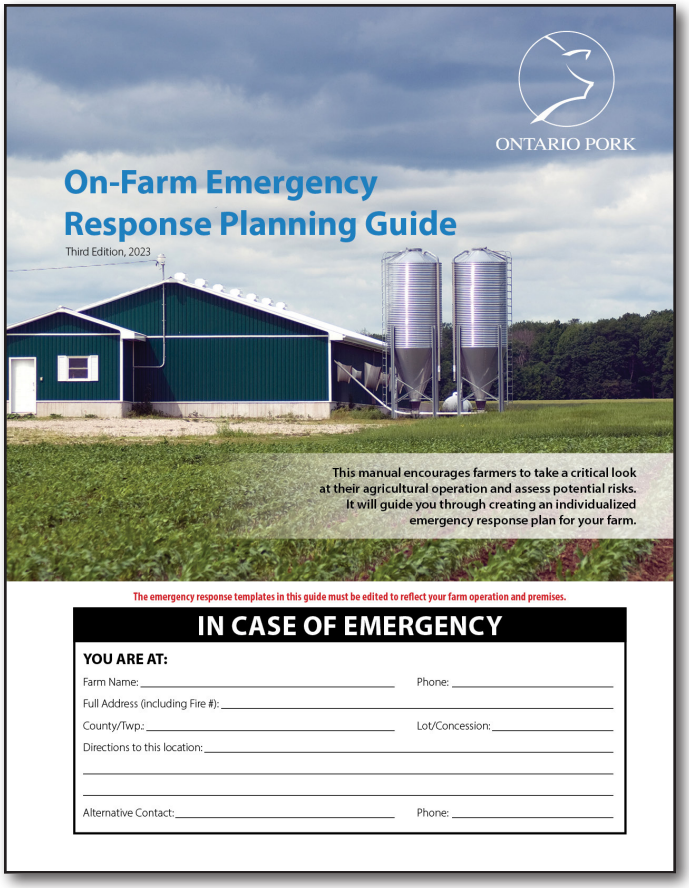
Appendix 3 lists additional on-line references for emergency planning and response if you would like more information.

All municipalities are to have a designated emergency management officer. In some cases, this is the fire chief while other municipalities have a staff position allocated to emergency response. Contact your municipality to determine who the emergency management officer is in your area and also inquire whether they have emergency preparedness information available that might assist you in preparing your personal plan.

NOTE: If you have an up-to-date Environmental Farm Plan, you may have completed many of these documents already and may choose to simply supplement that plan with procedures to address additional emergency types.

What to do with your completed plan:

- Your plan should be a quickly accessible source of information providing contact information and the description and location of production facilities, animals and equipment. It should also list the basic procedures to follow during an emergency.
- Write it down or print it out in hard copy as you may not have time to print it off during an emergency or computers and printers may not be working. If the plan is hand written, ensure others are able to read it (neatness and legibility).
- Keep your plan in a place where you and other people can easily get to it.
- Consider having multiple hard copies of the plan located in various locations around the farm, e.g. barn or house office, feed room or ante room, chemical storage building. Give a copy to a neighbor.
- Put a big label on your plan binder so that it is clearly identified.
- Store an electronic version on a "cloud" server or document sharing service such as Dropbox, SkyDrive, Google Drive, iCloud, OneDrive, etc.
- Ensure that other family members and employees know where to find the plan and how to use it.
- Review and update your plan(s) at least annually or sooner if any significant change occurs in the farming operation.



The purpose of this guide is to focus on the primary resources required in an emergency and is in no way a substitution of ongoing training for farm owners and employees (e.g. health and safety, machinery operation, pesticide use, etc.).

Disclaimer

This document is intended to be used as a guide to emergency planning and response. It is quite broad, touching on many different types of potential emergency situations. Appendix 2 gives you a list of documents included on the USB stick that go into greater detail regarding some of the topics covered in this guide.

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Section 3

Self-Assessment Checklist

Self-Assessment Checklist

Read through the questions in the self-assessment checklist on the following pages. Check off whether:

- you have completed the activity;
- it is not applicable for your farming operation; or,
- you consider it a high or low priority action yet to be done.

This exercise will help you to identify whether there are other emergency prevention practices you could implement on your farm to reduce the risk or severity of potential emergencies.

Review this checklist annually, when you review your emergency procedures, to keep on top of changes and maintain practices.

SELF-ASSESSMENT CHECKLIST					
	DONE	HIGH PRIORITY	LOW PRIORITY	N/A	NOTES:
ACCESS					
Is your 911 address clearly visible on a post at the road?	☐	☐	☐	☐	
Do you have appropriate areas locked and/or gated? (e.g. chemical storage, barns, etc.)	☐	☐	☐	☐	
Are all farm accesses posted with "No Trespassing" signs?	☐	☐	☐	☐	
Are laneways adequate for emergency vehicles?	☐	☐	☐	☐	
• Wide enough at the road to allow longer vehicles to turn?	☐	☐	☐	☐	
• At least 12 feet wide?	☐	☐	☐	☐	
• Capable of supporting vehicles weighing in excess of 40,000 lbs?	☐	☐	☐	☐	
• At least 15 feet height clearance?	☐	☐	☐	☐	
• Vegetation trimmed at least 10 feet beyond the shoulder?	☐	☐	☐	☐	
Do you mark driveways, access lanes, and other access points with markers before winter?	☐	☐	☐	☐	

SELF-ASSESSMENT CHECKLIST

	DONE	HIGH PRIORITY	LOW PRIORITY	N/A	NOTES:
VISITORS					
Do you require all visitors to sign-in?	☐	☐	☐	☐	
Are you especially diligent in your verification of foreign visitors to be sure they have followed your biosecurity protocol for time away from pigs?	☐	☐	☐	☐	
Do you prevent the use of cell phones, cameras, and video recorders in your facilities?	☐	☐	☐	☐	
Do you require visitors, including service personnel, to wear disposable or washable boots?	☐	☐	☐	☐	
Are you careful not to allow jewelry, watches, and eyeglasses into your facilities unless they can be cleaned and disinfected?	☐	☐	☐	☐	
Are service vehicles required to enter and leave the property from one entrance/exit?	☐	☐	☐	☐	
Are truck drivers prohibited from entering your buildings and load-out areas?	☐	☐	☐	☐	
Do you have a buzzer at the farm or building entrance to automatically alert you when someone passes through or so they can contact you?	☐	☐	☐	☐	
STRUCTURES					
Do you inspect all buildings for structural deficiencies; such as cracked concrete, broken latches, loose roofing or siding, broken glass, etc., and repair as necessary?	☐	☐	☐	☐	
Have you developed maps and diagrams of your farming operation?	☐	☐	☐	☐	
Are all electrical devices in barns/sheds CSA approved?	☐	☐	☐	☐	
Are feed storage facilities located so that delivery trucks do not cross through animal traffic flow patterns?	☐	☐	☐	☐	
Are load out areas designed to minimize the possibility of hogs re-entering the barn after moving into the load out area or onto the truck?	☐	☐	☐	☐	
Do you have lighting in the right places for security, safety, and production purposes?	☐	☐	☐	☐	
Are all barns/sheds free of flammable debris, i.e. cobwebs, trash, etc.?	☐	☐	☐	☐	
Are fire extinguishers easily accessible in strategic locations?	☐	☐	☐	☐	
Do you know the snow load capacity of your building roofs or other structural limitations of your building?	☐	☐	☐	☐	

SELF-ASSESSMENT CHECKLIST

	DONE	HIGH PRIORITY	LOW PRIORITY	N/A	NOTES:
VEHICLES AND EQUIPMENT					
Are all equipment, machinery, tools, vehicles, ATV's, snowmobiles, fuel, etc. inventoried or monitored, and VIN numbers recorded?	☐	☐	☐	☐	
Do you lock/secure your vehicles and equipment (sprayers, etc.) daily on and off the farm?	☐	☐	☐	☐	
Do you require cleaning and disinfection of equipment and tools brought onto your operation?	☐	☐	☐	☐	
Do you use a tire and vehicle disinfection station at the entrance to your property?	☐	☐	☐	☐	
Can you quickly locate specialized equipment such as tractors with blades, backhoes, and equipment for transporting animals on short notice?	☐	☐	☐	☐	
Are all farm vehicles equipped with fire extinguishers and well-stocked first aid kits?	☐	☐	☐	☐	
MATERIALS					
Are pesticides, farm chemicals and medicines stored in a secure area and limited to trained personnel?	☐	☐	☐	☐	
Do you have a response plan in case of manure, fuel, fertilizer, pesticide, or other types of spills?	☐	☐	☐	☐	
Are "Do Not Enter" signs or pictograms posted for restricted areas such as manure pits, animal areas, and hazardous materials storage – in languages understood by all employees?	☐	☐	☐	☐	
Are wildlife and pests controlled in and around your facilities?	☐	☐	☐	☐	
WATER					
Are water sources for fire suppression identified and is that information shared with employees?	☐	☐	☐	☐	
Is the water supply system secure? (including wellheads, pumps, and storage tanks)	☐	☐	☐	☐	
Do you have an alternative or back-up source of water, especially for animals?	☐	☐	☐	☐	

SELF-ASSESSMENT CHECKLIST

	DONE	HIGH PRIORITY	LOW PRIORITY	N/A	NOTES:
POWER					
Do you have an appropriately sized generator or other alternative source of electrical power?	☐	☐	☐	☐	
Do you maintain and test your generator regularly and have fuel for emergency use?	☐	☐	☐	☐	
Do you train all employees on the safe operation of generators and associated equipment?	☐	☐	☐	☐	
Do you have battery or solar-powered flashlights and radios; and are extra batteries available in case of power failure?	☐	☐	☐	☐	
LIVESTOCK					
Have you developed a written herd health plan with your veterinarian?	☐	☐	☐	☐	
With advice from your veterinarian, have you established a time that visitors must be away from other pigs before visiting your facility?	☐	☐	☐	☐	
Do you promptly report new diseases or unusual signs (blisters on snouts or feet; discoloration of ears, belly, rump or tail; neurological disorders) to your veterinarian or animal health official?	☐	☐	☐	☐	
Have appropriate biosecurity protocols been developed, communicated to, and reviewed with all personnel?	☐	☐	☐	☐	
Do you keep animals in age-segregated groups?	☐	☐	☐	☐	
Have you established a consistent traffic pattern for pigs and workers in the direction of youngest to oldest and highest health to lower status?	☐	☐	☐	☐	
Do you have a plan to safely rescue an animal or human who falls into a waste handling lagoon including flotation and rescue devices?	☐	☐	☐	☐	
Are routine mortalities composted, incinerated, or buried in an environmentally safe and bio-secure manner?	☐	☐	☐	☐	
If mortalities are rendered, is the mortality pick-up area located away from production facilities?	☐	☐	☐	☐	
Do you have a plan for how you would handle a larger than usual or catastrophic number of mortalities (mass mortalities)?	☐	☐	☐	☐	
Do animals have permanent identification? (those requiring identification)	☐	☐	☐	☐	
Do you and your employees follow the same protocols?	☐	☐	☐	☐	

SELF-ASSESSMENT CHECKLIST

	DONE	HIGH PRIORITY	LOW PRIORITY	N/A	NOTES:
RECORDS					
Is all sensitive information stored in a secure area and shredded upon disposal?	☐	☐	☐	☐	
Are computer data back-ups completed on a monthly basis and stored off site?	☐	☐	☐	☐	
Do you keep computer virus protection software updated?	☐	☐	☐	☐	
Do you have up-to-date inventories of livestock, equipment, and hazardous materials?	☐	☐	☐	☐	
Are all insurance policies reviewed on an annual basis or sooner, if significant changes are made in structures, livestock, crops, land, equipment, liability, or when business entity changes?	☐	☐	☐	☐	
Do you have duplicate copies of important documents, electronic files, emergency plans, inventories, etc. that are kept off site?	☐	☐	☐	☐	
PLANS AND BUSINESS RISK MANAGEMENT					
Do you have a contingency plan for meeting cash-flow needs after a commodity loss/ failure/recall?	☐	☐	☐	☐	
Does your community have an emergency management plan in place that specifically includes agriculture?	☐	☐	☐	☐	
If the primary decision makers for the farm are not available or are incapacitated, is there a plan for someone else (or multiple people) to make important decisions including signing authority?	☐	☐	☐	☐	
Is there a list of emergency response telephone numbers, in a language understood by all personnel, in a visible location near every telephone?	☐	☐	☐	☐	
In case of emergency, is contact information for all farm personnel posted in several places including on cell phones?	☐	☐	☐	☐	

SELF-ASSESSMENT CHECKLIST

	DONE	HIGH PRIORITY	LOW PRIORITY	N/A	NOTES:
TRAINING					
Are family members and employees trained and up-to-date in First Aid/CPR and know the location of first-aid kits?	☐	☐	☐	☐	
Are family members and employees familiar with and appropriately trained on your farm emergency response plan?	☐	☐	☐	☐	
Do employees and family members know where emergency telephone numbers are located and how to report an emergency?	☐	☐	☐	☐	
Do you have a smoking policy that everyone follows?	☐	☐	☐	☐	
Do you screen applicants thoroughly, including checking references and background checks?	☐	☐	☐	☐	
ANNUAL REVIEW					
Do you annually review and update your emergency response plan including this checklist?	☐	☐	☐	☐	

This checklist was adapted from ReadyAG, Disaster and Defense Preparedness for Production Agriculture, Pennsylvania State University Cooperative Extension, 2010, extension.psu.edu/readyag-workbook. Used with permission.

Section 4

Preparing Your Plan

General Emergency Planning

Points to Consider

TIP

Vehicles and equipment may have to be moved quickly during an emergency. Establish a secure location for a spare key rack for farm equipment, personal vehicles and buildings. Ensure the keys are clearly and specifically labeled. Five keys labeled "tractor" when you have multiple tractors is not helpful.

Notification

- Consider how you would be warned of a natural or widespread disaster. Is your cell phone or computer registered with a local area emergency alert system? Some radio and television stations offer the service as well as some municipalities. The province issues Red Alerts for an "imminent threat to life, public safety or property". You can subscribe at: alertready.ca

Protecting Records and Documentation

- Critical business records should be backed up by one or more methods (i.e. second print copy plus an electronic version) with at least one version stored off-site. To help determine whether a document or record is critical, consider the following questions:
  - Is the record required for business success?
  - Is it required for legal reasons?
  - Is it required by a regulatory agency?
  - Is it required to support recovery efforts?
- Use fire-proof filing cabinets or boxes for important documents and computer records stored on-site.
- Write down the location of important farm and personal documents and where back-ups are stored. See template for emergency contact information in Appendix 1.
- If you had to evacuate or could not return to your home or farm, how would you access your important documents: personal (passport), medical (list of prescriptions or other medication, health card), financial, insurance, etc.?
  - Scan all of your important documents onto your computer and onto a USB stick (flash drive).
  - Store the USB: in the glove box of a vehicle; in an off-site, secure location; in a purse, etc.
  - Computer files should be similarly backed on remote servers (Dropbox, iCloud, SkyDrive, Google Drive, OneDrive) or duplicate copies stored off site.
  - If you are not able to scan documents, snap a close up photo with your cell phone.

- If you have employees, payroll continuity is an extremely important consideration especially if you are dealing with a widespread emergency situation. It helps them handle disaster-related problems at home and meet their personal financial obligations. You may want to establish a farm business policy for:
  - direct deposit of pay cheques for all employees;
  - overtime pay during an emergency;
  - one week's pay or other amount even if your business is not operational.
- Contact your insurance agent. Review your insurance coverage. Consider additional coverage for "all-hazard" situations (e.g. flood, hail damage).

Maps and Communications

- Complete a farm site map, farm inventories, and contact lists. Templates are provided in appendix 1 of this guide.
- Take photographs or videos of your farm property and structures (inside and out) and store in multiple secure locations. These can be very useful for insurance purposes and also for first responders regarding structural questions.
- In the event of an emergency incident, record details of any damage by photograph or video if possible and document actions taken including timelines.
- Establish an on-site and off-site meeting location for family and employees. The on-site meeting location will allow you to take count of everyone who is expected to be on-farm during an emergency situation. A designated off-site meeting location is especially important if there is a natural disaster such as a tornado or flooding which might make travel to the farm dangerous or when communications are restricted.
- Identify a central telephone number and contact person for family members and employees to call in the event of a natural disaster or other off-farm emergency to confirm they are safe and also to coordinate response activities. Consider a cell phone number or someone outside your immediate area in case of widespread power outages. Non-voice channels like texting, email or social media use less bandwidth than voice communications and may work even when the land lines do not.
- If an emergency requires that you evacuate your premises, time permitting, leave a note informing others when you left and where you went. If you have a mailbox, leave the note there.

CHILD SAFETY

- Walk through your farm and assess every area for hazards that could injure children. Try to see things from your child's point of view according to their age, size and ability. Correct obvious hazards.
- For young children, design a fenced "safe play area." This area should be near the house and away from work activities.
- Consider fencing off dangerous water sources such as ponds, manure tanks/ lagoons, and creeks.
- Make sure that hazardous materials are locked and inaccessible.
- Don't let your child, or any other person, ride on farm machinery that isn't designed for passengers.
- Teach children about both the positive and dangerous aspects of livestock and farm animals.
- Equip all barns, farm shops, chemical storage areas, livestock pens, etc. with latches that can be locked or secured so that young children cannot enter.
- Always turn equipment off, lower hydraulics and remove the key before leaving equipment unattended.
- Children who are physically able to be involved in farm work should be assigned age-appropriate tasks and continually trained to perform them. They should also be constantly supervised.
- Most importantly, children learn by imitation. If you practise and value farm safety, so will your child.

Preparing Your Property

- Ensure your property can be easily identified by first responders, i.e. fire code number prominently displayed.
- Farm laneway gates/entrances should be at least 12 feet (3.5 metres) wide with a height clearance of 15 feet (4,5 mentres) to accommodate emergency response vehicles. Entrances must be wide enough to allow large vehicles to turn without backing up.
- Do not block laneways with tractors and other vehicles or equipment. Responders need clear access.
- Remove dead trees or other debris in fields or animal holding locations. Remove or secure any loose equipment or materials, such as lumber, feed troughs.
- Make sure wiring for heat lamps or other electrical equipment is CSA approved, safely installed and away from flammable material.
- Identify alternate water or power sources that could supply your farming operation.
- Leased buildings: Contact information for the owner of animals housed in leased buildings should be posted inside each leased building. Is there someone familiar with the animals located on that premises that could feed and care for them if you or your employees were unable to reach that location?
- If you rent out houses or property, have contact information for your renters including who and how many individuals reside at that location.
- Ensure that all firearms are stored safely and in compliance with legislation.[1]

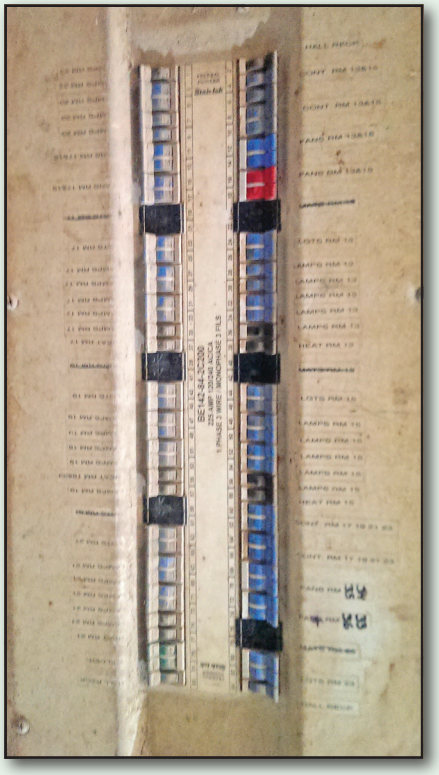
1. Storing, Transporting and Displaying Firearms, Royal Canadian Mounted Police, rcmp-grc.gc.ca/en/firearms/storing-transporting-and-displaying-firearms retrieved September 28, 2016.

Training

- Train family members and employees on the use of emergency equipment, how to turn off powered equipment, stop flow of liquids and gases, use of fire extinguishers, use of absorbents, starting generators, first aid, etc. Some insurance companies may be able to assist with providing fire extinguishers and/or training in their use. Document all training.
- Human safety is paramount when responding to an emergency situation. First aid training is extremely important for you, your family members and employees.
- At least once a year, formally discuss emergency plans with family members and employees. Ensure they know response procedures and that any training is up-to-date.
- If the primary decision makers for the farm are not available or are incapacitated, identify someone else (or multiple people) to make important decisions including signing authority. Discuss your wishes with your designee and write out the scope of responsibility given. Ensure the appropriate paperwork is completed with your financial institution, lawyer, accountant, etc. You can stipulate under which conditions the authority to make decisions will be activated. Document in your emergency response protocols who has been given this authority.
- Ask employees to provide you with an emergency contact person in case they experience illness or accident while at work. Also ask whether they have any allergies or medical conditions of which you should be aware and, if so, what appropriate emergency actions should be taken.

TIP

Put labels on all feed bins, tanks, and chemical and fuel containers so others will know what they contain. Also ensure electrical panels are clearly and correctly labeled.



A general emergency response procedure is contained on the following pages. It provides generic response direction and would be appropriate for posting in farm buildings and in equipment and vehicles. More detailed procedures for specific types of emergencies are also contained in this section. These should be completed and kept in your emergency response binder.

Note: You must adapt/edit all templates for emergency response procedures to reflect your farm operation and premises.

Training considerations for family members and employees:

- First aid and CPR.
- Proper use of a fire extinguisher and any other emergency equipment including where it is located.
- How to turn off powered equipment and stop the flow of liquids and gases, e.g. manure filling.
- Where and how to shut off electricity and gas.
- Consider running a mock emergency drill to test out response protocols.

WHERE TO BUY HEALTH AND SAFETY SUPPLIES AND EQUIPMENT

Industrial and safety supply stores will have first aid kits, personal protective equipment, and fire extinguishers. Below are four which also offer on-line ordering. In addition, fire departments may also refill fire extinguishers.

Grainger Canada grainger.ca

Canadian Tire Stores
canadiantire.ca

FLIR, thermal imaging equipment
flir.ca

Ideal Supply
idealsupply.com

Staples
staples.ca
and select safety supplies under "shop by category"

Peavey Mart
peaveymart.com

General Emergency Response Procedure[2]

List who to call:

- **Refer to Appendix 1: Emergency Contact Information**
- Speak clearly and provide the location of the accident or emergency.
- Describe any victim(s) and the nature of any injuries.
- Describe the emergency (fire, tornado, equipment accident, etc.).
- If a fire or tornado or utility emergency, describe:
  - any hazardous or flammable materials stored at this facility (fuels, bottled gases for welding or other);
  - Anhydrous ammonia stored on site;
  - fuel leaks (gasoline, ethanol, biodiesel, diesel, bottled gases);
  - pesticides or fertilizer stored on site with the potential to be implicated in the emergency situation; or,
  - solar panels; wind turbines, or biogas plant connected to the farm system.
- Note that you are calling from a farm and identify if animals are involved including type and number, if known.
- If an equipment related incident, describe:
  - the nature of the accident and
  - any rolling stock (tractor, combine, etc.) or fixed equipment implicated
- Contact other people below as appropriate (owners, managers, employees, and neighbors) for additional assistance. (When completing form, indicate the relationship these people have to the farm.)

_____

_____

_____

List what steps or activities should be taken and, if applicable, who is responsible:

- Do not move victim(s) unless you must do so for their safety and to prevent further injury.
- Render first-aid and emergency medical treatment to the best of your ability. At a minimum, attempt to provide the following assistance:
  - Stop the bleeding with firm pressure on the wounds; avoid direct contact with blood or other bodily fluids.
  - Clear blocked air passages in the case of choking.
- To the extent possible, use your training experience to prevent further damage to people, animals, environment and farm assets through quick and appropriate action and proper use of any emergency response equipment:
  - turn off powered equipment,
  - stop the flow of liquids and gases,
  - use fire extinguisher,
  - use absorbents, etc.

2. Adapted from Emergency Preparedness and Response Plan, Howick Township, Huron County, howick.ca/content/page-content/farm-emergency-plan.pdf

- Account for all personnel known or expected to be on the premises. The on-site meeting location is:

  _____

- Upon arrival of emergency response personnel, direct them to the location of any victims or facilities that require their attention and services.
- As appropriate, take photographs of the incident scene, damage, etc. and document actions including timeline.
- Other:

  _____

  _____

  _____

List what SHOULD NOT be done:

- Do not make statements during the emergency response about actions, cause, blame or responsibility unless authorized to do so.
- An accident or emergency may have legal and financial implications.
- Provide factual information necessary to direct and assist emergency responders.
- Direct all inquiries to farm management. When the emergency is over, farm management and/or skilled investigators will conduct a proper inquiry.
- If the press or animal activists should arrive at the scene, don't be rude. Be cordial but explain that you are focused on the care of the animals. Ask them to respect the biosecurity and do not enter signs. Direct them to officials on site if applicable.
- Other:

  _____

  _____

  _____

These procedures are to be copied, posted and maintained in good condition in facilities and equipment (in-cab/rolling stock or near to fixed equipment). Annual review and refresher training is recommended.

Post multiple copies in conspicuous places.

Replace this document with an updated version on an annual basis or more often as necessary.

Remember, you may know the procedure, but a stranger may be rendering aid.

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Deadstock - Mass Mortalities[3]

Points to Consider

- Identify the cause of death as this will direct your disposal options. Refer to the chart included in this section.
- Individual producers are responsible for the management of day-to-day livestock and poultry mortalities but you may be required to work with various levels of government in the event of an emergency carcass disposal situation.
- Large-scale emergency livestock or poultry carcass disposal may be necessary for a number of reasons including floods, fires, tornados, equipment and infrastructure failure, or animal disease outbreaks. As well, if export markets were closed to Canadian animals or meat products due to a disease or other trade issue, we could quickly be faced with a humane slaughter situation.
- In Ontario, disposal and management options for dealing with livestock and poultry mortalities are outlined fully in Ontario Regulation 106/09 under the *Nutrient Management Act, 2002*. They include:
  - deadstock collection service;
  - composting;
  - incineration;
  - disposal vessel;
  - burial;
  - delivery to a licensed disposal facility under the *Food Safety & Quality Act* (FSQA), e.g. rendering plant;
  - delivery to a waste disposal site IF approved under the Environmental Protection Act (municipal waste disposal sites are not able to accept deadstock);
  - delivery to an anaerobic digester approved under the Nutrient Management Act or Environmental Protection Act; and
  - delivery to a veterinarian for post mortem and subsequent disposal (infrequent mortalities).

- All deadstock should be disposed of within 48 hours of its death or immediately if it begins to putrefy before 48 hours have passed. These timelines may be extended if the deadstock is held for post-mortem or loss adjustment. Deadstock may also be stored in cold storage for up to 14 days and in frozen storage for up to 240 days before disposal.
- On-site or on-farm disposal is generally preferred to prevent the spread of disease if present. However, site conditions (e.g. high water tables, porous soils or heavy rainfall) and the number of carcasses, may restrict the ability of a farm site to be used for disposal.
- When dealing with a disease situation, disposal choices can be limited and some disposal possibilities may not be appropriate due to concerns regarding the spread of disease and regulatory requirements.
- The chart on the following page provides a schematic of the various decision points to be considered when determining how to handle large numbers of livestock and poultry mortalities. The cause of the mass mortality will initially guide the disposal decisions. Animal deaths resulting from a foreign animal disease must be reported to CFIA. They will direct the disposal options.
- **Check your insurance coverage. Specifically ask if disposal costs are covered by the general policy or if there is a separate rider. If you are considering a mass burial, again, check your coverage. Many policies will not insure properties with a mass burial on site.**

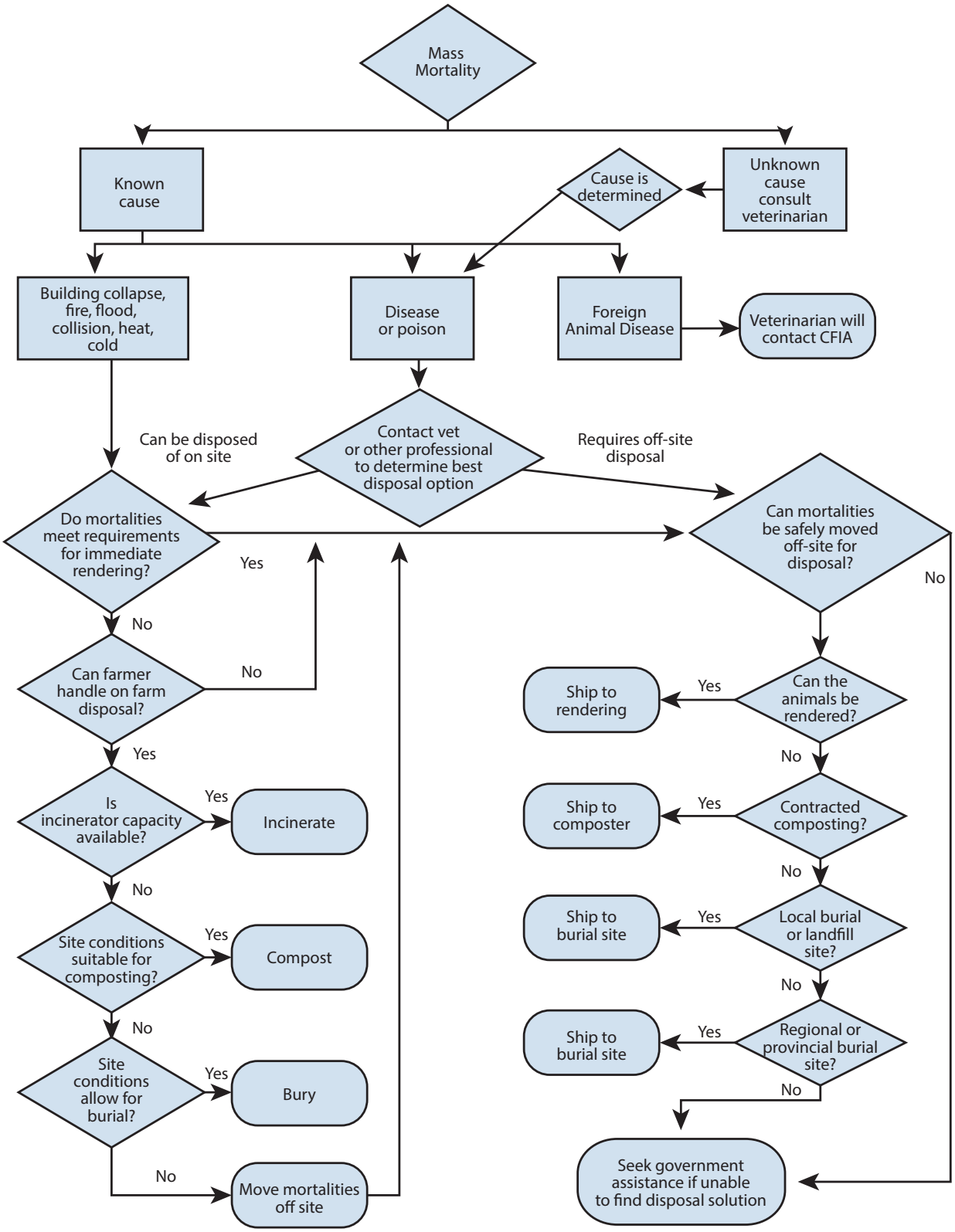
Note: More detailed information about on-farm disposal, including site and operational management considerations for composting or burial can be found on the OMAFRA website: omafra.gov.on.ca/english/livestock/deadstock/index.html

3. Some of the content in this section was adapted from the Mass Carcass Disposal Guide for Municipalities, 2017 produced by the Ontario Livestock and Poultry Council and available from ontlpc.com/uploads/1/3/2/4/132418252/masscarcassdisposalguiderevisedmay2017.pdf.

Training considerations for family members and employees:

- Proper disposal of deadstock including when and who to contact, farm documentation (as applicable), and how to handle carcass.

Mass Carcass Disposal Considerations



Flowchart adapted from Contingency Plan Template for On-Farm Planning, The Canada-British Columbia Environmental Farm Plan Program, Order No 390.100-0, September 2007.

Disease Outbreak and Biosecurity Planning for Livestock and Crops

Points to Consider

For Livestock:

- Post restricted entry signs at entrance to Controlled Access Zone (e.g. end of laneway) and at entrances to buildings to keep visitors out of facilities without your permission and protect your liability against trespassers[4].
- Ensure laneways and roadways used by visitor, delivery and service vehicles are kept free of manure and soil.
- Locate a drop box away from the barn entrance for feed delivery slips, courier deliveries, bills and receipts.
- Set aside a specific parking area for staff and visitors and post signage to clearly indicate that is where vehicles should be parked. Ensure the area is well-drained, graveled, free of manure, and a minimum of 15 feet (4.6 metres) from the barn.
- Keep a visitor log book at each barn to record the name and date of visitors and service vehicles. A template for a visitor sign-in page is provided in section 5 of this guide. As well, free log books are available for order or downloading from the Ontario Livestock and Poultry Council ontlpc.com/uploads/1/3/2/4/132418252/olpcvisitorlogbook.pdf.
- Provide hand washing facilities or a bottle upon entry and exit from the barn. Note: Hand sanitizer has an expiration date and must contain at least 60% alcohol to be effective.
- Provide boots and coveralls for visitors at each barn (this includes veterinarians). If staff are moving between barns, consider having separate boots and coveralls for them at each building.
- Establish a herd health program, including vaccination and medication protocols, and review it with your veterinarian on a regular basis.
- Observe your animals' production levels, behaviour, clinical signs and feed and water consumption daily. Early detection of a disease is vital to minimizing its impact and its containment to a single premises or individual production units. Record treatments and mortalities.
- Ensure (don't presume) workers are knowledgeable in recognizing signs of disease. Talk to them about what they should consider to be warning signs of a possible health issue. Write a standard operating procedure (SOP) to ensure everyone involved in the farming operation follows the same evaluation process.
- Work with your veterinarian to have a "disease response plan" in place for suspected cases of contagious or reportable diseases. A disease response plan should include triggers for activating the response plan. For example, numerous animals showing signs of disease, a significant decrease in production, a lack of response to routine treatments, unanticipated mortality rates, etc.
- There should be regular maintenance of equipment used to euthanize pigs, e.g. captive bolt, gun. Write down maintenance procedure, train those who will do it and record each time it is completed. Keep a maintenance record/log.

Disease in livestock can be spread in a number of ways, including:

- through diseased animals or animals incubating disease;
- through animals other than livestock (pets, wild birds and other wildlife, rodents and insects);
- on the clothing and shoes of visitors and employees moving from farm-to-farm, between animal groups or production areas on-farm;
- in contaminated feed, water, bedding and soil;
- from the carcasses of dead animals;
- on contaminated farm equipment and vehicles; or
- in airborne particles and dust blown by the wind and exhaust fans.

- Remove deadstock immediately and dispose of them in an approved manner (licensed collector, bury or compost according to provincial and municipal protocols, etc.). Clean and disinfect the area after carcass removal and wear protective clothing when handling deadstock. Deadstock pickup areas should be far away from the barn.
- Prepare biosecurity protocols for off-farm movement of pigs, e.g. transport biosecurity. (Refer to supplemental information on USB stick and references listed in appendix 3.)
- Vehicles and farm equipment can spread disease from farm to farm through contaminated material on their tires, fenders and undercarriages. Proper sanitation of equipment between farms can reduce the spread of disease. Complete drying of equipment and trucks is a very important component of the "cleaning" process.[5]
- Implement a pest control program; wild birds and rodents may carry infectious disease or contaminate feed supplies.
  - Screen all openings in naturally ventilated barns and exhausts.
  - Seal off openings into silo roofs.
  - Screen ledges which could be used as nesting sites.
  - Clean up feed spills.
  - Maintain bait stations.
  - Minimize vegetation and debris around facilities.
  - Consider a two-to-five foot apron of crushed stone/ gravel around the perimeter of barns to deter rodents.
- Develop a barn sanitation protocol.
- Implement a good record keeping system for dates of vaccination and medication, footbath changes, disease occurrences, mortalities, rodent bait changes, livestock movement in and out, etc. This will help you keep track of your biosecurity practices as well as flag any significant herd health changes.
- Biosecurity for your crops is equally important to protect against insects, weeds, and diseases. A plant biosecurity manual is included on the USB that accompanies this guide or it is available for ordering or downloading at www.ontlpc.com/uploads/1/3/2/4/132418252/olpc-plant_web.pdf.

A rat deposits 25,000 droppings and a mouse 17,000 droppings in one year. Even a small population of these rodents may severely contaminate feed supplies. Flies are also a frequent carrier of disease and have been shown to travel up to 1.5 km from farm to farm.

Rodent Control

Additional Information Sources:

Refer to the USB stick that came with this guide for additional details on preventing and responding to disease outbreaks on your farm. The National Swine Farm-Level Biosecurity Standard, the Code of Practice for the Care and Handling of Pigs, and the complete manuals for livestock biosecurity and plant/crop biosecurity are included.

Training considerations for family members and employees:

- How to assess/evaluate warning signs of a possible herd health issue.
- Proper cleaning and sanitation of barns, vehicles and equipment.
- Proper techniques for administering vaccines and medicines.
- Livestock euthanasia training.

VACCINATIONS FOR PEOPLE TOO

The CFIA recommends seasonal flu shots for livestock and poultry producers, their families and workers to help prevent the spread of influenza viruses between people and animals. Anyone with flu-like symptoms should also avoid contact with livestock. Several influenza viruses can be transmitted between people and animals, and between different species of animals.

Apart from the damage influenza can cause in herds and flocks, human health professionals are concerned that certain strains could mutate or combine with another flu virus that could spread more easily between people.

5. Refer to the OSHAB Transport Biosecurity Handbook contained on the USB which accompanies this guide. The Handbook contains best practices for cleaning and disinfecting.

Livestock Disease Response Procedure

List the factors that would trigger this disease response plan:

- State thresholds for: number of animals showing signs of disease; your definition of "high" mortality rates, your description of a "significant" decrease in production, etc. If you have different triggers for different production groups, clarify each group's benchmark triggers.

- List specific symptoms that would automatically trigger activation of the disease response plan, i.e. blisters on the snout, tongue, lips, between toes, or above hooves; sudden onset of watery diarrhea and vomiting; etc.

List who to call:

- **Refer to Appendix 1: Emergency Contact Information**

List what steps or actions should be taken and, if applicable, who is responsible:

- Call herd veterinarian and clearly explain all symptoms, number and age of affected animals, and any treatments undertaken.
- Service unaffected barns first or dedicate a specific farm worker to the affected barn(s).
- Stop all animal movements off and onto premises, just not the affected species. Other animals have the potential to spread the disease.
- Inform all family members and employees of the situation.
- Restrict movement of people, equipment and vehicles on and off farm. Ensure that footwear and vehicles leaving the property have been cleaned and disinfected
- Describe how to control access on and off the farm, i.e. shut gates, rope or chain across laneway, signage, relocate parking area, etc..

_____

_____

_____

- Describe the steps to follow in cleaning and disinfecting footwear and vehicles, i.e. product to use, contact time, water temperature, where cleaning is to take place, what equipment will be used, etc.

_____

_____

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_____

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_____

- Gather together all relevant documents including health and production records and review log book for movements on and off farm during the past 14 days. Seek advice from your herd veterinarian and government officials (if applicable) regarding who should be notified and any precautionary action they should take.
- **If the press or animal activists should arrive at the scene, don't be rude. Be cordial but explain that you are focused on the care of the animals.** Ask them to respect the biosecurity and do not enter signs. Direct them to officials on site if applicable. See section 6: Animal Activists, Protests and Trespassers.
- Other actions:

_____

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_____

Reportable Diseases

If a disease diagnosis confirms a "reportable" disease, the Canadian Food Inspection Agency (federal disease) or the Ontario Ministry of Agriculture, Food and Rural Affairs (provincially reportable) will have been informed at the same time. Follow the directions and recommendations of the regulatory agency but do not hesitate to ask questions. If they have not already been informed, update your service industry representatives and Ontario Pork of the diagnosis and the measures undertaken for containment.

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Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Refer to section 5 Animal Disease and Disaster Planning and Preparedness for additional information.

Fires

Points to Consider

- Do not block laneways to your barn with tractors and other vehicles or equipment. Responders need a clear access all around farm buildings in most instances.
- Farm laneway gates/entrances should be at least 12 to 16 feet (3.7 to 4.9 metres) wide.
- Do not store combustible materials in a barn that is used to house animals.
- If possible, put an electrical shut off on the outside of your barn.
- Ensure family members and employees know where the electrical and gas shut-offs are located.
- Have fire extinguishers in all barns and all vehicles. Verify annually that they are full and not expired. It is very important that family members and employees know the locations of the fire extinguishers and are trained in how to use them.
- Control grass and other vegetation around buildings.
- Consider constructing and maintaining fire ponds.
- Consider alternative sites for housing your animals if they had to be evacuated due to a fire. Put together a list of relocation farms/sites.
- Compile a list of resources you will need that can assist on short notice with relocation – livestock haulers, stock trailers, loading chutes, portable corrals, etc.
- A barn will normally become fully engulfed within six minutes. Human safety is the top priority; please wait for emergency response personnel. Evacuating animals from a barn can be extremely challenging and actually impossible in some cases. It will take an experienced person approximately one minute to halter and lead a horse 100 feet (30.5 metres), if they cooperate, from a barn. Pigs would be exceptionally difficult to evacuate.
- If there is a series of connected barns or other barns in close proximity, it may be more effective and safer to evacuate the animals in those barns versus the barn that is on fire. The animals closest to the doors should be the first ones evacuated as they are the easiest to get to.
- If animals have been evacuated from the barn, they must be contained in a field or corral or trailer away from the fire as animals will run back into a burning barn.
- Pigs must be protected from the cold if they are evacuated in the winter.[6]
- If there is a chance any of the animals have embers under their hair, they must be hosed off.
- Embers can smolder under their hair for several hours leading to burns. The majority of animals suffering from burns will need to be euthanized.
- Most animals are killed by smoke inhalation, and those who survive rarely recover. Horses have a delayed reaction to smoke inhalation and must be given veterinary care immediately.

6. Barn Fires Involving Farm Animals fact sheet contained on the USB which accompanies this guide.
ofa.on.ca/wp-content/uploads/2017/12/Barn_fires_involving_farm_animals.pdf

Other Fires

- **Hay fires:** Hay becomes a fire hazard when the moisture content is 20% or higher in small stacked bales and more than 18% in stacked large square or round bales. Hay fires usually occur within six weeks of baling.[7]
- **Field fires:** Keep harvesting equipment clean, blow off chaff with a leaf blower. Do not idle farm equipment or pick-up trucks in dry pasture and crop fields. Be aware that ATVs can also spark field fires.
- **Equipment fires:** Farm machinery should be checked routinely for:
  - build-up of crop residue around the engine, exhaust system, belts and chains;
  - damaged exhaust system components.
  - worn or badly frayed drive belts;
  - odor of burning electrical wiring; and,
  - signs of leaking fluids, oil and fuel.
- **Electrical fires:** Improperly designed, installed or maintained electrical systems are a common cause of farm building fires. This includes heating equipment, lighting systems, and electrical distribution (e.g. extension cords, wiring). Have a qualified electrician do regular inspections of electrical connections and equipment. Keep electrical boxes, connections, heat sources, etc. clean and free of any potential source of combustion, e.g. feed, bedding, binder twine, birds' nests, thick dust and cobwebs, etc.

Testing Temperature of Hay

Farm & Food Care (farmfoodcareon.org, 519-837-1326) has a lending program for thermal imaging cameras. These units show temperature differences in walls, electrical outlets and panels, equipment, etc. and can help detect areas of concern such as, overloaded circuits, overheated grain and feed, energy/heat leaks, and hidden moisture. FLIR is one manufacturer of thermal imaging scanners and cameras that also offers a personal plug-in thermal imaging unit for Android and iPhone called FLIR ONE (flir.ca/store).

Note: Refer to the factsheets on farm fires contained on the USB stick that came with this guide for additional details on preventing and responding to fires.

Training considerations for family members and employees:

- Proper use of a fire extinguisher.
- How to conduct maintenance checks on equipment.
- Where and how to shut off electricity and gas.
- First aid and CPR.
- If applicable, how to test the internal temperature of stored hay.

7. Preventing Hay Fires, NDSU Extension Service, ndsu.edu/agriculture/ag-hub/ag-topics/farm-safety-health/farm-safety/livestock-safety/preventing-hay-fires

Fire Emergency Response Procedure

List who to call:

- **Refer to Appendix 1: Emergency Contact Information**
- Speak clearly and provide the location of the accident or emergency.
- Describe any victim(s) and the nature of any injuries.
- Describe:
  - any hazardous or flammable materials stored at this facility (wood, straw, hay, fertilizer, gases for welding or other, fire arms/ammunition);
  - Anhydrous ammonia stored on site;
  - fuel and note if any are leaking (gasoline, ethanol, biodiesel, diesel, bottled gases); or,
  - pesticides stored on site with the potential to be implicated in the emergency situation.
- If it is a barn fire, tell the dispatcher if there are:
  - animals in the barn including the type and number, and
  - loose animals in the vicinity of the fire including the type and number.
- If you have any of the following on your property, be sure to advise the dispatcher:
  - solar panels;
  - wind turbines connected to the farm system; or
  - biogas plant.
- Contact other farm people as appropriate (owners, managers, employees, and neighbors) for additional assistance.

_____

_____

_____

List what steps or actions should be taken and, if applicable, who is responsible:

- **At no time should a fire fighter or anyone else put their own personal safety in jeopardy to save an animal from a barn fire.**
- Consider disconnecting the power/electricity and shutting off the gas unless doing so jeopardizes your safety.
- All family members and farm workers should leave the building and assemble in the designated meeting area:

_____

- Perform a head count and notify first responders if missing personnel.
- Do not enter a burning barn, especially if you are the only one present.

- Fight the fire ONLY if:
  - the fire department has been called;
  - the fire is small and is not spreading to other areas;
  - escaping the area is possible by backing up to the nearest exit; and,
  - the fire extinguisher or water source is in working condition and personnel are trained to use it.
- If the driveway is difficult to see or find, send someone out to the end of the laneway or road to meet the fire department (use a flashlight at night).
- If there is a chance of the structure fire spreading to a nearby field, begin plowing a dirt fire barrier around the barn area, without getting too close to the barn.
- If animals are housed in corrals next to the barn, they will need to be moved to another corral or holding area. Do not just turn them loose as they become a hazard to all people on scene and can potentially get on to the road and into traffic. Animals should be moved to:

_____

_____

_____

- Other:

_____

_____

_____

- **If the press or animal activists should arrive at the scene, don't be rude. See section 6, be cordial but explain that you are focused on the care of the animals and safety of the premises.** Direct them to police or fire officials on site.
- As appropriate and when it is safe to do so, take photographs of the incident scene, damage, etc. and document actions including timeline.

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Workplace Safety & Prevention Services®

INFORMATION

FLOWING GRAIN ENTRAPMENT

Storing and handling large volumes of grain or feed on farms is very common. Grain storage structures and handling equipment create hazardous work situations. Workers who work with grain – loading, unloading, or moving – must be aware of the hazards of flowing grain and ways to prevent a grain entrapment situation. Workers can become caught or trapped in grain in three different ways:

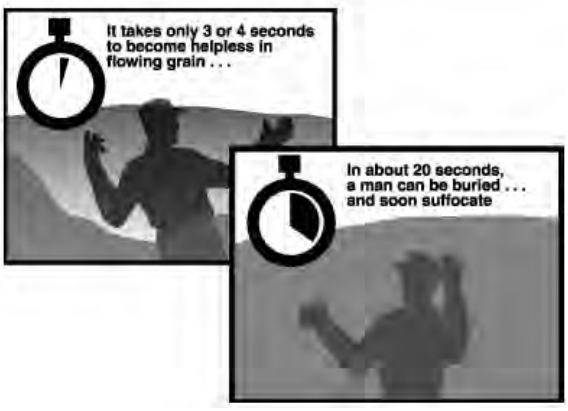
- Entrapment in flowing grain
- A grain bridge collapse
- The collapse of a vertical grain wall

Flowing Grain Hazard

Flowing grain is a term that is used to describe the movement (downward and out) of grain from a storage bin. During unloading, grain flows in a funnel-shaped path downward to the unloading auger. A conveyor at the bottom of the bin transports the grain out of the bin. This vortex of grain behaves very much like a water whirlpool. Velocity increases as grain flows from the bin wall at the top of the grain mass into a small, vertical column at the center of the bin.

Flowing grain acts very similar to quick sand. If a worker is pulled under, there is often little or no time to react **(see Figure 1)**. Rate of inflow at the center top of a grain bin is so great that escape is impossible. Once engulfed in the grain flow, a victim is rapidly drawn down toward the bin floor. The few survivors of this type of entrapment say they deliberately covered their mouths and noses with their hands and did not panic. All expressed amazement at the tremendous speed of their engulfment.

Figure 1: Flowing grain



Source: North Dakota State University Agriculture and University Extension

WSPS.CA

Workplace Safety & Prevention Services®

INFORMATION

FLOWING GRAIN ENTRAPMENT

Preventing flowing grain entrapment

- Be sure to train family, employees, and visitors about the dangers of flowing grain
- Display prominent warning decals or signs on all entrances to the bin
- Turn off and lock out power controls to unloading conveyors before entering a bin
- Ensure worker uses a body harness connected to a lifeline secured to the outside of the bin – have two observers (or more) during bin entry
- Prevent unauthorized entry by securing the grain bin at all times

Entrapment in grain transport vehicles

Many entrapments and suffocations have occurred in high capacity grain transport equipment. Victims are either buried during loading from combine or storage, or drawn into the flow of grain as a vehicle is being unloaded. There is a higher victim rate of this type of accident with youth under 16 years of age – all children should be supervised at all times, don't allow children to enter grain transport equipment!

Collapse of a grain bridge (horizontal crusted grain surfaces)

A grain bridge is a thin surface-layer of crusted, spoiled grain which can conceal voids beneath the surface. If a worker walks on the crusted surface, the additional weight will cause the crust to break and collapse, and the worker will be partially or completely submerged immediately **(see Figure 2)**. The worker could move 4 or 5 feet from the point of entry making locating the person difficult.

Preventing grain bridges

- To detect a grain bridge, look for an inverted cone or funnel after unloading from a bin
- Using a safety harness and lifeline, use a pole or a weighted line to free the bridge
- Never stand on the surface of the grain
- Use proper storage techniques to avoid conditions that cause spoilage

Figure 2: Grain bridge collapse

Source: North Dakota State University Agriculture and University Extension

FLOWING GRAIN ENTRAPMENT

Collapse of a vertical grain wall

Grain that has spoiled can cake in large vertical columns. As grain is removed from the base of a caked mass, the potential for an avalanche and engulfment increases dramatically. If a worker tries to break up the grain by poking with a shovel (or other tool), the grain can break free and result in an avalanche, completely burying the worker **(see Figure 3)**.

Figure 3: Vertical grain wall

Source: North Dakota State University Agriculture and University Extension

Preventing vertical grain walls

- Ensure workers are using a lifeline that is securely tied
- If entry is required, the worker should be lowered from the top of the bin, dislodging the grain as they descend into the bin (this keeps them above the vertical column)
- At all times, be prepared for the entire grain wall to break free and fall
- Use proper storage techniques to avoid conditions that cause spoilage

Grain Bin Rescue Procedures

Precautions for rescuers

1. Shut off the grain-moving machinery – stop the flow of grain
2. Always assume that an entrapped victim is alive
3. If possible, ventilate the bin using the drying fan without activating the heat source
4. If bin entry is required, the rescuer who goes into the structure should wear a body harness and be tied with a safety rope to at least two rescuers on the roof of the bin

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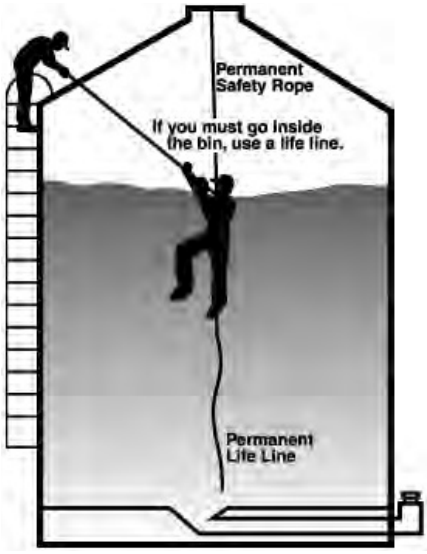
FLOWING GRAIN ENTRAPMENT

Completely submerged victim

1. Turn on bin aeration fans to provide as much air as possible to the victim (extra air has been credited with saving several lives in grain bin rescues)
2. Call the local rescue squad to get experienced help to the accident site
3. Remove grain from the bin in the most rapid and orderly manner possible
   - Attempts to 'dig' a buried victim free are generally unsuccessful, because of the substantial amount of material involved and the tendency of grain to back flow
   - Large openings should be cut uniformly around the base of the bin
   - Cut with an abrasive saw, air chisel, or cutting torch (if a torch is used, be alert for fire)
   - If suitable cutting equipment isn't available, use the corner of a tractor loader bucket to force holes in the bin wall
4. Cut emergency openings four to six feet above ground to reduce the potential for a grain build-up around the outside of the bin – this would block the flow
   - Ideally, you should make semi-circular or v-shaped cuts 30 to 40 inches across to form valves which, when bent up, allow grain to flow freely
   - When bent back into place, they slow or stop the flow
   - This type of control protects rescue workers inside the bin, who otherwise might be drawn into rapid, uncontrolled flow of grain
5. Space openings uniformly around the bin to reduce the risk of structural collapse and make it easier to remove grain from around the base
6. Once the victim has been uncovered, the bin openings can be closed to allow safe access by rescuers

Figure 4: Grain bin rescue



Source: North Dakota State University Agriculture and University Extension

FLOWING GRAIN ENTRAPMENT

Partially submerged victim

1. If possible, lower a rescue squad member into the bin to reassure the victim and to attempt to attach a body harness or lifeline
   - Don't try to pull the victim free with the line - the tremendous drag of the grain could cause further injuries and is only intended to prevent further sinking
2. Check the victim's airway for grain
   - If he/she is experiencing breathing difficulties, administration of oxygen will help
   - Calm the victim to avoid panic and struggling
3. Construct a shield if there is danger of further grain collapse
   - A steel drum with both ends removed, plywood and pieces of sheet metal formed into a circle have all been used successfully
   - You may need to remove a portion of the bin's roof to get material inside
   - Once the shield is in place, it may be possible to free the victim by scooping grain from the inside of the shielded area
   - Use a board or sheet of plywood as a work platform

References

- National Ag Safety Database, Agricultural Tailgate Safety Training
- National Education Center for Agricultural Safety
- Ohio State University Extension, Agricultural Safety Topics
- North Dakota State University Agriculture and University Extension, "Caught in the Grain", AE-1102, December 1995

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FLOWING GRAIN ENTRAPMENT

Revised: June 2019

WSPS.CA

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Flowing Grain Entrapment Response Procedure

List who to call:

- **Refer to Appendix 1: Emergency Contact Information**
- Speak clearly and provide the location of the accident or emergency.
- Describe the victim(s) and the nature of injuries or medical emergency.
- Contact other people as appropriate (owners, managers, employees, and neighbours) for additional assistance, i.e. equipment such as cutting tools, loaders, safety harnesses, etc. or list below where to find these items.

_____

_____

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- Call the following people (family, employees or close neighbours) who are trained in CPR and First Aid to provide assistance prior to the arrival of first responders.

_____

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Follow the steps and actions listed in the factsheet on flowing grain.

- If the press should arrive at the scene, explain that you are focused on the rescue and the safety of the premises. Direct them to the police or fire officials on site.

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Hazardous Material Spills[8]

Points to Consider

- Potentially hazardous materials found on farms include, but are not limited to: fuel and petroleum products, pesticides, fumigants, fertilizers, cleaners and disinfectants.
- The Ontario Grower Pesticide Safety Course is mandatory for farmers wishing to purchase or apply certain pesticides. opep.ca
- Try to purchase only the amount of pesticide you need to reduce the amount stored on your property.
- If you have to store pesticides, make sure it is in a separate, secured facility that is properly ventilated and has signage indicating storage of pesticides.
- Check stored products frequently for damage or leaks.
- For fuel tanks, the Liquid Fuel Handling Code requires records be kept for all tanks. Regularly checking your fuel storages can alert you to a minor leak before it becomes a major spill.
- If a spill occurs, call the Spills Action Centre and your municipality. If there is personal injury, explosion or fire, or there is a risk of explosion or fire, call 911.
- Material Safety Data Sheets (MSDS) are available from your supplier or the Canadian Centre for Occupational Health and Safety at 1-800-668-4284. The MSDS contains much more information about the material than the label. It is intended to tell what the hazards of the product are, how to use the product safely, what to expect if the recommendations are not followed, what to do if accidents occur, how to recognize symptoms of overexposure, and what to do if such incidents occur.
- Keep copies of MSDS for all chemicals used and stored on your premises in a central location, not in the actual pesticide storage, along with an inventory of all hazardous materials. See appendix 1 for an inventory template.
- Avoid using sawdust to contain and clean-up a spill as strong oxidizing chemicals can combust and become a fire hazard.
- On your farm map (see template in appendix 1), note the location of fire extinguishers and spill kits.
- After using application equipment, ensure valves are closed, hoses empty, and pumps are turned off.
- Clean and inspect equipment routinely for damage that could cause a leak including pumps, hoses and connections. Keep a record of inspections and repairs.
- You can prevent fuel spills by:
  - installing fuel dispensers that automatically shut off when the tank is full or when the handle is released;
  - securing and locking tanks and nozzles when not in use;
  - using only approved containers to transport fuel;
  - securing fuel containers during transport;
  - protecting all fuel storage tanks and piping against rust; and,
  - diking around fuel tanks. In some cases, dikes are a legal requirement.

EMERGENCY SPILL KIT

The spill kit should be mounted on a ready-to-move pallet for fast and easy transportation to the spill site. It should contain:

- 4 bags of fine sand, kitty litter, vermiculite, etc. (to absorb liquids)
- 4 straw bales for making a barrier
- 50 empty sand bags
- Shovel, hoe, and rake
- 1 garbage can
- 1 plastic drum (45 gal)
- Garbage bags (to hold contaminated materials)
- Plastic tarp (could be used to line a containment basin)
- 100 feet of rope
- Duct tape
- First aid kit
- Fire extinguisher
- Safety glasses, chemical resistant rubber gloves, coveralls, and hard hat.

Adapted from Planning for and Responding to Disasters in Canada, 2001, Canadian Farm Business Management Council.

8. Portions of this section were adapted from the Emergency Plan, Environmental Farm Plan, 2014, and from the Emergency Management Guide for BC Pork Producers, 2015.

Note: Refer to the USB stick that came with this guide for additional details on preventing and responding to health and safety risks associated with hazardous materials.

Training considerations for family members and employees:

- Grower Pesticide Safety Course
- Workplace Hazardous Materials Information System (WHMIS) training. Anyone working with or around hazardous materials is required by law to be WHMIS trained. All employers are required to show diligence in ensuring their employees are WHMIS trained. WHMIS systems must be reviewed every year, including some measure of training.
- Proper use of Personal Protective Equipment (PPE).
- Fit testing for face masks.
- Use of fire extinguisher.
- Process for properly shutting down equipment.

Hazardous Material Spills Response Procedure

List who to call:

- **Refer to Appendix 1: Emergency Contact Information**
- Speak clearly and provide the location of the accident or emergency.
- Describe any victim(s) and the nature of their injuries.
- Contact other farm people as appropriate (owners, managers, employees, and neighbors) for additional assistance.

_____

_____

_____

List what steps or activities should be taken and, if applicable, who is responsible:

- Contact one or all of the following: fire department, municipal spills expert, Spills Action Center, Ministry of Environment, Conservation and Parks. If the spill cannot be controlled, call the Spills Action Centre immediately.
- Spill containment and personal protection equipment is stored:

_____

_____

- Material Safety Data Sheets (MSDS) are stored:_____
- Do not move victim(s) unless you must do so for their safety and to prevent further injury.
- Render first-aid and emergency medical treatment to the best of your ability and training. Refer to the Personal Injury Emergency Response Procedure for more details.
- Stop the source of the spill by turning off pumping equipment or plugging leaks.
- Set up barriers to keep people and animals out. Describe what to use.

_____

_____

- Do not attempt to clean the spill unless trained to do so.
- Identify the product and read the MSDS. Take proper safety precautions, according to the label and MSDS, before trying to contain the spill.
- If you are appropriately trained, contain the spill with available equipment, e.g. pads, booms, absorbent powder, etc. in accordance with the instructions described in the MSDS.

- Wear protective gloves, safety glasses, and other personal protective equipment as recommended on the label and MSDS.
- Liquids should be covered with a thick layer of absorbent material, e.g. soil, vermiculite, kitty litter, etc., and given time to be absorbed.
- For large volume, liquid spills, contain the spill by constructing a sand berm with a loader or use bales of straw to block the spill. Dig a dike or ditch to block the flow path and trap the spilled material. Block drains, watercourses and plug tile drains. For severe spills, crush or cutoff field tiles in the area of the spill using heavy equipment. Describe procedure to follow:

_____

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- For dust, granular or powder spills, limit air movement and sweep or shovel into waste drum and seal. Describe procedure to follow:

_____

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- Depending on the scale and location of the spill, contaminated soil may have to be removed with a loader or other equipment and applied elsewhere. Consult with spill experts for correct decontamination and disposal methods.
- As appropriate and when it is safe to do so, take photographs of the incident scene, damage, etc. and document actions including timeline.
- Other:

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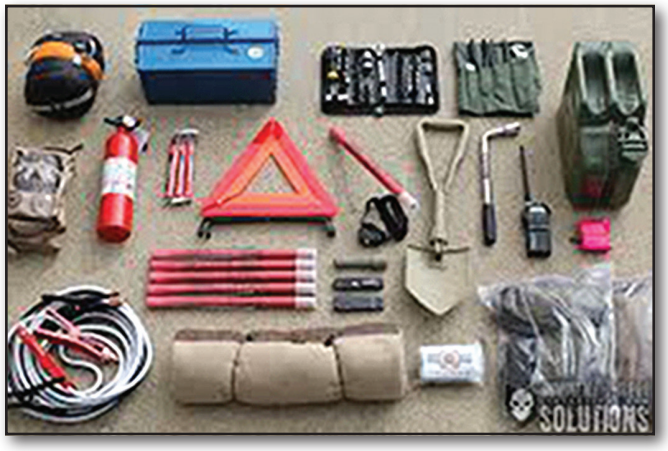
Live Transport Emergencies[9]

Points to Consider

This section deals solely with emergencies involving livestock. For commercial vehicle and driver's licensing requirements, refer to the Ontario Ministry of Transportation website ontario.ca/page/ministry-transportation.

- Everyone involved in transporting livestock, whether commercial transport companies or farm owned transport, should develop transport emergency response plans and train their employees on the protocols.
- Consider keeping an outline of the protocols, in simple language, in plain view on the truck's dashboard or other easily accessible and visible location. The emergency response protocols should include important contact information and directions in case the driver cannot communicate with the first responders.
- If the driver is incapacitated, first responders to the accident will be focused on:
    1. saving life;
    2. maintaining public safety; and,
    3. salvaging animals and property.
- Consider carrying additional items beyond mandated equipment in the truck, including:
    - Reflective safety vest.
    - Bolt cutters.
    - Flashlight with extra batteries.
    - First aid kit (complete).
    - Tarp (10' x 12') with six bungee cords.
    - Spill kit stocked with snakes, absorbent pads, wooden dowel assortment, stop-leak putty, a plastic garbage bag, chemical goggles, and nitrile gloves. Minimum kit should consist of at least 10 lbs. of untreated kitty litter.
    - Fire extinguisher.



- Before departure, conduct a walk-around visual check of the truck, trailer, and load. Pay attention to lights, tires, and any loose articles. Make sure tie-downs are secured.
- Have an alternate or back-up route planned in case of road closures due to traffic accidents or inclement weather. If possible, a longer slower route is preferred to sitting at a standstill in traffic.
- If you are hauling animals for someone else, be sure to have the contact information for the livestock owners. Conversely, if someone else is hauling your animals, you should have their contact information on file.
- Heat stress is one of the major concerns in pork production during summer because pigs do not have functional sweat glands like other livestock species to assist them in efficiently removing body heat.[10, 11, 12] Ontario Pork has transportation resources available on the website relating to: handling pigs, loading densities in hot and cold temperatures, and identifying stressed animals (ontariopork.on.ca/Resources).
- If a mechanical breakdown or accident diverts animals from their projected destination, be sure to update any animal movement information entered into PigTrace.

Note: Refer to the factsheets on handling livestock contained on the USB stick that came with this guide for additional details on transport accidents and loose animals.

9. Content in this section was adapted from the Ontario Poultry Handling and Transportation Manual available from the Poultry Service Association poultryserviceassociation.com/resources.html.

10. How to Reduce Heat Stress in Your Pigs, University of Minnesota Extension, extension.umn.edu/swine-production-management/heat-stress-swine-affects-production, accessed July 28, 2016.

11. How to Spot Heat Stress Pigs, heatstress.info/HeatStressExplained/Identifyingpigssufferingfromheatstress.aspx, accessed July 28, 2016.

12. Heat Stress in Pigs, The Pig Site, thepigsite.com/articles/4762/heat-stress-in-pigs/, accessed July 28, 2016.

Training considerations for family members and employees:

- Depending on the type of conveyance, a special class of driver's licence may be required.
- Best practices for handling and transporting livestock. Formal training is offered by Canadian Livestock Transport (CLT) and by the U.S. National Pork Board and Pork Checkoff (Transport Quality Assurance).
- Fire extinguisher use.
- How to conduct a circle check.
- Proper procedure for placing hazard reflectors and flares.

Mechanical Breakdown Emergency Response Procedure

Refer to Appendix 1: Emergency Contact Information

List what steps or actions should be taken and, if applicable, who is responsible:

- Get the truck out of the traffic lanes, to the side of road or shoulder if possible.
- Set flashers and slip a reflective vest over your clothing. Exit the truck safely. Use the passenger door if you are on a busy highway.
- At night, take a flashlight and swing it as you walk near the side of the road.
- Perform a quick visual inspection of the unit. Check especially for smoke or fire.
- If you discover fire, attempt to extinguish it without lifting the hood or other covers on the truck.
- Set reflectors at a slant pattern starting from the back left corner of the truck to 150 metres/500 feet if possible.
- Make note of the closest mile marker if visible.
- If there is a leak, stop it if possible using wooden dowels or putty and use absorbent snakes to contain the spill.
- **If the press or animal activists should arrive at the scene, don't be rude. See section 6, be cordial but explain that you are focused on the care of the animals and safety of the load.**
- Other:

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Accident Involving Live Animals Emergency Response Procedure

Try to remain calm. Taking actions without thinking may make the situation worse.

Refer to Appendix 1: Emergency Contact Information

List what steps or activities should be taken and, if applicable, who is responsible:

- Contact the identified emergency contact person as quickly as possible.
- If you are unhurt and able to move, assess the location and status of your truck and load.
- Put on a reflective safety vest and secure the immediate area.
- Check the condition of other vehicles if involved. Do not move injured drivers and passengers unless you must do so for their safety
- If the trailer is intact, the load should be pulled upright by a competent wrecker service as soon as it is safe to do so.
- Contact other transporters as soon as possible to assist with reloading and sorting if required.
- Gently, quietly and calmly herd any loose farm animals from the road and gather them in an area as far away from traffic as possible
- Monitor the load closely and adjust the weather protection if necessary to increase air flow.
- Under no circumstances let any farm animals off the trailer until a containment vehicle or suitable containment area is available.
- Euthanasia of injured animals should only be performed by properly trained and competent personnel.
- If you have called for a rescue trailer and back-up livestock handling support, let the police know the trailer and staff are on the way and estimated time of arrival.
- If possible, take pictures of the accident with a camera or phone. Include:
    - all four sides of the truck to get views of the accident from all angles;
    - skid marks;
    - curves and intersections in the road; and,
    - where the vehicle left the road.
- Contact insurance company.

- **If the press or animal activists should arrive at the scene, don't be rude. See section 6, be cordial but explain that you are focused on the care of the animals and safety of the load.** Direct them to police or fire officials on site.
- Do not make statements to the media or other parties but do not answer questions from reporters with "no comment." Saying this makes it seem like you are hiding something. As noted above, direct them to the police or fire officials.
- Other:

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Manure and Silo Gas and Gas Leaks

Points to Consider

- Never assume that the environment inside a silo or manure storage is safe.
- Do not enter a liquid manure tank or recently filled silo, under any circumstances, without a pressure-demand remote breathing apparatus. These confined spaces often contain lethal concentrations of hazardous gases.
- Always have a lifeline attached, with a responsible, trained and competent safety person in view of your work.

Manure and Barn Gases

PREVALENT HOG BARN GASES[13]				
Gas	**Characteristics**	**Source**	**TLV* (max)**	**Comments**
Carbon dioxide (CO_2)	Colourless and odourless	Animal respiration	5,000 ppm (8 hour day)	Non-toxic, but elevated levels will displace oxygen at floor level.
Carbon monoxide (CO)	Colourless, odourless, toxic, non-flammable	Fossil fuel burning (gas engines)	25 ppm (8 hour day)	Asphyxiant; toxic concentrations quickly absorbed; may cause illness in humans and pigs – small pigs and fetuses at greatest risk.
Ammonia (NH_3)	Pungent, recognizable by acrid smell, and colourless	Bacteria that live in faeces and urine	25 ppm (8 hour day)	Most prevalent of all barn gases – irritates mucous membranes of eyes, nose, and upper respiratory tract; long periods of exposure may cause respiratory disease.
Methane (CH_4)	Highly flammable, colourless, and odourless	Manure pits	5% max concentration in air	Highly explosive; simple asphyxiant, though rarely reaches danger threshold for oxygen deprivation
Hydrogen sulfide (H2S)	Rotten egg smell at low concentrations; highly toxic, numbs smell at high concentrations; flammable at 4% concentration in air	Breakdown of manure in areas where there is no oxygen (silos, manure pits)	10 ppm at any time	800 ppm is the lethal concentration for 50% of humans for 5 minutes' exposure (LC50). Concentrations over 1000 ppm cause immediate collapse with loss of breathing, even after inhalation of a single breath.
*TLV = threshold limit value, the airborne concentration of a substance to which an average person can be exposed repeatedly without any adverse effects.				

13. Chart extracted from the Emergency Management Guide for BC Pork Producers, 2015. TLVs are based on the American Society of Agricultural and Biological Engineers' Safety Standard, 2005. Refer also to OMAFRA Factsheet Hazardous Gases on Agricultural Operations, omafra.gov.on.ca/english/engineer/facts/14-017.htm

Manure Storages[14]

- Ensure covered manure storages are ventilated to prevent the accumulation of all hazardous gases.
- Always maintain at least 1 foot (0.3 metres) of freeboard between the manure surface and the bottom of the slats to prevent animals from routinely breathing hydrogen sulphide and carbon dioxide.
- Post a "Danger, Deadly Gases" warning sign in a visible location near each pump-out station.
- Do not agitate the liquid manure in storage unless absolutely necessary. If agitation is necessary, keep the agitator below the liquid surface and do not direct the stream of agitated manure towards a post or wall. Research has shown that gas levels will increase to lethal levels in seconds when splashing or surface agitation takes place. Remove all livestock, if possible, before agitating and emptying.
- Monitor gas levels in the barn. Personal monitors are often clipped to belts but that may be too high and definitely will be too high if children are present. You must monitor the air quality at their level. It is better to wear the monitor on your boot.
- It is highly recommended that a hydrogen sulphide gas monitor with an alarm be used to monitor gas levels in the barn, whenever this type of storage is agitated or emptied. In addition, consider taking hydrogen sulphide awareness training, available from consultants in Ontario.
- When flushing gutters, provide maximum ventilation. Do not enter the barn during or immediately following flushing. Use gas detection equipment to monitor gas levels in the barn.
- Ideally, locate all pump-out openings outside the building to eliminate the danger of working in a confined area. Surround them with a safety railing.
- Do not attempt to rescue an animal if it collapses during pumping or agitation. Turn off the pump, provide maximum ventilation and wait a reasonable time before entering the barn. Again, it is highly recommended to use gas detection equipment to ensure a safe concentration level prior to entering.
- Avoid any source of ignition, such as smoking, in the barn or near a manure storage facility. Avoid operating welding equipment in confined spaces without testing and monitoring the atmosphere and providing constant ventilation.
- Covered manure storages, even when empty, should only be entered by trained personnel equipped with suitable self-contained breathing apparatus. Never assume that gas levels are safe.

MANURE PIT FOAMING

Many swine farms in the U.S. Midwest have reported spontaneous foaming in under-barn, deep manure pits. While rare, there have been explosions, property damage and injuries due to this foaming. There has been at least one Ontario incident involving foaming manure in a deep pit swine finishing barn.

The foam is really a mass of gas bubbles on the surface of the liquid manure. Rather than being crusty or fluffy, foaming manure has a thick, mucous consistency.

The danger arises when the foam is broken up by pressure washing, aggressive manure agitation or some other method. This allows methane and sometimes lethal levels of hydrogen sulfide to be rapidly released into the barn, overwhelming the capacity of the ventilation system to safely exhaust the gas. A flame or spark from a heater, electric or gas motor, light switch, cigarette, etc. will trigger an explosion. De-foaming agents will work but not permanently.

Be extremely cautious when foam is being broken and always ensure there is good ventilation even when foam is not present and regardless of whether pigs are in the barn.

Liquid Manure Tankers

- Never assume a tanker is safe to enter, even when empty. Hydrogen sulphide, which is heavier than air, will collect at the bottom of the tanker and remain there, even though there is an opening at the top. Never enter a liquid manure tanker unless you are equipped with suitable self-contained breathing apparatus.
- When working around liquid manure storages and tankers, farm workers can protect themselves by wearing a pocket-sized hydrogen sulphide monitor that will sound an alarm when dangerous gas levels are reached.
- Newer liquid tankers are equipped with safety hatches to prevent unauthorized entry. However, a large number of older units do not have a safety hatch. Retrofit these tankers with a safety hatch on the top opening to prevent unauthorized entry. These safety hatches can be purchased from a number of farm equipment dealers or can be custom made.

14. Content on manure storages and liquid manure tankers is taken from Hazardous Gases on Agricultural Operations, OMAFRA Factsheet 14-017. omafra.gov.on.ca/english/engineer/facts/14-017.htm The factsheet, in its entirety, is contained on your USB stick.

Silo Gas[15]

- Silos can contain deadly gases. These gases are formed by the natural fermentation of chopped silage within a few hours after it is placed in the silo. These gases can also be formed in a forage box if left overnight.
- In sealed silos, both nitrogen dioxide (NO2) and carbon dioxide (CO2) gases are created but carbon dioxide is produced in far greater amounts. A variety of gases are also formed in conventional or open-top silos with nitrogen dioxide being the most abundant. Nitrogen dioxide is harmful because it causes severe irritation to the nose, throat and chest and may lead to inflammation in these areas.
- Potentially lethal levels of nitric oxide (NO) and nitrogen tetroxide (N2O4), can also be produced in the silage process. Exposure to nitric oxide can result in chemical burns, permanent lung damage, and even death.
- If you suspect you have been exposed to silo gas, seek medical attention immediately. Get to fresh air immediately if you start coughing or experience throat irritation.
- Post all appropriate warning signs. Oxygen limiting silos require a sign that warns people of the absence of oxygen.
- Ventilate the silo room adequately for at least two weeks after filling
- Barricade enclosed silo areas to prevent anyone from entering the silo.
- Keep a hatch door open close to the level of silage in the silo.
- When filling or emptying, never allow people in or around the silo.
- Never enter a silo unless it is absolutely necessary.
- Seek professional help from persons who are knowledgeable, trained, and qualified to make confined space entries. Confined space procedures should be followed for every entry.
- Do not enter the silo for 4 to 6 weeks after filling stops, since this is the most dangerous time.
- Test the air for oxygen levels and hazardous gases and vapours before entering.
- Always wear a self-contained breathing apparatus.
- Use a rope and safety harness and a person must be stationed outside to summon help if needed.
- Train all staff and family members about the hazards and safety procedures you have implemented for working around silos and other confined spaces on your farm.
- Allow only properly trained employees to enter the silo or other confined spaces.
- If you hire someone to work in your silo, like a contractor or service provider, make sure they have received appropriate safety training, equipment, and entry procedures are in place.

15. Content taken from Silo Safety, Workplace Safety & Prevention Services, 2019

Gas Leaks

- Signs of a natural or propane gas leak:
  - "rotten egg" smell;
  - dead or discolored vegetation in an otherwise green area;
  - dirt or dust blowing from a hole in the ground;
  - bubbling in wet or flooded areas;
  - blowing or hissing sound; and
  - flames, if a leak has ignited. Natural gas in transmission pipelines does not have odorant added, so signs of a pipeline leak may include all of the above except the rotten egg odor.
- Protect tanks, gauges, pipes and connectors from rust and inspect regularly for signs of damage or wear.
- Dig safely to prevent damage to gas services and pipelines. You should call for a utilities locate even for simple jobs such as planting, replacing a mailbox post or installing a fence. Ontario One Call provides utility locator services prior to excavation. They can be reached at 1-800-400-2255 or a locate request can be done online at ontarioonecall.ca/

Note: Refer to the USB stick that came with this guide for additional details on preventing and responding to gas hazards on your farm.

Training considerations for family members and employees:

- First aid and CPR.
- How to turn off powered equipment and stop the flow of liquids and gases, e.g. manure filling.
- How to wear and secure a life line.
- Proper procedure for flushing gutters and agitating manure pits including how to monitor gas levels.
- Proper use of a self-contained breathing apparatus.

Manure and Silo Gas and Gas Leaks Response Procedure

Refer to Appendix 1: Emergency Contact Information

List what steps or actions should be taken and, if applicable, who is responsible:

- Get to fresh air immediately if you start coughing or experience throat irritation.
- If you suspect you have been exposed to silo gas or high levels of manure gas, seek medical attention immediately. Call your doctor, poison control centre, or 911.
- If a rescue becomes necessary, call 911 or your local fire department. Do not attempt a rescue on your own.
- Rescue crews must wear a self-contained breathing apparatus, use a rope and safety harness (for confined spaces) and have at least one person stationed outside to monitor the rescue and provide assistance if needed.
- If the victim is outside the confined space, move to fresh air. Keep at rest in a position comfortable for breathing until first responders arrive.
- If you suspect a natural gas or propane leak, leave the area immediately and go to a safe location and call your gas supplier.
- Do not try to locate the source of the leak or shut off gas valves within the building.
- If there is the risk of fire or explosion, contact your fire department or dial 911.
- Do not do anything that could cause a spark and ignite the gas such as:
    - use electrical devices, such as light switches, telephones, or garage door openers
    - use an open flame, matches or lighters
    - start vehicles parked in the area
- Do not re-enter the building or return to the area until the gas company or fire department deems it safe.
- Other:

_____

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Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

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Manure Spills

Controlling a Manure Spill

Points to Consider[16]

- Ensure there is appropriately designed or adequate storage available to accommodate 240 days of manure.
- If you have your own manure application equipment, ensure it is maintained in good mechanical and operating condition.
- Check all transfer lines and valves for defects and insecure connections before pumping or transferring manure.
- Prevent spills from dragline application systems by having automatic shutoffs on all pumping equipment.
- Locate all pipe/dragline joints a minimum of 50 feet (15 metres) away from any watercourse, stream, municipal drain or catch basin.*
- Install a flow meter on the applicator unit where the transfer line attaches and install a display in the tractor cab. This allows flow monitoring and early identification of problems.
- Ensure manure is not carried onto public roads by equipment tires.
- Establish and maintain buffers between manure handling and storage location near and around watercourses.
- Do not apply liquid manure on steep slopes or within 66 feet (20 metres) of surface water.*
- Do not spread solid manure on steep slopes or within 33 feet (10 metres) of surface water.*
- Do not apply any manure if a high volume rain event has been forecast in the near future.
- Do not apply manure on frozen or snow covered ground.
- If there is concern about manure entering the tile drains (e.g. if the soil is very dry and cracked), lightly cultivate the top few inches of soil prior to spreading. Apply manure at rates less than 3,600 gal/ac.*
- Monitor tile outlets before, during, and up to a day after spreading for any sign of water contamination. A change in water colour of running tiles indicates a potential manure spill. If any trace of manure is noticed, stop applying, plug the tile(s) and activate your emergency response procedure.
- Identify manure haulers that could assist in clean-up if a spill occurs.
- If a spill occurs, document actions taken including photos and recording time lines.

For complete details on nutrient and manure management, approvals, compliance, education and training, building and construction, visit omafra.gov.on.ca/english/agops/index.html.

Training considerations for family members and employees:

- Environmental Farm Plan.
- Nutrient Management Planning.
- Operation of manure equipment and shut-off systems.

16. Portions of this section were adapted from the *Emergency Plan, Environmental Farm Plan, 2014, and from the Emergency Management Guide for BC Pork Producers, 2015.

Manure Spills Response Procedure

Refer to Appendix 1: Emergency Contact Information

List what steps or actions should be taken and, if applicable, who is responsible:

- Stop the source of the spill by turning off pumping equipment or plugging leaks.
- Contact one or all of the following: fire department, municipal spills expert, Spills Action Centre, Ministry of Environment, Conservation and Parks If the spill cannot be controlled, call the Spills Action Centre immediately.
- Contain the spill by constructing a sand berm with a loader or use bales of straw to block the spill. Dig a dike or ditch to block the flow path and trap the spilled material. Block drains, watercourses and plug tile drains. For severe spills, crush or cutoff field tiles in the area of the spill using heavy equipment. Describe procedure to follow:

_____

_____

_____

- Sweep, scoop or suction manure by working from the outside of the spill toward the inside to reduce spread. Pump the manure back into the storage if possible. Land apply reclaimed manure in accordance with nutrient management plan (if applicable) or incorporate small field spills directly into the soil. Describe procedure:

_____

_____

- Depending on the scale and location of the spill, contaminated soil may have to be removed with loader or other equipment and applied elsewhere.
- As appropriate, take photographs of the spill scene, drainage ditches, water courses, etc. and document actions including timeline.

- Other:

_____

_____

_____

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

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Date Updated: _____ Initials of person updating: _____

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Personal Injury

Points to Consider

Some sobering statistics:

- The Canadian Agricultural Injury Surveillance Program reports an average of 114 people killed and another 1,499 seriously injured in farm-related accidents each year.[17]
- Farmers are five times more likely to be killed through an occupational accident than workers in any other industry.
- Agriculture also has the highest rate of disabling injuries of any occupation.
- The 2001 census found that half of all farm accidents happened when the victim was working alone and 25% happened in the presence of another family member. Most disabling injuries were due to unsafe use of equipment and happened in the busy fall season, typically in late afternoon.
- Fatal agricultural injuries in Ontario from 1990 to 2008:[18]
  - 542 people were killed in agricultural accidents.
  - The top five causes of agricultural fatalities in Ontario were machine rollovers (23%), machine run overs (21%), machine entanglements (8%), animal-related incidents, and being struck by a non-machine object (both 6%).
  - 50% of fatalities due to toxic substance exposure were attributed to hydrogen sulfide (manure gas) poisoning.
- Hospitalized agricultural injuries in Ontario from 1990 to 2008:
  - 4,756 agriculture-related hospitalizations which is an average of 264 admissions each year
  - The top causes of agricultural injury hospitalizations in Ontario were animal-related and entanglement/caught in machinery (each with 16%), falls from height (14%), and machine run overs (10%).
- On the farm, amputation accidents generally fall into four categories.[19]
  - The first consists of entanglement. This is when clothes, jacket or shoe strings, gloves, long hair, etc. get caught in moving parts (e.g. PTO shafts, belts, pulleys, balers, and combines).
  - A second cause of limb loss is entrapment. Combine heads and augers would be an example because they are designed to trap and pull.
  - A third general cause of limb loss is crushing. Usually this occurs from post drivers or heavy equipment pinning certain body parts. This type of injury usually causes internal damage, to the arm or leg, and eventually ends in amputation.
  - Finally, the fourth way limb loss occurs is infection. This is usually due to a dirty wound. The limb may survive initial trauma but amputation is eventually required following days or weeks of intensive therapy.
- Other hazards include: burns from heaters, welders, hot equipment parts, etc.; chemical burns or irritation from caustics, detergents, and disinfectants; slips and falls; and, head injuries.

OBLIGATIONS UNDER THE OCCUPATIONAL HEALTH AND SAFETY ACT

As of 2006, farms are covered under the Occupational Health and Safety Act. Under the Act, workplaces must have workplace violence and harassment policies.

As well, an employer with more than five employees must have a written occupational health and safety policy and a program to implement that policy. The program will vary depending upon the hazards at the particular workplace but may include all or some of the following:

- Worker training (e.g. new workers, WHMIS)
- Confined space entry procedure
- Lock out procedure
- Machine guarding
- Maintenance and repairs
- Protective equipment
- Emergency procedures
- First aid and rescue procedures
- Electrical safety
- Fire prevention
- Engineering controls (e.g., ventilation)

Sample policies are available on the Ministry of Labour's website ontario.ca/page/understand-law-workplace-violence-and-harassment

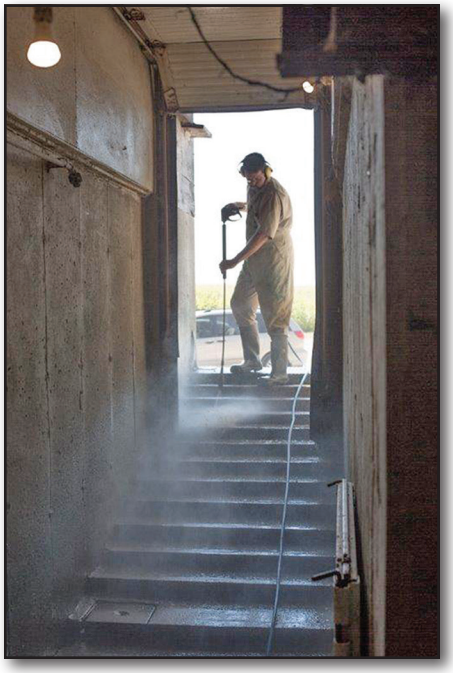
17. Agricultural Fatalities in Canada 1990 – 2008, Canadian Agricultural Injury Reporting, 2012. https://www.casa-acsa.ca/wp-content/uploads/2013-00_Agricultural_Fatalities_Canada_1990-2008_Full_EN.pdf

18. Fatality and hospitalized injury statistics taken from Agricultural Fatalities and Hospitalizations in Ontario 1990 – 2008, Workplace Safety & Prevention Services, 2011.

19. Farming and Amputations, Farm Again, farmagain.com/amputation.html, retrieved August 19, 2016.

Precautions:

- At least one family member or employee should have formal first aid and CPR training and ideally more as that person might not be available when needed or be the person in need of care. Ensure the training is kept up to date. A first aid app can be downloaded to your phone for quick reference; there are numerous free ones available. The link for the Canadian Red Cross is redcross.ca/training-and-certification/
- When new employees are hired, review all emergency procedures, location of emergency response equipment (e.g. fire extinguishers, first aid kits, emergency response plan binder, etc.), and safe operating practices for vehicles and equipment as part of their orientation. Have them demonstrate the safe operation of the equipment for you. This orientation must take place before they begin their farm duties.
- Have first aid kits in farm equipment (e.g. tractors, combine, trucks, etc.), barn(s), chemical storage area, etc. Ensure family members and farm workers know the location of the kits and mark the locations on your farm map (see section 5). Replenish kit contents regularly.
- Locate eye-wash and hand-wash stations in appropriate areas.
- When working around the farm, carry a cell phone with you at all times. If you tend to leave your cell phone in a vehicle cab, wear a Bluetooth earpiece so that you can access your phone to call for assistance if injured. Note: a standard Bluetooth earpiece will only transmit about 30 feet (9.1 metres).
- The best way to prevent entanglement is to completely shut down and disable machinery prior to working or moving next to the equipment.
- Augers should always have guards on them and remember to turn off the machine prior to working on it.
- Depending on the type of machinery and equipment being worked on, consider implementing a lock out, tag out procedure. The power source or switch is locked and a tag is placed on the lock identifying the worker who has placed it. The worker then holds the key for the lock ensuring that only he or she can start the machine. This prevents accidental startup of a machine.
- Always wear proper hearing protection when working in noise hazard areas. A short sudden squeal may cause hearing damage.



- Always know your whereabouts and "escape routes" when working with animals.
- Be aware that floors may get slippery with water, urine and manure.
- Keep alleyways clear to help with trouble-free, stress-free pig movement.
- Use effective tools when moving animals such as chase boards and shaker paddles.
- Care must be taken when performing animal injections. Poorly injected products could create drug residues, scar tissue or abscesses and can also injure the person administering the injection. Training on proper injection techniques should be provided by the herd veterinarian. Purchase a sharps container and safely dispose of used needles.
- Assess the demands of all jobs and have monitoring and control strategies in place for hot days and hot workplaces. Provide cool drinking water near workers and remind them to stay hydrated. Increase the frequency and length of rest breaks. Train family members and workers to recognize the signs and symptoms of heat stress and start a "buddy system" since people are not likely to notice their own symptoms.

The link below is for an on-line heat stress calculator posted by the Occupational Health Clinics for Ontario Workers Inc. You enter the temperature and humidity and it will provide the humidex rating.

ohcow.on.ca/edit/files/general_handouts/heat-stress-calculator.html

Note: Refer to the health and safety folder on the USB stick that came with this guide for 50 additional factsheets on preventing and responding to personal injury risks and emergencies on your farm. The supplemental information goes into greater detail on each specific hazard.

HUMIDEX	ACTION RECOMMENDED
LOW 30-37	• Post heat stress alerts • Drink water
MEDIUM 38-39	• Reduce physical activity *(e.g., slower pace, more breaks)* • Drink a cup of water every 20-30 minutes
MODERATE 40-41	• Further reduce physical activity • Drink a cup of water every 15-20 minutes
HIGH 42-44	• Severely curtail physical activity • Ensure sufficient rest/recovery time • Drink a cup of water every 10-15 minutes
EXTREME 45+	• Hazardous to continue physical activity

Heat Stress Action Chart

Training considerations for family members and employees:

- Health and safety training as mandated under the Occupational Health and Safety Act (see text box on preceding page).
- Employee orientation on safe operation of equipment and livestock handling.
- First Aid and CPR Training
- How to recognize the signs and symptoms of heat stress.
- Farm safety courses and field days
- Proper documentation of accidents, reporting protocols (internal and external)
- Training on proper livestock injection techniques should be provided by the herd veterinarian.
- Forklift training if applicable.
- Chainsaw safety.

Personal Injury Emergency Response Procedure

List who to call:

- **Refer to Appendix 1: Emergency Contact Information**
- Speak clearly and provide the location of the accident or emergency.
- Describe the victim(s) and the nature of injuries or medical emergency.
- Call the following people (family, employees or close neighbours) who are trained in CPR and First Aid to provide assistance prior to the arrival of first responders.

_____

_____

Contact other farm people as appropriate (owners, managers, employees, and neighbours) for additional assistance.

_____

_____

_____

List what steps or activities should be taken and, if applicable, who is responsible:

- Do not move victim(s) unless you must do so for their safety and to prevent further injury.
- Until first responder arrives, render first aid and emergency medical treatment to the best of your ability and First Aid training.
- Try to keep the person calm.
- To the extent possible, use your training experience to prevent further damage to people, animals, environment and farm assets through quick and appropriate action and proper use of any emergency response equipment:
  - turn off powered equipment,
  - stop the flow of liquids and gases,
  - use a fire extinguisher,
  - use absorbents on spills, etc.
- Upon arrival of emergency first responders, direct them to the location of any victims or facilities that require their attention and services.
- If the press or animal activists should arrive at the scene, explain that you are focused on the rescue and the safety of the premises. Direct them to the police or fire officials on site.
- Other:

_____

_____

List what SHOULD NOT be done:

- Do not make statements during the emergency response about actions, cause, blame or responsibility unless authorized to do so.
- An accident or emergency may have legal and financial implications.
- Provide factual information necessary to direct and assist emergency responders.
- Direct all inquiries to farm management. When the emergency is over, farm management and/or skilled investigators will conduct a proper inquiry.
- Other:

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Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

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Date Updated: _____ Initials of person updating: _____

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Date Updated: _____ Initials of person updating: _____

Power Outages

Points to Consider

> **TIP**
>
> If you have a land line, keep an older style corded telephone on hand as it will likely work during a power failure. The connection is direct to the telephone company, which has extensive back-up power, while cordless phones rely on electricity on site. Mobile phones may work if cell towers are still functional but often system overload causes lost connections.

- Keep your contacts up to date on your phone and ensure all cell phones are charged especially if extreme weather is forecast. Portable batteries and booster packs are available.
- Conserve your cell phone's battery by reducing the screen's brightness, placing it in airplane mode, and closing apps you are not using. Invest in a vehicle charger for your phone.
- Keep flashlights charged or have spare batteries on hand.
- Install surge protector power bars for sensitive appliances and equipment. This is essential for your computers.
- Ensure wired-in smoke and carbon monoxide detectors have a battery back-up.
- Consider installing an alarm to notify you of a power outage when you are away from the barn (can notify you via your cell phone).
- Train family members and employees in the proper start-up of generators.
- Follow manufacturer's instructions regarding testing and running your generators.
- Ensure a supply of fuel is available to operate the generator(s).
- Ensure you have an appropriately sized generator to run your essential equipment and services.

> **TIP**
>
> Send text messages or emails as they use less bandwidth than a voice call. As well, once a message is sent, even if there is no bandwidth available at the time you hit "send", the message will go through as soon as it can.

- Refer to the factsheets contained on the computer disk/USB stick which accompanies this guide: *On-Farm Generators for Emergency Use* and *Understanding Portable Generators*.
- Use other temporary heating and lighting sources with care, i.e. candles, kerosene, etc. Always operate your heater according to the manufacturer's instructions, making sure that the wick is kept clean and set at the proper level. Keep a window open approximately an inch to ensure adequate fresh air infiltration. Use proper candle holders and do not leave candles unattended. Never use charcoal or gas barbecues, camping heating equipment, or generators indoors. They give off life-threatening carbon monoxide which is invisible and odorless.

Electronic Barn Monitoring

- Turn off all tools, appliances and electronic equipment not being powered by a generator. Turn thermostats down to minimum to prevent damage from a power surge when power is restored. Power can be more easily restored when there is not a heavy load on the electrical system.
- Do not close buildings tight to conserve heat as animals could suffocate from lack of oxygen.
- Open vents to facilitate natural air flow. Clear any debris from all vents.
- Mechanical feeders will be inoperable during a power failure. Have a plan for emergency feeding procedures.
- Your water pump may be driven by a back-up generator or fuel-powered engine; otherwise you will need to haul water for your animals.
- Don't open your freezer or fridge unless it is absolutely necessary. A full freezer will keep food frozen for 24 to 36 hours if the door remains closed. Keep a bag of ice cubes in the freezer. If it is apparent the ice has melted and then refroze, it is likely the food or freezer contents are spoiled.

- When power is restored, switch on the main electrical panel. In cold weather, turn up the heating system thermostats first, followed by refrigerators and freezers. After 10 to 15 minutes, reconnect other electrical equipment and appliances.

Training considerations for family members and employees:

- Proper start-up and operation of generator(s) including the priority order of start-up if you have multiple generators.
- Chainsaw safety.

Power Outages Response Procedure

Refer to Appendix 1: Emergency Contact Information

List what steps or action should be taken and, if applicable, who is responsible:

- Instructions for starting generator(s) and priority starting list:

_____

_____

_____

- Turn off all tools, appliances and electronic equipment not being powered by a generator.
- Turn thermostats down to minimum to prevent damage from a power surge when power is restored.
- Instructions for ventilation system

_____

_____

_____

- Instructions for feeding and providing water

_____

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_____

- Other:

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_____

List what SHOULD NOT be done:

- Other:

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_____

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

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Severe Storms

(tornadoes, hail, ice, blizzards)

TORNADOES

Canada gets more tornadoes than any other country except the U.S., averaging about 50 per year.

A tornado WATCH is issued when weather conditions favour the formation of tornadoes, for example, during a severe thunderstorm. Be prepared to take shelter immediately if conditions worsen.

A tornado WARNING is issued when a tornado funnel is sighted or indicated by weather radar. You should take shelter immediately!

Points to Consider

Tornadoes and High Winds

- Secure or remove anything that could become blowing debris. Make a habit of securing trailers, propane tanks, and other large objects. If you have outdoor feed troughs or other large containers, fill them with water before any high wind event. This prevents them from blowing around and also provides an additional supply of water.
- Remain indoors, off porches, and away from windows and doors.
- If you are in a building, go to the basement or take shelter in a small interior ground floor room such as a bathroom, closet or hallway. Alternatively, protect yourself by taking shelter under a heavy table, desk or work bench. Stay away from windows, outside walls and doors. If possible, cover your body with a blanket or sleeping bag; protect your head with anything available—even your hands.
- Large buildings with wide-span roofs may collapse if a tornado hits. If you are in one of these buildings and cannot leave, take cover under a sturdy structure such as a table or desk.
- If you spot a tornado in the distance go to the nearest solid shelter.
- If the tornado is close, get out of your vehicle and take cover in a low-lying area, such as a ditch.
- Do not take shelter under an overpass or a bridge. Winds can accelerate under an overpass or a bridge and cause injury or death from flying debris.
- A tornado is deceptive. It may appear to be standing still but may in fact be moving toward you. If you are outside, get as close to the ground as possible, protect your head and watch for flying debris.
-

Hail, Ice and Blizzards

- Contact your marketing association or processor regarding the sale of animals approaching marketing weight when a severe storm is predicted.
- Consider that you may be isolated for some time as suppliers may not be able to access some roads. Make sure that you have adequate water, feed, bedding material, medications, etc. on hand for an extended period.
- Check with your municipality regarding their policy on winter road closures and accessibility by feed trucks.
- If you have animals housed in an off-site barn, plan how to get to the barn for feeding if the roads are closed (e.g. snowmobile, contact someone at or nearer to the barn site, etc.)
- Purchase extra fuel in case of prolonged power disruptions.
- Ensure that you have enough food and essential supplies for your family and livestock for at least 72 hours (three days).
- Be aware that ice, branches or power lines can continue to break and fall for several hours after the end of an ice storm.
- Never approach downed or hanging power lines as they could be charged (live) and you could be electrocuted. Stay back at least 33 feet (10 metres) from wires or anything in contact with them.

- If excessive snow accumulates on roofs or a roof shows signs of distress, arrange for safe snow removal.
- Prevent access to areas under roofs where snow could fall and cause injury. Consider ice breakers or ice guards for steel roofs to protect personnel from the possibility of falling ice and snow hazards.
- If you must travel during a winter storm, do so during the day and let someone know your route and arrival time.
- If your vehicle gets stuck in a blizzard or snowstorm, stay in it. Allow fresh air in by opening the window slightly on the sheltered side. You can run the engine about 10 minutes every half-hour if the exhaust system is not blocked with snow. Check the exhaust pipe periodically to make sure it is not blocked. Remember: you can't smell potentially fatal carbon monoxide fumes.
- Before a severe thunderstorm, unplug radios, televisions and appliances (especially those that may start up automatically when the power is restored). Listen for weather updates on your wind-up or battery-powered radio.

Note: Refer also to the points to consider listed under general emergency planning and under power outages within this section of the guide.

Training considerations for family members and employees:

- Proper start-up and operation of generator(s) including the priority order of start-up if you have multiple generators.
- Chainsaw safety.

Severe Storm Emergency Response Procedure[20]

List who to call:

- **Refer to Appendix 1: Emergency Contact Information**
- Speak clearly and provide the location of the accident or emergency.
- Describe any victim(s) and the nature of any injuries.
- Contact other farm people as appropriate (owners, managers, employees, and neighbors) for additional assistance with injuries or providing back-up equipment, power, feed or water.

_____

_____

_____

For livestock and buildings, list what steps or activities should be taken and, if applicable, who is responsible:

- Wear sturdy boots and shoes when venturing outdoors after a severe storm.
- Be aware animal behavior may change before, during and even after a severe storm.
- Survey the outside and inside of your barns and other structures for structural damage, sharp objects, downed power lines, damaged gas lines, or other hazards. Assess the stability and safety,
- Examine your animals closely; contact your veterinarian if you observe injuries.
- Gather and dispose of trash, limbs, wire and damaged equipment that could harm livestock outdoors.
- Be aware of hazards that may cause injury to you or others cleaning up - these can include chain saw injuries, electrical or chemical hazards.
- Do not touch downed power lines or objects in contact with downed lines. Report electrical hazards to the police and the utility company.
- Provide clean, uncontaminated water.
- Do not feed flood damaged or moldy feed or hay.
- Do not use any feed or forage that may have been contaminated by chemical or pesticides.
- Account for all livestock, fuels, chemicals, machinery and equipment; use the inventory list prepared prior to the incident.
- Record any animal deaths.
- Dispose of dead carcasses using proper deadstock disposal methods.
- Check machinery and equipment for damage.
- After winter storms, if excessive snow accumulates on roofs or a roof shows signs of distress, arrange for safe snow removal.

20. Portions of this section were adapted from All-Hazards Preparedness for Rural Communities, The Center for Food Security & Public Health, Iowa State University, 2014. prep4agthreats.org/Assets/Factsheets/All-Hazards-Preparedness-for-Rural-Communities-Book.2014.pdf

- Clear ice and snow from vents. If mechanically ventilated facilities are not functioning properly, animals could suffocate from lack of oxygen. Open vents to facilitate natural air flow.
- Clear away the snow safely. Avoid overexertion. Strain from the cold and the hard labor can lead to a heart attack, a major cause of death in the winter. Make sure you have good footing when lifting the snow shovel.
- Take photographs of all damage for insurance or emergency assistance purposes.
- Contact your insurance agent to report any loses and obtain advice about restoration needs.
- Other:

_____

_____

_____

For crops, list what steps or activities should be taken and, if applicable, who is responsible:

- Survey the damage to your crops from wind, hail or flooding.
- Evaluate injured plants to determine whether the growing potential is still viable; this is best done three to five days after the storm to allow time for plant recovery, if it occurs.
- Factors affecting the extent of crop damage include: degree of submergence of plant; weather conditions prior to the situation (e.g., temperature); plant growth stage and height, younger stages are more vulnerable; and whether there was a significant loss of soil nitrogen. Mud deposited on plants can stress plants and reduce photosynthesis
- Yield losses due to hail damage may include: stand reduction due to plant death; leaf area reduction due to hail damage to leaves; and severe bruising of leaf tissue.
- Contact your crop insurance agent prior to destroying or replanting crops to discuss coverage.
- Evaluating whether to replant will depend on: the existing plant stand; distribution of the plant stand; calendar date; weed situation; seed availability of earlier maturing hybrids; cost to replant; and, yield potential of the existing crop.
- Flood conditions can increase disease incidence in surviving plants; scout the fields often to determine if and when problems occur.
- Other:

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_____

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Structure Collapse

Points to Consider

- Farm buildings may collapse due to fire, wind, snow load or deterioration. Tower silos can also collapse.
- Take photographs or videos of your farm property and buildings (inside and out) and store in multiple secure locations. These can be very useful for insurance purposes and also for first responders regarding structural questions (type of construction) when responding to a collapse.
- If excessive snow accumulates on roofs or a roof shows signs of distress, arrange for safe snow removal.
- At least annually, scan the entire outside of your silo(s) to determine if cracks have developed in the concrete. Use binoculars to do a cursory inspection. If a silo shows signs of distress, contact a professional engineer before emptying the silo.
- Emptying a silo can cause a significant increase in the loads applied to the structure. If a failure is about to happen, unloading the silo can cause an instantaneous structural failure. If you suspect that your silo has structural problems, do not fill or empty it before having a professional engineer on-site to evaluate the situation.[21]
- Never enter a collapsed structure unless first responders indicate it is safe to do so.
- Never approach downed or hanging power lines when a structure collapses as they could be charged (live) and you could be electrocuted. Stay back at least 33 feet (10 metres) from wires or anything in contact with them.
- Complete the templates in appendix 1 for: a master Emergency Contact List; Location of Emergency Water Supplies: and, Location and Sources of Emergency Equipment and Supplies. Having pre-populated lists of who to call to assist and where to get emergency supplies and clean-up equipment will save a lot of time and stress should you experience a structure collapse.
- Before beginning clean-up and disposal operations, be sure to check with your insurance company and your municipality regarding requirements and restrictions.

Note: Refer also to the points to consider listed under general emergency planning, fire and severe storms within this section of the guide.

Training considerations for family members and employees:

- First aid and CPR.
- Proper use of a fire extinguisher and any other emergency equipment including where it is located.
- Chainsaw safety.
- How to turn off powered equipment and stop the flow of liquids and gases, e.g. manure filling.

21. OMAFRA Factsheet, Deterioration of Concrete Tower Silos, 08-057, omafra.gov.on.ca/english/engineer/facts/08-057.htm

Structure Collapse Response Procedure

(for fire related collapses, see Fire Emergencies)

List who to call:

- **Refer to Appendix 1: Emergency Contact Information**
- Speak clearly and provide the location of the accident or emergency.
- Describe any victim(s) and the nature of any injuries.
- Describe any hazardous or flammable materials stored in this facility and note if any are leaking (gasoline, ethanol, biodiesel, diesel, bottled gases, crop protection products).
- Contact other people as appropriate (owners, managers, employees, neighbors, electrician, plumber) for additional assistance with injuries or providing back-up equipment, power, feed or water. Refer also to your master Emergency Contact List.

_____

_____

_____

- Contact your insurance agent to report any loses and obtain advice about clean-up and restoration needs.
  - Name and number _____
- Municipality (regarding disposal restrictions or requirements):
  - Name and number _____

List what steps or activities should be taken and, if applicable, who is responsible:

- Wear sturdy boots and shoes when venturing near the collapsed structure. Consider protective head gear as well.
- Do not touch downed power lines or objects in contact with downed lines. Report electrical hazards to the police and the utility company.
- Perform a head count and notify first responders if missing personnel.
- Consider disconnecting the power/electricity and shutting off the gas unless doing so jeopardizes your safety.
- Survey the outside and inside of your barns and other structures for structural damage, sharp objects, downed power lines, damaged gas lines, or other hazards. Assess the stability and safety,
- If animals were housed in the structure, examine surviving animals closely; contact your veterinarian if you observe injuries.
- Euthanasia of injured animals should only be performed by properly trained and competent personnel.
- Be aware animal behavior may change due to the stress of the event.
- Record any animal deaths.
- Dispose of dead carcasses using proper deadstock disposal methods.

- Before beginning clean-up and disposal operations, be sure to check with your insurance company and your municipality regarding requirements and restrictions.
- Be aware of hazards that may cause injury to you or others cleaning up - these can include chain saw injuries, electrical or chemical hazards.
- Do not feed water damaged or moldy feed. Wet but reusable feed may be taken to a grain dryer.
- Check machinery and equipment for damage.
- Utilize tarps to protect exposed feed or moisture sensitive equipment.
- Take photographs of all damage for insurance or emergency assistance purposes. Document actions taken including timeline.
- **If the press or animal activists should arrive at the scene, don't be rude. See section 6, be cordial but explain that you are focused on the care of the animals and safety of the premises.** Direct them to police or fire officials on site.
- Other:

_____

_____

_____

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Other Emergencies

Points to Consider

In this section, we touch on other emergencies that are less common in Ontario. Templates for response procedures have not been provided for these incidents however the General Emergency Response Procedure at the beginning of this section would cover these situations.

Earthquakes

- Bolt down or reinforce water heaters and other gas appliances.
- Broken gas lines are a major cause of earthquake-related fires. Following an earthquake, turn off any supplies of gas to your home or farm buildings.
- Use flexible gas line and appliance connections wherever possible.
- Know where to turn off the gas supplies to your house and barn. Ensure your family members and employees are also shown where and how to shut off gas.
- Place large and heavy objects on lower shelves and securely fasten shelves to walls taller than five feet. Brace-anchor tall or top-heavy objects.
- Attach desktop equipment such as computers or printers to surfaces with industrial strength Velcro.
- If you are indoors, take cover under a sturdy piece of furniture such as a desk, table or workbench. In the barn, tools, equipment and other objects on the walls and in the rafters are likely to fall and can cause injury to people and animals.
- Stay away from chimneys, windows, or other objects that can shatter.
- If you are outside, get away from buildings, walls, utility poles and power lines, and other objects that could fall.
- Following an earthquake, check buildings for structural damage.[22]

EARTHQUAKES

Roughly 5,000 earthquakes are recorded in Canada every year. Although earthquakes can and do occur in Ontario, it is not a high risk area. According to Natural Resources Canada, Northern Ontario is very low risk. The southern Great Lakes seismic area extends from Sarnia/Windsor across to Kingston and has a low to moderate level of seismicity risk. The more active zones to the East, includes Cornwall, Ottawa and all along the Ottawa River and into Quebec.

Over the past 30 years, on average, two to three magnitude 2.5 or larger earthquakes have been recorded annually in the southern Great Lakes region. By comparison, over the same time period, the smaller region of Ottawa and Western Quebec experienced 15 magnitude 2.5 or greater earthquakes per year.

Floods

- Consider alternative sites for housing your animals if they had to be evacuated due to a flood. Put together a list of relocation farms/sites.
- Compile a list of resources you will need that can assist on short notice with relocation – livestock haulers, stock trailers, loading chutes, portable corrals, etc.
- Keep a supply of materials such as ropes and wire, sandbags, plywood, tools, plastic sheeting and lumber handy for emergency waterproofing. Keep an updated list of local suppliers of those items.
- Move farm equipment and supplies to high ground where possible.
- Anchor fuel tanks firmly if empty to ensure they will not float away in floodwaters. Close valves.
- Keep in mind that wet hay may spontaneously combust due to natural composting processes. High risk areas should consider storing hay away from buildings in the event that the stored hay catches fire after the flood waters have receded.
- Shut off electrical power to areas where flooding is imminent.
- Contact your marketing association or processor regarding the sale of animals approaching marketing weight when a flood is predicted.

22. Points to consider were adapted from Planning for and Responding to Disasters in Canada, Canadian Farm Business Management Council and Canadian Federation of Agriculture, 2001. ablamb.ca/images/documents/resources/planningforandrespondingtodisastersincanada.pdf

- Ensure that your wellhead is protected by a surface seal and a cap to prevent downward movement of water and contaminants. Be ready to turn off the electricity to your well pump just prior to the flood.
- Remove all chemicals and store away from any flood levels. Pesticides, fuel and fertilizers may cause pollution and even poisoning.
- Be aware that in cases of flooding and high water tables, the bottom of less than half-filled manure pits may break due to increased hydrostatic forces.
- Do not enter a flooded basement or building unless you are positive the power is disconnected.
- After a flood, do not use flooded electrical outlets, appliances, switch boxes or fuse-breaker panels until they have been checked and cleaned by a qualified electrician.
- Test your well water to ensure it is safe for human and livestock consumption after a flood. Water test kits are available from your Public Health Unit and often from municipal offices.

- Flooded buildings must be checked for structural integrity. After the water subsides, clean and dry out the building as much as possible. Animals housed in mechanically ventilated buildings may need to be moved to prevent acute exposure to hazardous gases.

Training considerations for family members and employees:

- First aid and CPR.
- Where and how to shut off electricity and gas.
- Proper start-up and operation of generator(s) including the priority order of start-up if you have multiple generators.

After the Emergency

Points to Consider[23]

- Certain people react strongly at the time stressful events happen while others react later, after a few days or even weeks.
- Some people experience physical symptoms such as headaches, back pain, stomach pain or upset, diarrhea, problems sleeping, low energy, or changes in appetite.
- Emotional symptoms include anger, sadness, anxiety about the future, and feelings of helplessness or guilt.
- It may be difficult to concentrate or stop thinking about the stressful event.
- Coping may be more difficult for seniors suffering from depression, thinking and memory problems, those living alone or those with few social contacts.
- Talk to children about the incident and encourage them to share their concerns. Tell the child about your plans each day and don't leave them in a new place without other family members.
- On farm operations, stress and mental illness may result in decreased care of livestock and a noticeable reduction in regular farm maintenance activities.

Common effects of stress on your body[24]

- headache
- muscle tension or pain
- chest pain
- fatigue
- change in sex drive
- stomach upset
- sleep problems

Common effects of stress on your mood

- anxiety
- restlessness
- lack of motivation or focus
- feeling overwhelmed
- irritability or anger
- sadness or depression

Common effects of stress on your behavior

- overeating or undereating
- angry outbursts
- drug or alcohol abuse
- tobacco use
- social withdrawal
- exercising less often

23. Taken from After the Emergency, Alberta Emergency Management Agency, April 2016, open.alberta.ca/dataset/841bd9af-2f8d-477d-b9d1-3532a634a454/resource/cdb6ba5e-082b-4931-adf2-ae177a7847d3/download/ma-after-an-emergency-fact-sheet.pdf

24. Mayo Clinic mayoclinic.org

Coping strategies:

- Take time to talk with family members and employees about the events. Recognize that they may be concerned about the future of the farming operation.
- Review with family members and employees the signs of stress (as noted above). Encourage them to come to you or seek out support if they recognize these symptoms in themselves or in you.
- Take part in information meetings about the event(s) however also take breaks from the media reports and from thinking and talking about the events.
- Be cautious about making major decisions if you are very upset.
- Try to get back to your daily routine.
- Be physically active and do something you enjoy.
- Visit with friends and relatives.
- Get lots of sleep, eat healthy and on a regular schedule.

When to seek help:

- can't return to a normal routine;
- feeling extremely helpless;
- having thoughts of hurting self or others;
- using alcohol and drugs excessively; or
- stopped doing things you enjoy.

You may want to start with a visit to your medical doctor or consider seeing a professional counsellor or therapist (including your faith leader), who can help you identify and talk through the sources of your stress and learn new coping tools.

Additional sources of information

- Canadian Mental Health Association cmha.ca/get-involved/find-your-cmha/
- Children's Mental Health Ontario cmho.org/
- ConnexOntario, Health Services Information 1-866-531-2600 connexontario.ca/
- Farmer Wellness Initiative 1-866-267-6255 farmerwellnessinitiative.ca
- Kids Help Phone 1-800-668-6868 kidshelpphone.ca/
- Ontario Mental Health Services ontario.ca/page/mental-health-services ontario.ca/page/find-mental-health-support
- Mayo Clinic mayoclinic.org
- Mental Health Services for Children, Ontario Ministry of Children and Youth Services, children.gov.on.ca/htdocs/english/specialneeds/mentalhealth/index.aspx
- The American Institute of Stress stress.org/stress-effects/

For resources in your specific area, search "Mental Health Services and Counselling Centres" in your phone directory or online at canada411.yellowpages.ca/.

See Section 7: Mental Health Information and Resources for more information

Section 5

Animal Disease and Disaster Planning and Preparedness

Major Animal Disease Outbreak and Disaster Planning and Preparedness

This module is focused on preparing you and your farming operation for a major animal disease outbreak or market interruption. It will help you create a plan for dealing with diseased animals on your farm, and a plan for a market collapse due to trade restrictions or border closure. Your preparedness action plan can apply to any other disaster situation on your farm.

Having a response plan will help mitigate the impact on your business and the Ontario pork sector as whole.

There is not one single process or solution that will work on all farms. Each farm operation must consider what options will work on individual sites and even for individual barns. Animal size and number, animal holding capacity, barn set-up, and land base will impact on-farm euthanasia and disposal decisions. The scope of the emergency and broader pork industry decisions will determine what choices are available regarding marketing and disposal of animals.

CREATE YOUR PLAN NOW. Time spent writing down your plan now will allow you time to calmly work through your options, gather information, and have important discussions with your suppliers and financial institution. This will facilitate a quicker response should a disease or market collapse occur. Waiting until an emergency or disaster is occurring, when the industry is overwhelmed, is too late.

There are three parts to this module:

- Biosecurity and disease monitoring;
- Depopulation and disposal; and,
- Financial considerations and business decisions.

If you need assistance completing your plan, contact Ontario Pork, Industry and Member Services at 1-877-668-7675 or memberservices@ontariopork.on.ca. When a disease emergency or other disaster occurs, check the Ontario Pork website for updates ontariopork.on.ca.

This project was funded in part through the Canadian Agricultural Partnership (the Partnership), a federal-provincial-territorial initiative. The Agricultural Adaptation Council assists in the delivery of the Partnership in Ontario.

1. Biosecurity and Disease Monitoring

Points to Consider

Swine diseases vary in their severity and ease of transmission. The ones of greatest concern to the pork sector and to government agencies are those that cause significant morbidity or mortality, may be transmissible to humans, or impact trade.

The Canadian Food Inspection Agency (CFIA) and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) have regulatory authority to require reporting of certain diseases. They may apply movement and quarantine restrictions and order depopulation in certain circumstances.

Federally reportable diseases are outlined in the Health of Animals Act and Regulations. The law requires immediate notification to CFIA of the presence of an animal that has or is suspected of having one of these diseases. If you suspect your pigs are infected with a reportable or notifiable disease, contact your herd veterinarian immediately. Your veterinarian can then contact the CFIA district veterinarian. Control and eradication measures will be applied immediately upon disease confirmation. Zones will be established.

Examples of reportable diseases in swine include: African swine fever, Classical swine fever, Foot and mouth disease, Pseudorabies, Swine vesicular disease, and Vesicular stomatitis. A complete list of federally reportable diseases can be viewed on the CFIA website inspection.canada.ca/animal-health/terrestrial-animals/diseases/reportable/eng/1303768471142/1303768544412.

For a complete list of notifiable hazards to be reported to the Chief Veterinarian for Ontario, refer to omafra.gov.on.ca/english/food/inspection/ahw/aha-regs-hazards.htm.

Step 1

Review the *Points to Consider in the Disease Outbreak* and *Biosecurity Planning for Livestock and Crops* module on pages 11 and 12 in Section 4 of the On-Farm Emergency Response Planning Guide.

Below are additional points to consider.

- Do not allow meat or meat products into your production area. This includes pet food.
- When visiting other countries, do not bring back any meat products into Canada.
- Wash all clothing and footwear immediately after use in other countries.
- Cameras, phones and personal effects that were taken onto agricultural premises should be cleaned with a disinfectant wipe.
- After visiting an ASF positive country, CFIA recommends waiting 14 days before returning to work on your farm.
- Purchase feed from mills that have quality assurance and biosecurity programs. If you do not know, ask your supplier what protocols they have in place.
- Ensure you and your workers know the symptoms of high-risk diseases and your employees understand the importance of reporting any signs of illness promptly.
- Work with your veterinarian to have a disease response plan. It should include triggers for activating the response

PROPER CLEANING AND DISINFECTION OF CLOTHING AND FOOTWEAR

Clothing should be laundered using detergent and the hot water or sanitary cycle setting on the washing machine.

To ensure adequate disinfection:

- water temperature should reach 60°C and
- wash cycle should be at least 60 minutes in length.

Clothes should be dried on the highest heat setting for a minimum of 30 minutes.

Footwear should be cleaned to remove visible dirt and then disinfected using a solution of one part household bleach and nine parts water.

The disinfectant solution should remain in contact with the surface of the footwear for 30 minutes. Rinse surfaces with cold water to remove the bleach solution.

plan, what you can do to mitigate the spread of the disease, and options for humane euthanasia if required.

- If you suspect a serious illness in your herd, stop all pig movements. Never move, sell or send sick or compromised pigs from your farm. This will prevent further spread of infections. Contact your herd veterinarian immediately.
- Implement a self-quarantine on all animals, feed and equipment until you know the cause of the illness.

Step 2

Complete the *Livestock Disease Response Procedure* on pages 11 to 13 in section 4 in the On-Farm Emergency Response Planning Guide.

If a federally reportable disease, such as ASF, is detected on your farming operation, CFIA personnel will come on site and conduct a premises investigation. At the initial visit, they will work through a lengthy questionnaire with you, requesting:

- contact information for the owner of the premises, owner of the animals, and site contact person;
- complete physical and mailing address or the farm location;
- a site plan of the farm;
- an inventory of the types and number of animals on the property; and
- a list of all visitors and animal movements on and off the farm property.

The list above is only a portion of the information you will be asked to provide. As part of your disease response preparedness, it is recommended you proactively compile this information. There are several templates in the On-Farm Emergency Response Planning Guide as noted below that can help you with this task.

Step 3

Complete the *Emergency Contact List* beginning on page 1 of appendix 1 of the On-Farm Emergency Response Planning Guide.

- Use the *Farm Map Template* on pages 9 to 11 in appendix 1 or an aerial photo to create a site plan for your farm.
- Fill in the *Animal Inventory* on page 16 in appendix 1 of the On-Farm Emergency Response Planning Guide. If the number of animals varies, put a population range in the appropriate fields.
- If you do not routinely maintain a visitor log, a sample page is provided on page 18 of appendix 1.

Step 4

Review the ***Points to Consider*** in the ***After the Emergency*** module on pages 67 to 68 of section 4 in the On-Farm Emergency Response Planning Guide.

EMOTIONAL AND MENTAL HEALTH SUPPORT

- Emotional support may be required for owners and employees of herds suffering high financial losses or requiring mass depopulation. Fatigue may put individuals at greater risk of making judgment errors and lower the capacity to cope with stress.
- ConnexOntario assists individuals with access to mental health, addiction, and problem gambling services; connexontario.ca or 1-866-531-2600.
- Farmer Wellness Initiative farmerwellnessinitiative.ca or 1-866-267-6255

2. Depopulation and Disposal

This section focuses on depopulation and disposal on-farm and what information you should proactively gather to assist with that process.

Animal deaths resulting from a reportable animal disease must be reported to CFIA. CFIA may order destruction of live animals on disease-positive farms. The preferred option for disposal of infected carcasses is on-site burial or composting according to O. Reg. 106/09: Disposal of Dead Farm Animals under the Nutrient Management Act. If movement of carcasses off-site for disposal is required, this will be carried out according to strict biosecurity controls. CFIA will oversee the disposal for disease-positive sites. You will have to present a disposal plan for CFIA to review. Do not expect CFIA to run the disposal for you.

If a foreign animal disease is detected in Canada, export markets will be closed to Canadian pork for an undetermined length of time. The number of infected sites, geographic spread, and effectiveness of eradication efforts will impact the time it takes to reopen trade with other countries. It is reasonable to expect a market interruption period of at least six months. As a result, the pork sector will very quickly be faced with a surplus of animals requiring humane depopulation.

For non-infected animals, a full range of disposal choices is available with marketing being the preferred option.

Humane treatment of animals and adherence to regulatory requirements regarding deadstock disposal must be followed regardless of the severity of the disaster.

Points to Consider

- In the event that herd depopulation or partial depopulation is necessary due to a reportable animal disease or large scale supply chain interruption, monitor the Ontario Pork website for guidance: **ontariopork.on.ca**. Under exceptional circumstances, additional industry resources in terms of people and large scale euthanasia options may be available.
- To help you work through the decision-making process regarding breeding, holding market-ready animals, euthanasia and disposal, refer to the producer decision trees on pages 17 to 22 in this section.

Have a conversation with your barn managers and senior staff regarding depopulation and disposal in the event of a disease emergency of disaster. Share your considerations regarding humane euthanasia and the disposal of deadstock. Ask for their input.

Depopulation

- Calculate how long you could hold pigs on your farm if the supply chain is interrupted.
- For farrowing operations, determine at what point you would cease breeding.
- Proactively work with your herd veterinarian to develop an euthanasia plan appropriate for your operation.
- Any method should minimize pain or distress of the pig during euthanasia. Discuss options suitable for herd depopulation with your veterinarian. You must have all necessary equipment available for your chosen method.
- Certain euthanasia methods are more appropriate for pigs of certain sizes or weights.
- In some cases, a secondary step such as exsanguination (bleeding out), is needed to ensure the pig is euthanized.
- Pigs euthanized in the hog barn will need to be removed. Think about how they can be accessed for removal by a tractor or skid steer.
- If pigs have to be moved out of the barn to be euthanized, handling and restraint facilities will be required. Think about where you can quickly get equipment if needed. Make sure the area is secure and covered (out of sight).

Methods of Euthanasia (large-scale situation)				
	Piglets (up to 12 lbs, 6 kg)	**Nursery Pig (up to 70 lbs, 32 kg)**	**Grower – Finisher (to market weight)**	**Mature Pig (sow or boar)**
Federal & provincial slaughter facilities	No	Yes	Yes, preferred method	Size dependant
Penetrating captive bolt	No	Yes	Yes	Yes
Non-penetrating captive bolt	Yes	Yes, with secondary step	No	No
Blunt force trauma	Yes	No	No	No
Gas: Small on-farm unit	Yes	No	No	No
Gas: Larger mobile unit	A unit that will accommodate all sizes of pigs			
Veterinarian-administered anesthetic overdose	Unlikely to have enough supply in an industry-wide situation			
Electrocution on farm	NOT recommended – safety concerns			
Ventilation Shutdown	NOT recommended – major animal welfare and barn cleanout concerns			
The table was created by Ontario Pork with input from OMAFRA. For any of the approved methods to be successful, the right equipment and training is required.				

Points to Consider

- Human safety is the top priority. The method(s) used must not put anyone involved in the depopulation activities at unnecessary risk, either from the animals, the euthanasia method or physical strain.
- Those involved in depopulation must be comfortable with, and willing to perform, the chosen euthanasia method. Discuss this with your barn managers and senior staff. Consideration should be given to accessing external industry support to assist with herd depopulation or partial depopulation.
- If possible, rotate those involved through euthanasia, recording, and animal-handling positions to minimize stress.

Disposal

Step 6

Review the Points to *Consider in the Deadstock – Mass Mortalities* module on pages 7 and 8 in Section 4 of the On-Farm Emergency Response Planning Guide.

The list of licensed deadstock operators in Ontario can be accessed at omafra.gov.on.ca/english/food/inspection/ahw/deadstockoperators.htm. However, during a widespread emergency, these haulers may not be able to handle the volume.

Refer to the chart summarizing restrictions on burial and composting sites.

Below are additional points to consider.

- Composting carcasses is a good biosecurity measure because most disease organisms can be killed by exposure to the temperature levels in a compost pile or bin (58°C to 68°C or 135°F to 155°F).
- Suitable on-farm deadstock composting for pigs can be done in windrows. The mixture should be no more than 25% deadstock and 75% co-composting material (substrate). 'Refer to the 'Characteristics of common farm substrates used to compost deadstock' table at the end of the section. C:N ratio is important to take into account.
- The allowed composting substrates are:
  - sawdust, shavings or chips from wood that is clean, uncontaminated, untreated and has not come into contact with any chemicals;
  - straw made from dried stalks and leaves of cultivated grain, corn or beans;
  - clean hay or silage;
  - a mixture containing only livestock manure and any or all of the bedding materials described above, provided that the mixture is at least 30% dry matter, by weight; and
  - poultry litter.
- Multiple outdoor composting sites can be established with a 100 m (328 ft.) setback between them to reduce the

Restrictions for Disposal Sites On-Farm

Restrictions	Burial	Composting
Distance to field drainage tile	6 m/20 ft.	6 m/20 ft.
Distance to highway/public road	30 m/100 ft.	30 m/100 ft.
Distance to parcel line	15 m/50 ft.	15 m/50 ft.
Distance to neighbouring livestock facility/single residence	100 m/330 ft.	100 m/330 ft.
Distance to parcel line of land that has an industrial or parkland use	100 m/330 ft.	100 m/330 ft.
Distance to commercial, community or institutional buildings or nearest parcel line of residential areas (4 or more contiguous residences on parcels <1 hectare each)	200 m/660 ft.	200 m/660 ft.
Distance to drilled well of at least 15 m depth and water-tight casing to at least 6 m (not required for properly decommissioned wells)	50 m/165 ft.	15 m/50 ft.
Distance to municipal well	250 m/820 ft.	100 m/330 ft.
Distance to any other well not described above (e.g. gas well)	100 m/330 ft.	30 m/100 ft.
Flow path to top of bank of the nearest surface water or tile inlet (not required for closed drains)	100 m/330 ft.	50 m/165 ft.
Areas subject to flooding once or more every 100 years	Not allowed	Not allowed
Organic/muck/peat soil, or soil that is hydrologic soil group AA; less than 0.9 m to bedrock	Not allowed	Not allowed-impervious pad required
On-farm maximum volume	2,500 kg/2.5 metric tonnes per pit	600 m^3/ 21,200 $ft.^3$ per site

cumulative impact of leaching. Recommended site dimensions are 3mx200m but can vary as long as site can be effectively managed with equipment.

- Multiple burial pits on the same site are permitted, provided there is adequate separation between them (60 m/200 ft.) to reduce the risk of groundwater contamination through leaching. This equates to approximately 1 pit per acre.
- Every part of a burial pit must be a least 6 m (20 ft.) from a field drainage tile. If the pit is 6 m to 15 m (20 to 50 ft.) from a drainage tile, the dead animals must be placed lower in the pit than the lowest point of the tile.
- Deadstock placed in a burial pit must be covered with at least 0.6 m (2 ft.) of soil at all times while the burial pit is open.
- Generally, soil materials ranging from sandy loam to clay are suitable for burial. Burial is not allowed where the soil type poses a high risk of polluting groundwater. These soils include:
  - organic soils (more commonly known as peat, muck, bog or fen soil); and
  - soils considered hydrologic soil group AA, which have a combination of rapid infiltration rates (e.g. gravel) as well as a depth of less than 0.9 m require at least 3 ft. to the bedrock layer.
- Burial is not permitted in areas where the bottom of the burial pit is less than 0.9 m (3 ft.) above bedrock or an aquifer.
- To close a burial pit, it must be filled with enough soil so that the top of the fill forms a mound that is higher than the level ground at the perimeter of the pit by the greater of:
  - half of the depth of the pit measured at its lowest point, or
  - 0.6 m (2 ft.).
  - This reduces the chance of scavenging and also allows for settling as the deadstock decompose and the soil settles.
- Excessive nitrogen build-up can be a problem at burial sites.
- Detailed record keeping of carcass burial sites is particularly important, including the following essential information on each site:
  - exact location on the farm property (identify on your farm map);
  - date of burial;
  - type and size of carcasses buried;
  - approximate total weight of the carcasses; and
  - cause of death.

Characteristics of common farm substrates used to compost deadstock

Substrate	C:N Ratio[a]	Typical % Dry Matter[a]	Bulk Density (kg/m^3)[b]	Comments
Deadstock	5:1	50%	775	Variable characteristics
Corn silage	38:1–43:1	30%–40%	495	Must not be too wet
Wheat straw	100:1–150:1	86%–90%	135	May need moisture
Coarse sawdust	200:1–750:1	40%–60%	200–267	Excellent substrate; lots of bark will decrease C:N ratio
Wood shavings — hardwood	451:1–819:1	40%–60%	260–368	
Wood shavings — softwood	212:1–1,313:1	40%–60%	260–368	
Dry hay hay/grass	32:1	86%–90%	200	May need moisture
Bedded horse manure	22:1–50:1	20%–40%	721–962	Manure must contain lots of bedding (carbon)
Broiler poultry litter	12:1–15:1	54%–75%	449–609	
Turkey litter	16 :1	70%–74%	465	

Source: On-Farm Composting Handbook NRAES 54

[a] C:N ratio and dry matter content vary considerably and can only be determined accurately through lab analysis.

[b] Bulk density can vary considerably; the best way to verify bulk density is to calculate value using procedure listed.

Step 7

Complete the *Preparing for On-Farm Depopulation and Disposal* template on the following pages.

Additional Depopulation Resources:

- On-Farm Euthanasia of Swine, Farm & Food Care Ontario, farmfoodcareon.org/wp-content/uploads/2016/04/EuthanasiaBooklet.pdf

Additional Disposal Resources:

- Emergency Disposal of On-farm Deadstock, OMAFRA factsheet, omafra.gov.on.ca/english/engineer/facts/09-023.htm
- Ontario Ministry of Agriculture, Food and Rural Affairs, Deadstock Disposal Resources, omafra.gov.on.ca/english/livestock/deadstock

Preparing for On-Farm Depopulation and Disposal

Note: If you have multiple farm locations, make a plan for each location.

1. Contact Information

Legal Land Owner: _____

Hog Owner: _____

Farm name: _____

Premises ID:_____

Farm address (include fire code, GPS coordinates if you have them):

_____

Location of farm and directions from nearest major intersection: _____

_____

_____

Premises owner:_____

Phone number:_____ Mobile number:_____

Hog owner:_____

Phone number:_____ Mobile number:_____

Barn manager:_____

Phone number:_____ Mobile number:_____

_____

2. Animal Inventory

Animal Type	Average Number of Animals on Premises	Number of Barns on this Premises	Maximum Capacity of Premises	Barn Set-up/ Configuration e.g. loose housing, farrowing stalls.	Max. Extra Days of Holding Beyond Normal Shipment Date
Sows and gilts					
Boars					
Pigs < 20 kg/45 lbs					
All other pigs > 20 kg/45 lbs					

3. Holding Capacity

Identify the flow type of your operation (i.e., all in/all out, continuous flow, batch farrow, etc.), the types of housing on site (e.g., farrowing crates, pens, stalls, etc.) and average group sizes by type of animal (e.g., 30 pigs/pen).

List what measures other than euthanasia you would take to manage pig numbers while shipping is not an option, assuming no new animals are received (i.e., nursery pigs, replacement gilts, etc.).

4. Feed Capacity

What is your maximum feed capacity and how much do you normally maintain on site (by ingredient type if applicable)? Is feed complete or mixed on site? How often are deliveries received?

5. Euthanasia Methods

Note: If you need assistance putting together your plan, contact your herd veterinarian or Ontario Pork, Industry and Member Services at 1-877-668-7675 or memberservices@ontariopork.on.ca. In the event that herd depopulation or partial depopulation is necessary due to disease or supply chain interruption, monitor the Ontario Pork website for guidance at ontariopork.on.ca. Under those exceptional circumstances, industry resources in terms of people and large scale euthanasia options may be available.

Are staff willing and able to assist with large scale euthanasia? Yes ☐ No ☐

If yes, how many staff are available? _____Have they been trained? Yes ☐ No ☐

List the euthanasia method(s) you feel would work best at this farm site and the approximate size and number of animals requiring euthanasia for each method.

_____

_____

_____

_____

Can animals be safely moved and contained outdoors/off-site for euthanasia? Yes ☐ No ☐

Is the barn accessible by a skid steer of any size? Yes ☐ No ☐

List the handling and restraint system(s) you have available, (e.g. snares, gates, penning, deadstock cart, paddles, boards, etc). Do you have access to or own a skid steer?

_____

_____

_____

_____

6. Site Map

Create a farm site map of where you propose to locate your disposal site(s) and attach it to this plan. See, page 23 of this chapter to create a site plan for your farm, or draw it over an aerial photo of your property. Google Maps is one source.

Be sure to take into consideration the setback restrictions listed under *Points to Consider* for the proposed method of disposal, either burial or composting.

You can use OMAFRA's on-line AgMaps Geographic Information Portal to access surface drainage and aerial maps .omafra.gov.on.ca/english/landuse/gis/portal.htm.

If your fields are tile drained, contact your tile drainage company and request a copy of the tile maps for your farm. Indicate on your site map where the tiles are located.

Call your local conservation authority if you do not know where flood lines are sited. To find your local conservation authority, go to: conservationontario.ca/conservation-authorities/find-a-conservation-authority/.

Contact Ontario Pork at emergplans@ontariopork.on.ca or by calling 1-877-668-7675 for assistance in completing site maps.

7. What is your on-farm emergency disposal plan? Check all that apply.

Composting ☐ Burial ☐ Other ☐ specify method _____

Can undertake on-farm disposal of large volume of deadstock? Yes ☐ No ☐ Partial ☐

*If you cannot find a space that complies with all regulations, call OMAFRA for advice and other options.

Does the premises have tile drainage? (Fully Tiled, Partially Tiled, Untiled)

_____

_____

_____

_____

List below the reasons why on-farm disposal is not an option for this site, (E.g. insufficient land base, soil type, subject to flooding, set-back requirements, etc.)

_____

_____

_____

8. Soil Type

List the soil type(s) on this property, or, ideally attach maps of your soil type and tile drainage:

(You can find the soil type, drainage and aerial maps by using OMAFRA's on-line AgMaps Geographic Information Portal omafra.gov.on.ca/english/landuse/gis/portal.htm)

_____

_____

_____

9. Size and Number of Burial Pits (existing or planned)

Maximum Deadstock KG: _____

Total Number of Burial Pits Required (2,500kg/pit, 1 pit/acre): _____

Number of Pits Possible, Respecting Tiling: _____

Number of Pits Possible, Ignoring Tiling: _____

Use the table as a guide for burial pit dimensions dug by backhoe. Pit widths are in multiples of 0.6 m (2 ft) as that is a typical backhoe bucket width.

Deadstock Size and Type	Pit Dimension to Bury 2,500 kg		Approx Animal count to = 2,500kg
Small animals (20 kg/45 lbs)	width	0.6 m	125
	depth	1.2 m	
	length	9.0 m	
Mid-size animals (50 kg/110 lbs)	width	1.2 m	50
	depth	1.2 m	
	length	4.5 m	
Large animals	width	1.8 m	19
	depth	1.2 m	
	length	3.0 m	

*Approximate dimensions of burial pits based on total weight of deadstock to bury and relative size of animal

10. Composting

Are you prepared to actively manage the compost pile for up to a year? (monitor temperature, leachate and scavengers) ☐

Indicate below what type of composting method you intend to use, (e.g.windrows, bin system). Windrow sites are typically 3mx200m and require 100m between sites.

_____

Maximum Deadstock KG: _____

Total Number of Windrow Piles Required (120,000kg/pile): _____

Number of Piles Possible, Respecting Tiling: _____

Number of Piles Possible, Ignoring Tiling: _____

The compost mixture should be no more than 25% deadstock and 75% co-composting material (substrate). 3m3 of substrate are required for every 800kg of deadstock to be composted. How much substrate (m3) will you require?

_____

What type(s) of substrate are you proposing to use? Allowable substrate includes: clean sawdust, shaving or wood chips; grain, corn or bean straw; hay or silage; livestock manure and bedding (30% dry matter); and poultry manure. Calculate kg required for each substrate based on the average density table provided on page 7.

To ensure your composting is working properly, refer to the OMAFRA factsheet, On-Farm Bin Composting of Deadstock available at omafra.gov.on.ca/english/engineer/facts/09-031.htm#7. There is a section on monitoring the compost process and a troubleshooting guide.

What will you do with composted material once animal matter has decomposed? _____

Date Prepared:_____Initials of person completing:_____

Date Updated:_____Initials of person updating:_____

Date Updated:_____Initials of person updating:_____

Date Updated:_____Initials of person updating:_____

Date Updated:_____Initials of person updating:_____

Date Updated:_____Initials of person updating:_____

3. Financial Considerations and Business Decisions

If a foreign animal disease is confirmed in Canada, in addition to the animal losses from the disease there could be a lengthy market interruption with significant financial implications for individual farm businesses and the broader rural community. By completing the planning activities listed below, you will gain the background information you need to help work through some difficult financial and business decisions.

Currently we do not know what government assistance might look like. Before you make any significant operational decisions visit www.ontariopork.on.ca. Do what you can to build a safety net to get you through a few months without income.

Having these discussions with your suppliers, customers and financial institution can be uncomfortable but will be much easier now than during an emergency.

Points to Consider

- Review all your legal and contractual obligations both verbal and written. Contracts include mortgages, operating lines of credit, marketing and production agreements, land and equipment leases, etc. Assess areas where the farm operation is in a good position and where improvements can be made.

  - Are there any clauses in the contracts you have with packers/processors that outline a market interruption event, e.g. foreign animal disease, border closure?
  - How will contractual arrangements between animal owners and contractors and production decisions be handled during a disease outbreak or border closure?
  - How could you ensure a business relationship is maintained with these customers?
  - What penalties are there for paying down all, or large portions, of any loans and mortgages? Does it make sense financially to do so?
  - If income is lost due to market interruption (e.g. border closure), are you able to make minimum debt payments to meet your obligations? If not, talk with your lenders to see what options are available.
  - If required, what non-essential equipment/capital can be liquidated or traded-in to eliminate or reduce debt payments?

- Discuss the global threat of disease with your financial institution and business advisors. Ask them for advice on your current business situation and financial risk mitigation measures. Explain to them what measures you have in place to protect your farming operation in terms of biosecurity and prevention controls.

  - Should you focus on paying down debt and/or building up your savings in anticipation of weathering a large-scale market interruption?
  - Do you have enough savings to service eight months of fixed debt payments, e.g. mortgage, equipment and building loans, utility bills, land tax bills, etc.?
  - Are your savings liquid and easily accessible, e.g. AgriInvest account?
  - Would large scale burial on your property impact your lender's environmental assessment of your property and thus impact your mortgage and operating lines of credit?

- Read through insurance policies and confirm with your agent what coverages you have in place and any exclusions.

  - Would large scale burial on your property impact your property insurance coverage?
  - Are there any insurance programs or products that will cover loss of income and environmental risks in which you could participate and which would apply to market interruption?
  - If you have business interruption insurance, what time period will it cover and does it apply to market interruption?

- Ask your accountant or tax advisor about available tax programs or credits that might assist with market interruption and financial loss.

  - Are there any programs or products that will cover loss of income and environmental risks in which you could participate, e.g. AgriStability, AgriInvest?
  - Are there any emergency relief programs you can access for foreign animal disease? This information will likely not be available until after the event occurs. Producers should look to provincial, federal, and Ontario Pork websites to determine if anything is available.

- Talk to your suppliers of goods and services regarding available payment and credit options.

- Inquire of your municipality or real estate lawyer whether there is a possibility to sever some of your land and sell parcels if it becomes necessary.

Step 8

Complete the *Financial Considerations and Business Decisions – Disease Response and Recovery Procedure* on the following pages.

Additional Resources:

- Business Strategy, OMAFRA omafra.gov.on.ca/english/busdev/businessstrategy.html
- Business Structure and Agreements, OMAFRA omafra.gov.on.ca/english/busdev/businessstructure.html
- Exploring New Market Channels, OMAFRA omafra.gov.on.ca/english/busdev/facts/sellingfoodwkshop.htm
- Farm Business Analyser Calculator, OMAFRA omafra.gov.on.ca/english/busdev/download/analyse_farmbus.htm
- National Farm Business Management Resource Centre takeanewapproach.ca/
- Specialty Cropportunities, OMAFRA omafra.gov.on.ca/CropOp/en/business_planning_marketing.html
- Starting a Farm in Ontario – Business Information Bundle for New Farmers omafra.gov.on.ca/english/busdev/newentrant/newent.htm

Financial Considerations and Business Decisions – Response and Recovery Procedure

List what steps you need to take regarding legal, contractual and financial obligations if a foreign animal disease is confirmed in Canada.

Based on your planning activities, state what steps you will take to mitigate the financial impact to your farming operation, e.g. asset sales, herd depopulation or partial depopulation, debt restructuring, liquidating savings, off-farm employment. If you have a timeline when each activity will occur, note that beside the activity.

_____

_____

_____

_____

List the specific steps you will take now and if there is a disease emergency with your customers and suppliers, e.g. processors, transporters, feed mill, etc.

_____

_____

_____

_____

Other actions:

_____

_____

_____

Date Prepared:_____ Initials of person completing:_____

Date Updated:_____ Initials of person updating:_____

Date Updated:_____ Initials of person updating:_____

Date Updated:_____ Initials of person updating:_____

DECISION TREES FOR PRODUCERS

NOTES:

This information is intended to help in the case of market disruption resulting from a border closure and NOT in dealing with the animals infected with a Foreign Animal Disease (FAD).

If borders are anticipated to be closed for six months, this is a different decision process than if the expectation is the border will open in one month. For the purposes here, the questions contemplate the border being closed (and therefore the markets limited) for six months.

The following decision trees have been developed as a tool for producers to think through the various difficult and trying decisions that might be required during a FAD outbreak, such as African swine fever, and to guide them through the process of preparing information, resources, and important contact details prior to an event. They will be prefaced with instructions on their intended use, how to use them, and where to find further resources.

These flow charts are not intended to be used as recommendations for any decisions but are guides to think through some common scenarios.

It is recognized that due to the large variety of farm operations and the number of different situations, these tools are meant as general decision-making tools to help producers think through their own individual situations.

It should be applicable and help in numerous situations/conditions but not necessarily apply to all.

Individual producers will need to assess their own situations and make decisions based on their own situation along with reassessing regularly — daily, weekly, monthly — and consider the broad impact and implications for their entire production system.

The following flow-charts address some common scenarios and have been developed for guidance and planning purposes only. The information provided and the views expressed within these materials do not bind Ontario Pork, the Governments of Canada or Ontario. In the event of an actual animal disease outbreak or other emergency, Canada and Ontario reserve their respective rights to exercise their statutory animal health mandates as they deem appropriate in the circumstances which may vary in whole or in part from what is set out within these materials. The Governments of Canada and Ontario and their respective Ministers, directors, officers, employees and agents and Ontario Pork and its staff and agents will not accept any responsibility for any loss, injury or damages that may be related to or arise from your use of or reliance upon this information.

Breeding/Multiplier Herds

NOTES:

- It is likely that assembly yards will not be an option for cull sows and boars.
- Decisions related to the breeding herd revolve around the longer-term prospects and opportunities for the markets to be available again.
- If borders are anticipated to be closed for six months, this is a different decision process than if the expectation is the border will open in one month.
- For the purposes here, the questions contemplate the border being closed (and therefore the markets limited) for six months.
- Everyone has different considerations and each individual will need to consider their situation almost on a daily (or at least on a breeding cycle) basis due to the dynamics of the overall situation.
- The main decisions for the breeding herd involve either not breeding or aborting.
- Communicate with each other and come up with a strategy that works for everyone.

FAD DECISION TREES FOR PRODUCERS

FAD (e.g. ASF) confirmed. Borders Closed.

Is the processor/marketer anticipating procesing hogs in six months?

YES

Is the processor/marketer taking **all** hogs?

YES

Is the business willing to continue to invest in the **full** costs for production?

YES

Is the business able to invest in the **full** costs for production? I.e. Consider lendors, investors, feed companies, vets, business management?

YES

Continue to breed sows.

NO

Is the processor/marketer taking **some** hogs?

YES

Is the business willing to invest in the **partial** costs for production?

YES

Is the business able to invest in the **partial** costs for production given the financial situation? I.e. What is situation with lendors, investors, feed companies, vets, business management?

YES

NO

NO

NO

NO

NO

NO

May need to consider:

- Not breeding sows;
- Delaying breeding sows;
- Aborting sows already bred; and/or
- Reducing the breeding herd
- Refer to the Production Flow/Timelines Chart (to be developed) for help with timelines and decisions

Weaners and Suckling Pigs

FAD confirmed. Borders Closed.

Is there a place (space in the next production stage or barn) or market for the weaners or suckling pigs?

YES

Will it take **all** pigs?

YES

Respect any quarantine or animal control zones (means TBD). Move pigs as planned.

NO

NO

REMAINING ANIMALS

Will space take some pigs?

YES

NO

DON'T KNOW

Are there options to delay moving the weaners or suckling piglets for a few days or so?

Options might include:

- Temporarily overcrowd by up to 15% but watch for issues or symptoms (develop SOPs).

- Adjust feeding program to slow growth rate of pigs (develop SOPs).

- Additional alternative housing (e.g. another building, outside (season dependent), etc.).

NO

Review checklist of equipment, expertise, staffing requirements—different for weaners and suckling piglets Refer to Guidelines for Euthanasia and Disposal

DON'T KNOW

Humanely euthanize (all or some of the remaining animals)?

YES

Is there equipment, expertise, staffing and willpower available to euthanize animals (different for weaners and suckling pigs)?

YES

Is there a deadstock plan prepared?

YES

Proceed with euthanasia and deadstock disposal in consultation with your herd veterinarian and Ontario Pork.

NO

NO

Need to pull together the euthanasia equipment and expertise. Refer to Guidelines for Euthanasia and Disposal.

Develop deadstock plan as per SHO's Mass Depopulation and Deadstock Guidelines (to be developed).

Are there any other options other than euthanize or delayed moving?

YES

Implement options and revisit decisions above in one week or next production/movement cycle.

Market Hogs

FAD confirmed. Borders Closed.

Is the processor/marketer accepting hogs?

YES

Is the processor/marketer accepting **all** hogs?

YES

Respect any quarantine or animal control zones (means TBD). Move pigs as planned.

NO

NO

REMAINING ANIMALS

Will space take some pigs?

YES

NO

DON'T KNOW

Are there options to delay moving the weaners or suckling piglets for a few days or so?

Options might include:

- Temporarily overcrowd by up to 15% but watch for issues or symptoms (develop SOPs).

- Adjust feeding program to slow growth rate of pigs (develop SOPs).

- Additional alternative housing (e.g. another building, outside (season dependent), etc.).

Review checklist of equipment, expertise, staffing requirements—different for weaners and suckling piglets Refer to Guidelines for Euthanasia and Disposal

NO

DON'T KNOW

Humanely euthanize (all or some of the remaining animals)?

YES

Is there equipment, expertise, staffing and willpower available to euthanize animals (different for weaners and suckling pigs)?

YES

Is there a deadstock plan prepared?

YES

Proceed with euthanasia and deadstock disposal in consultation with your herd veterinarian and Ontario Pork.

NO

NO

Need to pull together the euthanasia equipment and expertise. Refer to Guidelines for Euthanasia and Disposal.

Develop deadstock plan as per SHO's Mass Depopulation and Deadstock Guidelines (to be developed).

Are there any other options other than euthanize or delayed moving?

YES

Implement options and revisit decisions above in one week or next production/movement cycle.

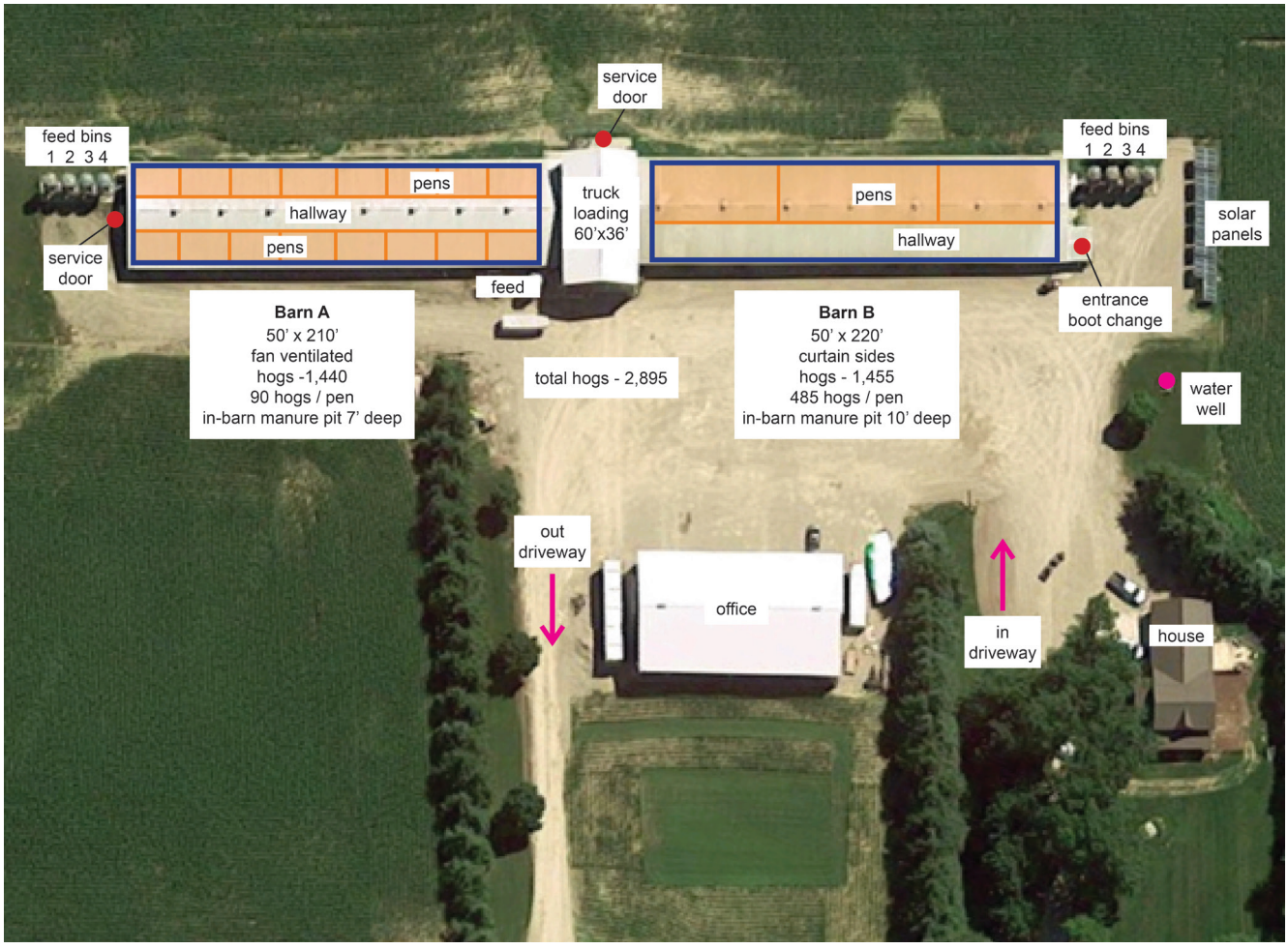
Example Site Map

One of the easiest ways to create a site map for your farm is to download aerial photos of your property from Google Maps or AgMaps. Important features of your property can be added digitally or manually to the map, creating a valuable addition to your emergency binder.

We've done a full property image and a close-up of the barn to show you what information is helpful for first responders, including CFIA, during an emergency.

Barn Features to Note:

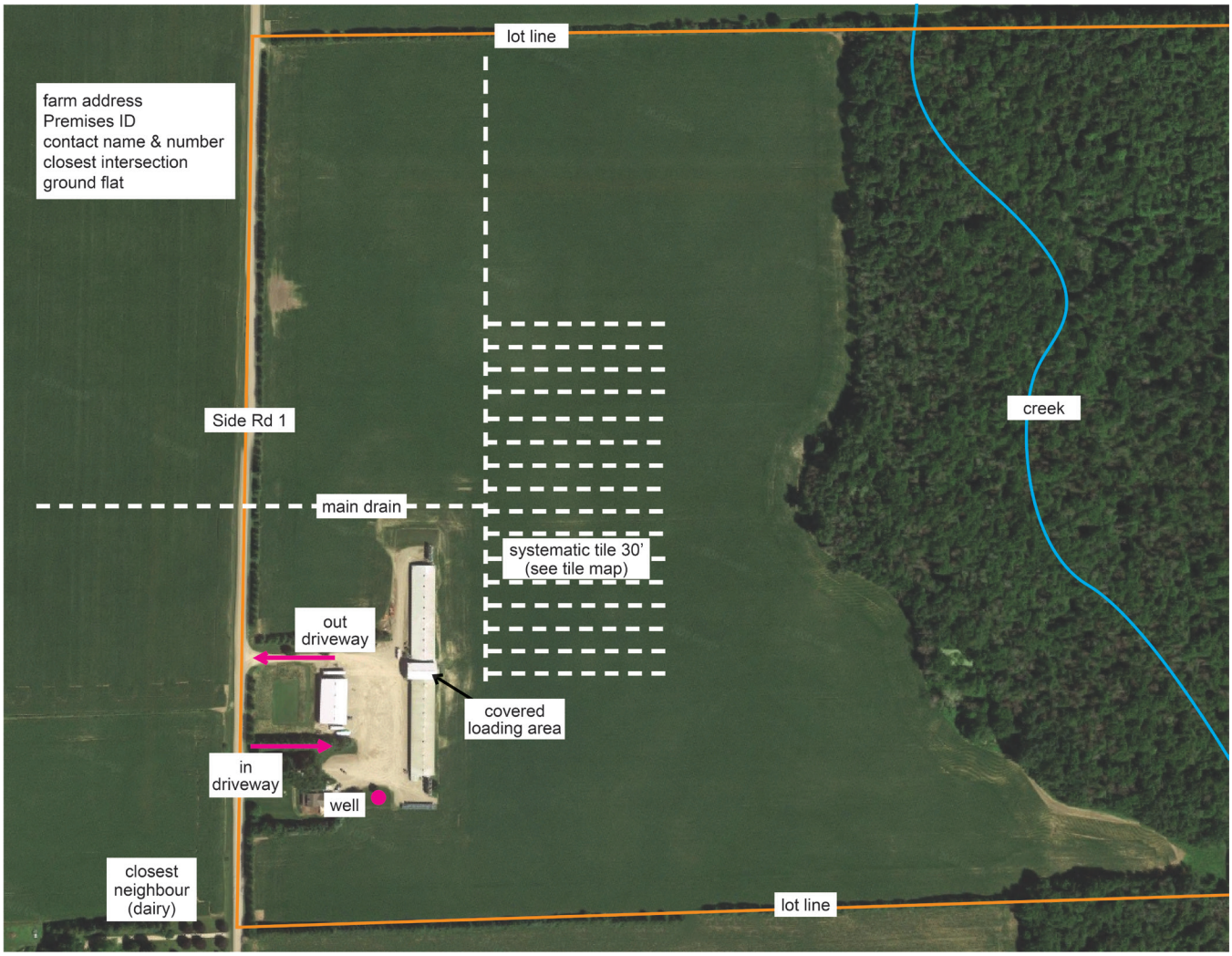
- Premise identification, including street address, acreage, fire address, GPS location, North/South orientation
- Barn type, sow housing type, pen styles and sizes
- Usual number and type of animals
- Exits: man-doors, animal loading doors and other overhead doors
- Manure system maximum volume and duration of holding, pump out locations
- Feed location and systems, complete or mixed feed
- Deadstock bins or composting sites
- Driveways in and out, 53' trailer access/turnarounds, passenger vehicle parking
- Power sources (Fuel tanks, generators, solar panels, etc.)
- Location of onsite equipment that could be used to handle and euthanize animals (gates, snares, boards, captive bolt or firearms, C02 chambers, etc.)



Site Conditions to Note:

- Premise identification, including street address, acreage
- Soil types (sand, silt, clay, etc), soil drainage, class, depth to water.
- Water wells, gas wells (active and old)
- Tile drainage – Where are your detailed tile maps located?
- Surface water, aquifers, flood plains, municipal wellheads, catch basins, hickenbottoms, tile inlets/outlets
- Natural area (frequent wildlife)
- Roads (winter maintenance?)
- Assessment parcel lines
- Nearest neighbours and types of operations (e.g., livestock operations including type, industrial/commercial operations, residences/residential areas, community or institutional use areas such as schools and churches, public parklands, etc.)
- Distances to nearest neighbours, if known
- Location of buried power/gas/cable lines etc.

This information is important when making plans for composting or burial of large volumes of deadstock.



Section 6

Animal Activists, Protests and Trespassers

Animal Activists, Protests and Trespassers

Animal rights activists are increasingly targeting farms and livestock emergency scenes, such as barns fires and traffic accidents, as protest sites. This section provides some measures to lessen the chance of trespassers and mitigate the impact of on-site protests.

Points to Consider

Site Access

- Ensure "No Trespassing" signs are present at all farm access points and on fence lines.
- Use gates and other appropriate barriers to block access to laneways (recognizing it may not be practical in all cases if this would impede farm operations).
- Have printed site maps with clearly marked boundaries; these are helpful to share with police if a protest occurs.
- Ensure barn areas and driveways are well lit and lighting is motion activated.
- Install alarms to alert you to intruders during off hours. Audible alarms may also deter trespassers' entry.
- Mount web cameras or trail cameras at prime access points to your property and buildings to capture photographs or videos of trespassers. Footage obtained can be used for laying charges and in court proceedings.
- Remove keys and lock vehicles especially if there are remote door openers in the vehicles.
- Lock buildings, livestock medicine and filing cabinets.
- Password protect all computers.
- Place deadstock in secure and discretely located collection bins. Do not overfill; ensure the lid can close properly. Any blood, birthing discharge, and tools that contain animal substances need to be properly managed (e.g. cleaned, stored).
- Be alert. If someone unfamiliar comes onto your property, approach them and politely ask why they are there. If they do not need to be on your property, civilly ask them to leave. If someone refuses to leave, call police. Family members and employees also have the authority to deny access to unfamiliar individuals. Ensure they are aware of the protocols you wish them to follow.
- Record and report any suspicious activity to local police and to Ontario Pork. Include as many details as possible, such as time and date, what happened, duration, person and/or vehicle description, license plate numbers, any other identifying details.
- All sales and service calls should be pre-arranged. Be wary of anyone showing up unannounced especially from a company with which you are not currently doing business. For existing suppliers, if the sales or service personnel are not known to you, confirm with the business office. Call using the telephone number you typically use for that business, not one provided by the visitor.

Employees

- Ensure all employees are aware of your policies relating to animal welfare and dealing with animal activists.
- Take the time to check employment references for new hires.
- Look for gaps in service on applicants' resumes.
- Check the candidate's social media and networking activity. There are also companies that will perform this service for you. Contact Ontario Pork communications staff for recommendations of companies that perform these services.
- Ensure all staff sign an animal welfare code of conduct. Keep a copy in the employee's file and ensure the filing cabinet is locked so information cannot be extracted from the file without your knowledge. Consider having employees review and sign the code annually. A sample is provided at the end of this section.
- Have any visitors and subcontractors also sign an animal welfare declaration. A sample is provided at the end of this section.
- Consider including a clause that the use of phones and other recording devices are not allowed on your farm without permission to respect the privacy of farm owners and other employees.

- Consider a policy that staff are not to discuss employer-specific information on social media; this could be included in a confidentiality policy.
- Be aware of new employees who are excessively curious about operations that are not within their job descriptions. Encourage long-term employees who are overly questioned about animal handling, care, etc. to tell you about these encounters.

Social Media

- Activists regularly monitor social media. Do not post information about a protest or unfortunate event (e.g. barn fire or truck rollover) to social media channels.
- Be cautious of posting any photographs or videos of your farming operation online. The GPS location is often accessible by viewers and will allow them to learn the location of your farm. They are able to conduct preliminary surveillance of the layout of your buildings using Google maps.
- Ensure family and staff do not tag or post personal/identifying information regarding farms and farm families.
- Do not broadcast vacations and time away from farms.
- Analytics technology will pick up visitor views to websites and animal activist Facebook pages. Avoid driving up page/video views of activist content. Doing so increases the popularity and spread of the content. Put security before curiosity and stay away from activist sites/social media groups.
- Do not engage on social media with activists; make things as boring as possible for them. They want and benefit from any attention whether positive or negative, it raises their profile.

MANAGING A PROTEST

- It is LEGAL to protest on public property (sidewalks, shoulders of roads, etc.).
- It is ILLEGAL to enter onto private property without the property owner's permission.
- Do not touch a protestor; inform them they are on private property and request they leave.
- Protestors may try to stop vehicles from entering the property, allow police to deal with this.
- Do not confront or engage with protestors in any way. Especially do not antagonize protestors by screaming, threatening or yelling. This provides protestors with an opportunity to videotape you saying or doing something negative. Always assume you are being recorded.
- The more attention protestors receive, the greater the chance they will return.
- It may be helpful to have videotape of the protestors especially if they are threatening you, your vehicle or property.
- However, do not use your cell phone to videotape if you are behind the wheel of a vehicle. This could lead to a possible distracted driving charge. Some vehicles have mounted dash cams for this purpose.
- Call 911 if a situation is life threatening, dangerous or a crime is in progress.

When a Protest Occurs or is Expected to Occur

- Always ensure safety is the top priority for you, your family and employees, and the protestors themselves. An accident or injury of any kind could cause significant legal problems and be used to justify activist campaigns.
- If your farm is protested without warning, call the police and express your concern for your safety and the safety of your family. Be very clear you are not sure of the intent of the protest and you are fearful.
- If there is advanced warning of the protest, review your trespasser and protest response plan with all those involved and contact the local police to inform them of the potential issue.
- Contact Ontario Pork for immediate producer support as well as media and communications assistance. The contact numbers are given at the end of this section.
- Have one person designated to work with the police. This will help the police know the point of contact and avoid confusion.
- Review your property line with the police so everyone is clear and discuss a "no fly zone" for drones and no parking areas on roadways.
- **Be very clear when initially speaking to the protestors, advise them they are not welcome, if they enter your premises they will be trespassing, and that you have called the police.** Do not engage with the protestors beyond that statement.

- Designate one person (who is able to remain calm) to monitor the property line and nearby protestor activity if police are not present to do so.
- Define your property boundary at the end of the laneway. Use marker paint or a rope to define property lines on the ground.
- Block laneways and entrances, where possible, with gates, vehicles or farm equipment.
- If you know how long the planned protest is expected to last, try to limit any activity on the site during that time; give them nothing to film and no one to interview.
- If possible, limit traffic moving on and off the property, especially heavy machinery and trucks. This will help reduce the chances of needless, and potentially negative, engagement.
- Always assume you are being filmed or photographed. Any negative interaction with protestors will be filmed, and it is of the utmost importance that you remain professional.
- Protests are generally short term in nature, ranging from a few minutes to a few hours. The best strategy is to let them proceed with their protests as long as it is conducted in a lawful manner. Strive to give them as little to record as possible during that time.
- "Counter protests" by you or your neighbors are not productive and only increase the chances for recorded negative interaction and added publicity for the activists. Discourage all interactions with protestors other than the police.
- If the farm is swarmed or rushed by an overwhelming number of protesters, follow the same procedures listed above to the best of your ability. Leave the protesters alone, go into your home or office and call police. Report that your business and home are being invaded by a number of people, that your family feels threatened and you are concerned about the welfare of your animals.
- **If media arrives at the farm, do not be pressured into responding to questions or allowing access to your property. Direct them to Ontario Pork for a response. In general, it is recommended that producers do not provide interviews or comments to reporters.**

When to call 911

If the situation is life threatening, dangerous or a crime is in progress (e.g. trespassers on site and will not leave, animals have been released from pens, etc.), this constitutes an emergency to law enforcement. Call 911 immediately, officers from the appropriate police service will be dispatched.

When to call the police non-emergency phone number

If police are not urgently required, but a report still needs to be filed then the non-emergency number should be used. If it is not an emergency, then DO NOT CALL 911.

If you reside in an OPP jurisdiction, call 1-888-310-1122 to put you in contact with the Communication Centre 24/7. For a municipal policing service, see the chart included at the end of this section.

Examples of non-emergency but reportable situations:

- An attempt was made by someone to enter your property/buildings and there is evidence of the crime that could be collected.
- You have identified a suspicious person through an email, phone call or farm visit,
- Animal rights activists have directly or indirectly threatened you/your livelihood (email, phone call or mailed letter).
- Animal rights activists have made it clear on social media they are targeting your business with plans for "direct action."

Response to Barn Fires or Other Emergencies

There are some additional considerations to guard against protests following a barn fire or other high profile farm emergency, e.g. a disease outbreak. A recent trend sees activists using tragic farm events as a platform to bring attention to their anti-animal agriculture message.

- Appoint one person to make any statements on behalf of the farm. Ask family members, friends and employees to direct all inquiries to this person.
- Be clear with police, fire and government officials that you wish to keep your information private, including address, ownership and estimated losses. You have a say in protecting your privacy after a fire.
- Media inquiries: Reporters may call, reach out via social media, or show up on farm. Do not be pressured into giving a comment on the spot. Politely request their contact information and offer to have someone follow up. Media inquiries can be directed to Ontario Pork (see contact information below). Ontario Pork can also provide coaching and key messages for producers who choose to do media interviews.
- Social media accounts or websites associated with a farm may be targeted by activists following a fire. Consider

temporarily deactivating social media accounts, restricting access, or limiting comments on your sites. Information on how to deactivate your account can be found here:

- Facebook: facebook.com/help (search "deactivate my account")
- Twitter: help.twitter.com/en/managing-your-account (search "deactivate my account")
- Instagram: help.instagram.com (search "deactivate my account")

Ontario Pork Assistance

- For immediate producer support, contact **Ontario Pork's, director industry and member services** at 519-767-4612.
- For media relations and communications support, contact **Ontario Pork's, director communications and consumer marketing** at 519-767-4609.

Protest and Trespasser Response Procedure

List who to call:

- For emergency situations call **911.**
- For non-emergency reports contact local police services at _____.
- Speak clearly and provide the location of the incident or emergency.
- Describe the emergency (number of trespassers, protestors at road, intent of their presence, etc.).
- Be very clear you are concerned for the safety of your farm, family, employees and animals.
- Contact Ontario Pork:
  - For immediate producer support, contact **Ontario Pork's, director industry and member services** at 519-767-4612.
  - For media relations and communications support, contact **Ontario Pork's, director communications and consumer marketing** at 519-767-4609.
- Contact other people below as appropriate (owners, managers, employees, and neighbors) for additional assistance. *(When completing form, indicate the relationship these people have to the farm.)*
  - _____
  - _____
  - _____

List what steps or activities should be taken and, if applicable, who is responsible:

- Advise protestors or trespassers they are not welcome, ask them to leave or not enter the property, and inform them that police have been called.
- Designate one person to work with police and monitor the property line until police arrive.

  Responsible: _____ Backup: _____

  Responsible: _____ Backup: _____
- Block laneways and entrances where possible and define the property line at the end of the main laneway.
- Limit traffic and farm activities while protestors or trespassers are present.
- Consider whether to temporarily deactivate farm and family members' social media accounts.
- Other:
  - _____
  - _____

List what SHOULD NOT be done:

- Do not speak with or touch protestors or trespassers beyond requesting they leave.
- **If the press should arrive at the scene, do not be rude but also do not make statements regarding the protestors or trespass situation. Be cordial but explain you are focused on the care of the animals.** Ask them to respect the biosecurity and do not enter signs. Direct them to Ontario Pork communications staff.
- Other:
    - _____
    - _____
    - _____

These procedures are to be shared with all farm family members and employees. Annual review is recommended. Replace this document with an updated version on an annual basis or more often as necessary.

Date Prepared:_____Initials of person completing:_____

Date Updated:_____Initials of person updating:_____

Date Updated:_____Initials of person updating:_____

Date Updated:_____Initials of person updating:_____

Date Updated:_____Initials of person updating:_____

Date Updated:_____Initials of person updating:_____

Jurisdictions for Reporting Non-Emergencies to Police

OPP Non-Emergency Number: 1-888-310-1122

Available from anywhere in Ontario

Chatham-Kent Police		
	Blenheim, ON	226-312-2025
	Ridgetown, ON	519-674-3315
	Tilbury, ON	519-682-2614
	Wallaceburg, ON	519-627-2296
Durham Regional Police		
	Bowmanville, ON	905-579-1520, ext. 1687
	Pickering, ON	905-579-1520, ext. 2521
	Port Perry, ON	905-579-1520, ext. 2672
	Whitby, ON	905-579-1520
Guelph Police	Guelph, ON	519-824-1212
Halton Regional Police		
	Burlington, Oakville, ON	905-825-4777
	Georgetown, Milton, ON	905-828-5511
Hamilton Police		
	General non-emergencies	905-546-4925
	Central Station, King William St.	905-546-4772
	East End Station, King. St. E.	905-546-2929
	Mountain Station, Rymal Rd. E.	905-546-4930
London Police Service	London, ON	519-661-5670
Niagara Regional Police		
	St. Catharines/Niagara-on-the-Lake/Niagara Falls/Thorold	905-688-4111
	Fort Erie	905-871-2300
	Grimsby/Lincoln/West Lincoln	905-945-2211
	Welland/Wainfleet/Port Colborne/Pelham	905-735-7811
Stratford Police Services	Stratford, ON	519-271-4141
Waterloo Regional Police		
Central Division	Kitchener, ON	519-570-9777 Ext. 4499
South Division	Cambridge, ON	519-570-9777 Ext. 2299
North Division	Waterloo, ON	519-570-9777 Ext. 6399
West Grey Police	Durham, ON	519-371-6911
Windsor Police Service	Windsor, ON	519-258-6111
Woodstock Police	Woodstock, ON	519-537-2323

Sample Animal Care Code of Conduct for Employees

(Insert Company Name) _____
Animal Care Code of Conduct for Employees

Our Commitment to Our Animals
(Insert company name) _____ is committed to responsible animal care and handling. That means animals in our care deserve to be healthy, safe and well cared for.

Our Commitment to Our Customers
Working with animals is important work that we take seriously. We are proud of the work that we do, and we strictly enforce responsible animal care and handling among employees and service providers at our facility.

Every person who handles or comes into contact with an animal is required to support our core objective of responsible animal care and handling. The demonstration of that support is through the review and signing of this Code of Conduct agreement on an annual basis.

Our Commitment to Our Employees
Your job is valuable and important to our business. When you report an incident involving possible mistreatment, illness or injury involving animals in our care, we will take it seriously. We will document your concern. We will follow up to resolve the animal's situation, and/or provide additional training among employees.

Our Employees' Commitment to Us
Every one of our employees is required to handle and treat animals with respect and in accordance with *(Insert company name)* _____ policies and rules as well as the federal, provincial and municipal regulations under which we operate.

Any employee who is responsible for, observes or receives any information that alleges an animal on our property or in our care is being mistreated, mishandled or treated or handled in a way that is contrary to our animal care policy/ guidelines must report that information to (name of contact person) _____ immediately so that the situation can be corrected. (provide contact info) _____.

Failure to adhere to this agreement is cause for dismissal. *(Insert company name)* _____ reserves the right to refer animal-abusers to law enforcement for prosecution.

I _____ understand and acknowledge that willful neglect, mishandling or abuse of animals by any *(insert company name)* _____ employee or witnessing it and not reporting it is subject to discipline including immediate termination of employment, and that offenders may also be subject to prosecution under applicable laws.

_____ _____
Signature of Employee Date

Print Name:_____

_____ _____
Signature of Employer Date

Name and Title:_____

Sample Animal Care Code of Conduct for Visitors and Subcontractors

_____

(Insert company name)

Commitment to Animal Care, Safe Practices and Safe Food

Caring for animals and people and producing safe food is the core of our business. Every person who comes into our facility is required to support our core objectives of excellence in health and safety, food safety and responsible animal handling. The demonstration of that support is through the review and signing of this Code of Conduct.

- All visitors, contractors and suppliers are required to follow employee/visitor and food safety polices and rules. In addition, all visitors are required to handle and treat animals with respect and in accordance with company policies and rules.
- Any employee or visitor who witnesses or perceives to witness an unsafe act, food safety concern or that an animal is being mistreated or receives any information that alleges a safety hazard, food safety concern, that an animal is being mistreated or handled in a way that is contrary to our animal care policy/guidelines must report that information to _____ immediately.
- Smart phones and recording devices such as cameras, phones etc. are not allowed in any production area without approval.

Failure to adhere to this agreement is cause for dismissal or removal from our premise, and the company reserves the right to refer issues to the appropriate law enforcement agency for prosecution.

Full name	Date	Signature that you have read and understand the above	Purpose of business

Section 7

Mental Health Information and Resources

Identifying and Managing Stress, Anxiety and Depression: Mental Health Information and Resources

Stress is all around us — family, relationships, work, financial, health (human and animal) — and it can sometimes become very overwhelming, taking a toll on our mental wellbeing.

With busy and demanding lives and jobs, it can be difficult to find the time to take care of ourselves. That is why it is so important for family, friends and neighbours to look out for one another.

Remember that you are not alone — reach out to a family member, or a friend, or other emotional support. Just talking with someone can make a world of difference.

There are also confidential resources — available 24/7 — that you can and should contact if you, or someone you know, is in need of assistance. **Contact information is found under "Resources."**

GOT 5 MINUTES? MAKE TIME FOR YOU!

1. Take a quick walk, stretch, grab a cup of coffee or a snack or text a friend to check-in.

2. Breathe deeply and focus on something that is positive and makes you happy.

3. Prioritize: Write down what you need to complete and when. What tasks need to be done and what can wait? Give thought as to who you can contact for specific issues, e.g. speak with your financial advisor or bank regarding financial concerns. What can you ask someone else to do? Delegating is good. Saying "no" or "not now" is also ok!

4. Be mindful of your diet and your food and beverage choices.

5. Share your feelings — talking to someone can make a big difference.

WHAT IS STRESS?

Stress is the body's response to a real or perceived threat. Some stress can be a good thing. It can motivate us to focus on a task or take action and solve a problem. In this situation, stress is manageable and even helpful. Stress becomes a problem when we are not sure how to handle an event or a situation. Then worry sets in, and we feel "stressed."

WHAT IS DEPRESSION?

Depression is a mental health condition that affects a person's mood — the way a person feels. Mood impacts the way people think about themselves, relate to others, and interact with the world around them. This is more than a 'bad day' or 'feeling blue.'

Signs of **depression** include:

- Feeling sad, worthless, hopeless, guilty or anxious a lot of the time
- Feeling irritable or angry; this may include losing interest in things that you used to enjoy and may also include withdrawing from others
- Difficulty concentrating, focusing on tasks and remembering information; it can be hard to concentrate, learn new things or make decisions
- Changes in eating and sleeping habits and impacts to one's physical health

WHAT IS ANXIETY DISORDER?

Everyone feels anxious at times. Workplace pressures or demanding schedules or health issues can lead to worry, even fear. However, people suffering from an anxiety disorder have intense, prolonged feelings of fright and distress for no obvious reason, and these feelings can seriously impact feelings, thinking and actions.

(Sources: Canadian Mental Health Association and the Ontario Ministry of Agriculture, Food and Rural Affairs)

How are you feeling?

While everyone experiences some level of stress, anxiety and/or depression in their lives, being able to identify and lessen stress is important to one's overall wellbeing and in helping to ensure that everyday stress does not escalate to something more serious.

The following dashboard uses colours — green, yellow, orange and red — to help you measure your stress level, as well as provides some coping strategies. For example, under Orange, moderate insomnia and a constant focus on problems and anger, can lead to injury and/or burnout. On any given day, depending on your circumstances, your stress level may escalate; it is important to know when you need help, or if you feel someone around you needs help, and act upon it.

My dashboard

By Dr. Georges Sabongui © 2018

Balance is extremely important when dealing with stress. When you look at your internal dashboard, do you see all green lights? Are there any red lights tipping you toward overload and stress? Let's all take care of ourselves so we can continue to do what we enjoy most.

	Green **Healthy | Optimal**	Yellow **Reacting | Stress**	Orange **Injured | Burnout**	Red **Illness | Depression | Mental illness**
Physical	Good sleep Good appetite, want to eat healthy Want to take care of physical health Rarely or never sick	Mild insomnia Tired Attracted to junk food often Unmotivated to exercise Trouble relaxing without a drink	Moderate insomnia Exhausted Binge eating Drinking too much alcohol or using drugs to relax Various aches and pains	Constantly sleeping or periods of no sleep at all Constant aching in body Immune compromised: always sick Trouble getting off the couch or getting out of bed Only moments of relief come from excessive drinking or drugs, or over-the-counter medication
Mental	Mentally clear Focused Good concentration Creative problem-solving Sees solutions	Easily distracted Excessive worry Procrastination Avoidance Sees obstacles	Chronically preoccupied Inability to concentrate Impaired decision-making Memory loss Constant focus on problems Always negative	Impaired judgment Paralyzed decision-making *Suicidal thoughts or actions **If you're having suicidal thoughts, seek help immediately and call 911.*
Emotional	Motivated Excited Good social network	Irritability Loss of sense of humour Discouraged Impulsive Seeing people is a chore	Anger Anxiety Low mood Overwhelmed Avoiding social situations	Apathy Hopelessness or helplessness Out of control: explosive-implosive, holding it all in Feeling like a burden Isolating yourself from friends, family, and your community
Strategies	Self care: physical, mental and emotional Serotonin boost Take a work break or vacation	Reaching out to friends and family Doing something to relax Seeing your family doctor	Peer support, assistance programs, mental health first aid	Professional or clinical support: doctor, psychologist

If you feel that you are a threat to yourself, or others, **call 911 immediately,** or go to your closest emergency department or hospital

The information contained within this resource is for information purposes only and is not a substitute for professional advice.
Concerns specific to stress, anxiety depression or other mental health impacts should be discussed with your doctor or other mental health professional.

I'm here to listen and help

Do you know someone who is going through a challenging time? Have you noticed differences in their behavior, attitude or appearance, or a difference in the condition of their farm or animals? Do you struggle with how to speak with them? How do you begin? What do you say?

Start simple – "How are you?" or "How are things at the farm?" are basic questions to ask to begin a conversation. From there, you can continue the conversation by asking questions specific to what the speaker is saying.

Try to actively listen and respond accordingly – Listen and pay attention to what the speaker is saying. Give your full attention to the speaker so that the speaker knows and feels that what they are saying is important and that you are genuinely concerned and interested in their wellbeing. Be patient, give the speaker time to gather their thoughts, and provide gentle encouragement to the speaker to reveal additional thoughts and feelings.

Offer to help – Acknowledge that the speaker is dealing with a lot and ask what you can do to help or support them. If you know of someone in a similar situation, you can offer suggestions on what that person is doing. If you have expertise in a specific area, you can offer to work together with the speaker.

Support system – Ask the speaker if they have a support system and someone they can talk to, be it their family, a friend or a neighbour. If not, encourage them to open up to someone they feel comfortable with, or to contact a mental health resource (found at the end of this chapter under **Resources**).

The hardest and most important question to ask:

Do they have thoughts of causing harm to themselves or others? Are they feeling suicidal?

If yes, contact 911 and stay with the person until assistance arrives. **Do not leave the person on their own.**

Resources

If you feel that you are a threat to yourself, or others, **call 911 immediately,** or go to your closest emergency department or hospital

24/7 crisis hotline

ConnexOntario (connexontario.ca/) is a service of the Ontario Ministry of Health and Long Term Care that provides mental health, addiction and problem gambling navigation and information services, 24/7 - 365 days/year.

- Phone: (toll free) 1-866-531-2600 – available 24/7 - 365 days/year
- Email and webchat options are also available by going to the website connexontario.ca/
  - Note: the webchat option is not a crisis line and may take longer to receive a response
- You can also download the ConnexGo app from the Apple App Store or Google Play

Crisis text number – available 24/7

- Text (686868) – for youth and adults (sponsored by Kids Help Phone)

Canadian Mental Health Association (Ontario)

- Toll-free: 1-800-463-2338, staffed 24/7

Farmer Wellness Initiative

- farmerwellnessinitiative.ca
- 1-866-267-6255

Kids Help Phone

- Call: 1-800-668-6868 (provides counselling and info for ages 5-20)
- Live web chat
- Text (686868) – this is for youth and adults (sponsored by Kids Help Phone)

Mental Health Kit for Farmers

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed a ontario.ca/page/mental-health-resources-for-farmers to assist farmers in dealing with the stresses of owning a farm business and to improve their well-being.

Mental health resources and contact information, as well as resources to assist farmers in reducing and coping with stress, financial stress and animal welfare stress, are provided.

The information contained within this resource is for information purposes only and is not a substitute for professional advice.
Concerns specific to stress, anxiety depression or other mental health impacts should be discussed with your doctor or other mental health professional.

Appendix 1

Emergency Response Plan Templates

EMERGENCY CONTACT INFORMATION

In the event of an emergency always call 911

Note: If you have multiple farm locations, make a list for each location with the owner name and contact information, physical address for the farm, renter's contact information (if applicable), farm employees at that location along with their cell phone number (if applicable).

Farm name: _____

Legal Land Owner: _____

Hog Owner: _____

Farm address (include fire code, GPS coordinates if you have them, and premises ID):

_____

_____

Primary Contact name: _____

Barn phone number: _____

Home phone number: _____

Mobile number: _____

Designated Backup Person if Primary Contact is not available: _____

Home phone number: _____

Mobile number: _____

Location of farm and directions from nearest major intersection: _____

_____

_____

List of family members/renters living at location: _____

_____

_____

_____

_____

EMERGENCY CONTACT INFORMATION

List of employees/farm help at location or nearby and their cell phone number(s) if available: _____

_____

_____

Additional contact phone numbers: _____

_____

_____

Local Emergency Services

Fire department: _____

Police department: _____

Poison control: _____

Family doctor: _____

Hospital: _____

Faith leader: _____

Power supplier: _____

Gas/Propane/Diesel Suppliers: _____

Water Source/Well Service Provider: _____

Municipality Emergency Management Contact: _____

Internet provider: _____

Meeting Site in Event of Disaster

Off-site meeting location: _____

_____

Off-site phone number and contact: _____

Any person(s) NOT to contact in an emergency

_____

EMERGENCY CONTACT INFORMATION

Off-site Aid

1. Name of neighbour able to provide assistance: _____

Home contact number: _____

Mobile contact number: _____

Assistance/equipment available: _____

2. Name of neighbour able to provide assistance: _____

Home contact number: _____

Mobile contact number: _____

Assistance/equipment available: _____

Contact Information for Farm Business

1. Insurance agent (hogs and property if different): _____

Office: _____

Mobile: _____

Email: _____

2. Accountant/Bookkeeper (hogs and property if different): _____

Office: _____

Mobile: _____

Email: _____

EMERGENCY CONTACT INFORMATION

3. Banker (hogs and property if different): _____

Office: _____

Mobile: _____

Email: _____

4. Lawyer: _____

Office: _____

Mobile: _____

Email: _____

5. Veterinarian: _____

Office: _____

Mobile: _____

Email: _____

6. Livestock Transporter(s) (note if transporting own animals): _____

Office: _____

Mobile: _____

Email: _____

7. Processor(s): _____

Office: _____

Mobile: _____

Email: _____

EMERGENCY CONTACT INFORMATION

8. Feed supplier: _____

Office: _____

Mobile: _____

Email: _____

9. Deadstock removal: _____

Office: _____

Mobile: _____

Email: _____

10. Closest Landfill: _____

Office: _____

Mobile: _____

Email: _____

11. Compost Substrate Supplier(s): _____

Office: _____

Mobile: _____

Email: _____

12. Animal Control/Shelter: _____

Office: _____

Mobile: _____

EMERGENCY CONTACT INFORMATION

13. Towing:_____

Office: _____

Mobile: _____

Email:_____

14. Heavy Equipment Supplier(s): _____

Office: _____

Mobile: _____

Email:_____

15. Chemical supplier (i.e., cleaners for the barn, vaccines etc.): _____

Office: _____

Mobile:_____

Email:_____

16. Plumber:_____

Office: _____

Mobile:_____

Email: _____

17. Electrician: _____

Office: _____

Mobile:_____

Email: _____

EMERGENCY CONTACT INFORMATION

18. Fuel supplier (by type, e.g., propane, gas, diesel): _____

Office: _____

Mobile: _____

Email: _____

19. Barn equipment dealer (i.e., replacement parts): _____

Office: _____

Mobile: _____

Email: _____

20. Ontario Pork:

Name: N/A

Phone Number: 1-877-668-7675x1222

Email: memberservices@ontariopork.on.ca

21. Ontario Ministry of Agriculture, Food and Rural Affairs:

Name: N/A

Phone Number: 1-877-424-1300

Email: ag.info.omafra@ontario.ca

22. Ontario Ministry of Environment and Climate Change:

Name: N/A

Phone Number: 1-800-565-4923, Spills: 1-800-268-6060

Email: N/A

23. Canadian Food Inspection Agency:

Name: N/A

Phone Number: 1-877-814-2342

Email: N/A

Location of Important Farm Documents and Personal Papers

Storage location of farm information (i.e., ownership documents, tile maps, etc.)_____

_____

Storage location of personal financial information: _____

_____

Storage location of backup computer files: _____

_____

Location of spare keys to buildings and equipment: _____

_____

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

FARM MAP[25]

Draw a farm site map on the blank grid "Farm Site Map" and indicate: buildings and structures, access routes (roads, lanes), barriers (fences, gates), locations of livestock, hazardous substances, electrical shutoff locations, etc. Use the example on the next page as a guide. Contact Ontario Pork at emergplans@ontariopork.on.ca or by calling 1-877-668-7675 for assistance in completing site maps.

Important considerations when developing your map:

- Select a suitable scale
- Use the symbols in the legend at the bottom of the page and others as required
- Indicate the 'North arrow'
- Number all buildings and ensure those numbers match signs mounted on the physical structure
- See sample map for ideas

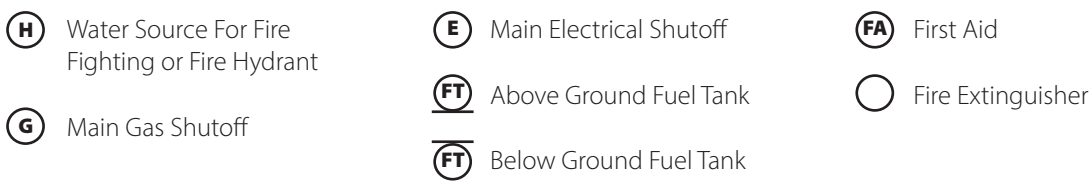
On your map include:

- The outline of all buildings with the name and number on each one, showing all of the following:

- The location of access routes and barriers:

- The locations of all hazardous substances or those that can cause pollution:

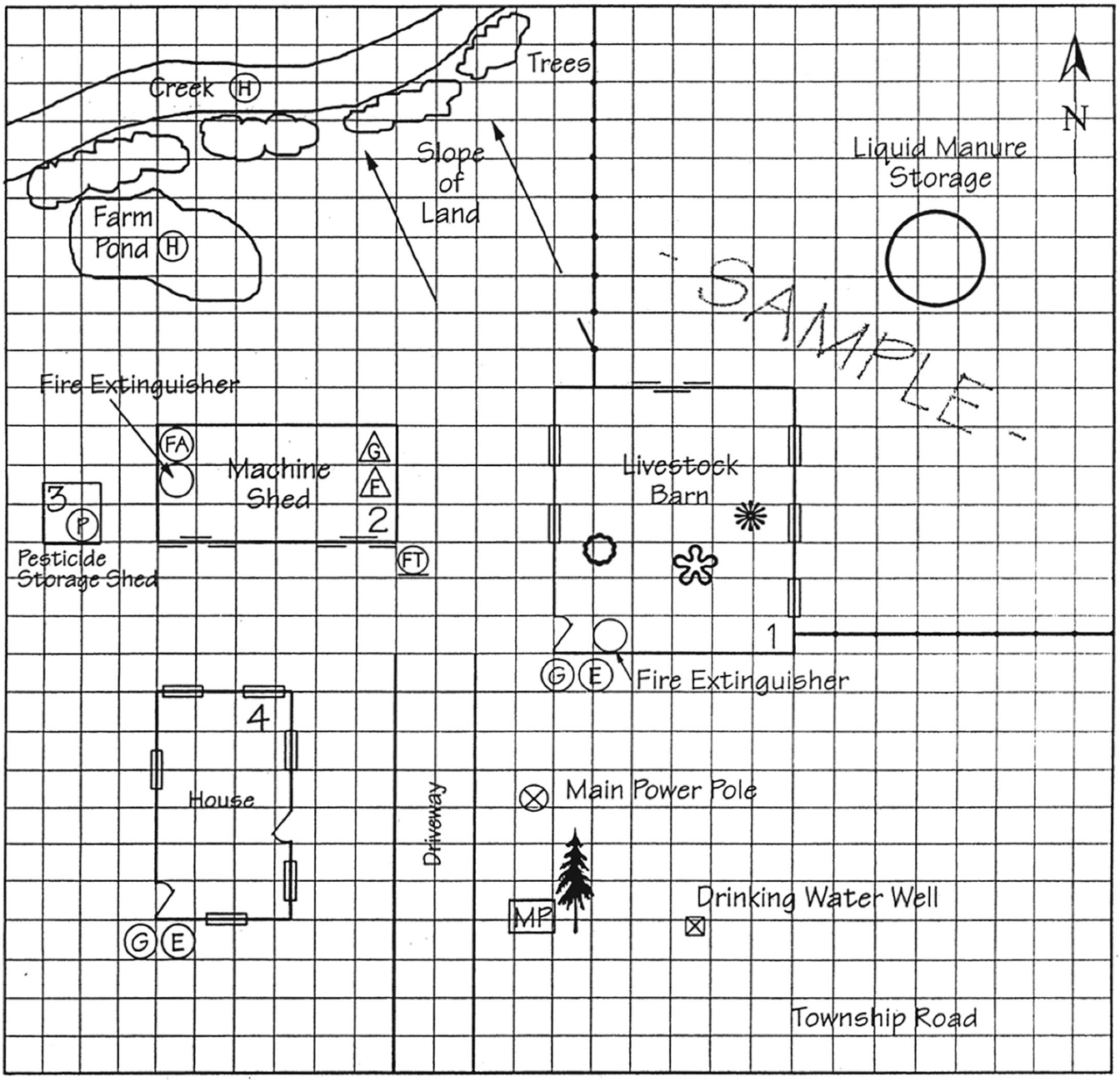
- The location of all fire protection considerations:



- The location of a meeting place that is communicated to family members and employees:

25. This section has been adapted from Rural Emergency Plan 2008, http://www.ruralemergencyplan.com/index.htm.

SAMPLE FARM SITE MAP

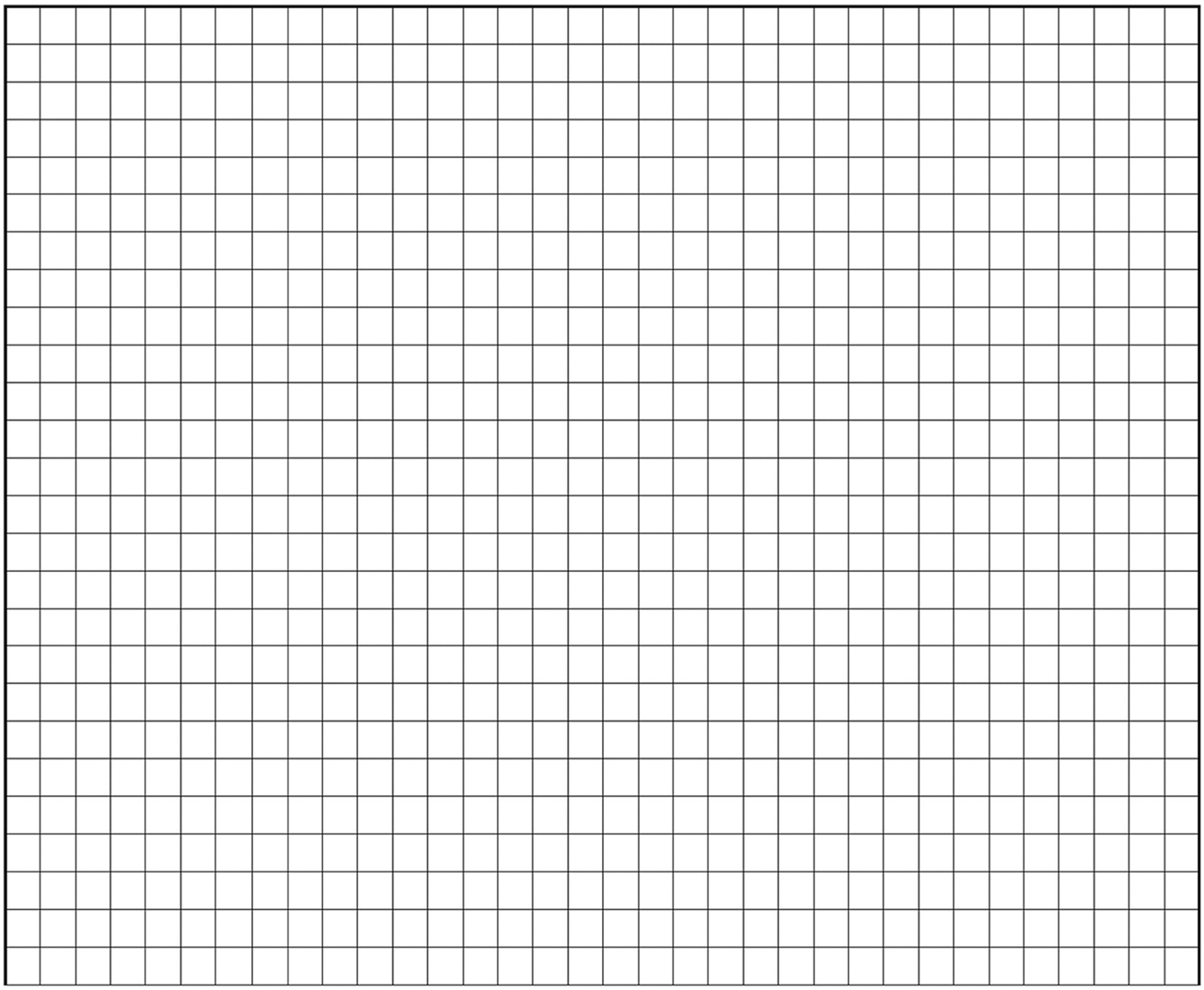


Approximate Scale: ¼ in. = 10 ft.

FARM SITE MAP

Physical address or legal land description:_____

911 Code/Number: _____



- North
- Pedestrian Door
- Sliding Door
- Overhead Door
- Windows
- Fans
- Floor Drains
- Sprinkler System
- Solar Panels
- Biogas Plant
- Wind Turbine
- Fences
- Gates
- Compressed Gas
- Flammable Liquids
- Oxidizing Materials
- Poisonous Materials
- Corrosive Materials
- Fertilizer
- Pesticide
- Water Source For Fire Hydrant
- Main Gas Shutoff
- Main Electrical Shutoff
- Above Ground Fuel Tank
- Below Ground Fuel Tank
- First Aid
- Fire Extinguisher
- Meeting Place
- Septic System (Label on map)
- Manure System (Label on map)

FARM SITE MAP

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

INVENTORY OF HAZARDOUS MATERIALS

Hazardous Goods

Include compressed gases, pesticides, fertilizers, petroleum fuel, lubricants, and significant quantities of paints, thinners, and solvents. Indicate building numbers on Farm Site Map.

NAME OF HAZARDOUS GOODS	BUILDING NUMBER

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

LOCATION OF EMERGENCY WATER SUPPLIES

(e.g. hydrants, ponds, watercourses, wells, etc. and show location on farm map)

_____

_____

_____

_____

Water Requirements of Swine

(Excerpt from OMAFRA factsheet, Water Requirements of Livestock, 07-023, July 2015)

The housing method, growth stage and feeding method used affect the drinking water requirements of pigs. The table below gives a breakdown of drinking water consumption by weight range or level of maturity.

SWINE TYPE	WEIGHT RANGE (KG)	WATER REQUIREMENT RANGE[A] (L/DAY)	AVERAGE TYPICAL WATER USE[B] (L/DAY)
Weaner	7-22	1.0-3.2	2.0
Feeder pig	23-36	3.2-4.5	4.5
Feeder pig	36-70	4.5-7.3	4.5
Feeder pig	70-110	7.3-10	9
Gestating sow/boar	-	13.6-17.2	15
Lactating sow[c]	-	18.1-22.7	20

a. A result of the animals' environment and management.

b. Typical consumption over a year on a daily basis under average agricultural conditions in Ontario.

c. Includes unweaned piglets.

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

LOCATION AND SOURCES OF EMERGENCY EQUIPMENT AND SUPPLIES

Indicate whether the items are on-farm (and where) or must be accessed from a supplier in the event of an emergency.

Fire extinguishers: _____

_____

First aid kit(s): _____

_____

Vacuum tanker: _____

_____

Scrapers: _____

_____

Front-end loaders: _____

_____

Backhoes: _____

_____

Portable water pumps: _____

_____

Absorbent material (e.g., sawdust, wood chips, straw, etc.): _____

_____

Sand bags: _____

_____

Portable generators: _____

_____

Others: _____

_____

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

ANIMAL INVENTORY

LIVESTOCK	AMOUNT (UNIT)	VALUE PER UNIT	LOCATION
Boars			
Sows			
Gilts			
Suckling Pigs			
Nursery Pigs <20kg			
Grower Hogs 20-50kg			
Market Hogs >50kg			
Other:			
CATTLE:			
• Bulls			
• Cows			
• Calves			
SHEEP:			
• Rams			
• Ewes			
• Lambs			
GOATS:			
• Bucks			
• Does			
• Kids			
POULTRY:			
• Chickens			
• Turkeys			
• Ducks			
OTHER:			
• Horses			
• Dogs			
• Cats			

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Note: You may already have a list similar to the one below prepared for your insurance company or financial institution. If so, insert a copy of that list rather than completing a new one.

VEHICLES, MACHINERY, AND EQUIPMENT INVENTORY

VEHICLES – MAKE/MODEL/YEAR	VIN #	VALUE
TRACTORS – MAKE/MODEL/YEAR	**IDENTIFICATION #**	**VALUE**
FIELD MACHINERY – MAKE/MODEL/YEAR	**IDENTIFICATION #**	**VALUE**
OTHER EQUIPMENT	**IDENTIFICATION #**	**VALUE**
IMPORTANT TOOLS AND SUPPLIES	**IDENTIFICATION #**	**VALUE**
MISCELLANEOUS	**IDENTIFICATION #**	**VALUE**

Date Prepared: _____ Initials of person completing: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

Date Updated: _____ Initials of person updating: _____

VISITOR LOG

DATE	PRINT NAME	COMPANY NAME (IF APPLICABLE)	TELEPHONE NO.	PURPOSE OF VISIT	DATE OF LAST CONTACT WITH LIVESTOCK

Appendix 2

List of Supplemental
Information Provided

List of Supplemental Information Provided

The following documents have been provided in electronic format on the USB stick which accompanies this guide. The websites listed were active at the time of writing.

I. Disease, Biosecurity and Deadstock

Code of Practice for the Care and Handling of Pigs

The Codes of Practice are nationally developed guidelines for the care and handling of farm animals. As a guiding principle, requirements are intended to be outcome- or animal-based, as they are most directly linked to animal welfare, and can be applied in a wide range of animal production systems. Since requirements will often state the necessary outcome, the producer has the flexibility to determine how the outcomes can be achieved using individual management and husbandry practices.

nfacc.ca/codes-of-practice/pigs

Emergency Disposal of On-Farm Deadstock

In situations where farmers cannot comply with O. Reg. 106/09, due to an emergency, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) may authorize disposal or management of deadstock that would not normally be permitted. This factsheet discusses the process and the factors affecting eligibility for an authorization.

Ontario Ministry of Agriculture, Food and Rural Affairs

omafra.gov.on.ca/english/engineer/facts/09-023.htm

Livestock On-Farm Biosecurity Information Guide

This guide is an introductory resource for producers when considering and applying biosecurity practices on farm.

Ontario Livestock and Poultry Council

ontlpc.ca/pdfs/downloads/olpc-livestock_web.pdf

National Swine Farm-level Biosecurity Standard

The aim of this Standard is to assist the swine industry attain and apply the strategic objectives of bio-exclusion, bio-confinement and bio-management of swine pathogens and zoonoses in Canada.

Canadian Swine Health Board

cpc-ccp.com/biosecurity

OSHAB Transport Biosecurity Handbook

Contaminated transport vehicles can quickly spread costly diseases. This handbook contains wash, disinfect, dry and inspection protocols to reduce the risk of spreading PRRS and other swine diseases.

albertapork.com/wp-content/uploads/2017/06/5.-OSHAB_Truck_Wash_Handbook.pdf

Plant On-Farm Biosecurity Information Guide

This guide is an introductory resource for producers when considering and applying crop biosecurity practices on farm.

Ontario Livestock and Poultry Council

ontlpc.ca/pdfs/downloads/olpc-plant_web.pdf

II. Environmental Farm Plan – Emergency Plan

All farm operations deal with materials that, if improperly handled, have the potential to contaminate and damage our environment. Learning about the risks on your farm will help you develop plans of action to use in the event of a spill or other emergency.

A completed Emergency Plan is a series of plans that help prepare you for different types of emergencies according to the specifics of your operation. The EFP Emergency Plan workbook, which is included on the USB stick, is a fillable document that is intended to guide you through the process, starting with "big-picture" farm-wide emergency planning and working through risk-specific situations

https://www.ontariosoilcrop.org/wp-content/uploads/2022/06/emergency_plan_fillable.pdf.

Sample Site Map Examples, *Ontario Pork*

ontariopork.on.ca/Resources/Emergency-Planning/Site-Map-Creation

III. Fires

Barn Fires - A Concern for Ontario Farmers

Questions and answers to barn fires and fires in farm structures

Ontario Ministry of Agriculture, Food and Rural Affairs

omafra.gov.on.ca/english/engineer/facts/barn_fire.htm

Barn Fires Involving Farm Animals

The following guidelines are intended to provide guidance to first responders when relaying important information back to dispatch.

Farm & Food Care Ontario

ofa.on.ca/wp-content/uploads/2017/12/Barn_fires_involving_farm_animals.pdf

Dealing with the Aftermath of a Barn Fire

Having a plan already in place will help you to efficiently and effectively assess the situation. The plan can be divided into three parts: immediate, short term, longer term.

Farm & Food Care Ontario

farmfoodcareon.org/wp-content/uploads/2020/10/Dealing-with-the-aftermath-of-a-barn-fire.pdf

How to Deal with Protestors On Farm

Protestors have begun showing up at farms after barn fires and could potentially do so after any type of publicized on-farm emergency. This document provides some items to consider.

Farm & Food Care Ontario

info@farmfoodcare.org

Reducing the Risk of Fire on your Farm, Publication 837

The guide examines the major causes of farm building fires and what can be done to reduce the associated risks. The concepts of fire safety and how they are applied are covered. Strategies are also discussed, using best management practices, to reduce the impact on property and business in the event that a fire does occur.

Ontario Ministry of Agriculture, Food and Rural Affairs

omafra.gov.on.ca/english/engineer/barnfire/toc.pdf

Silo and Hay Mow Fires on Your Farm

A factsheet that provides information on the causes of fires and fire prevention.

From the Ontario Ministry of Agriculture, Food and Rural Affairs

omafra.gov.on.ca/english/engineer/facts/93-025.htm

Spontaneous Combustion and Hay Fires

Lives have been lost and hay crops destroyed because of fires caused by spontaneous combustion. This factsheet provides information to prevent fires.

Ontario Ministry of Agriculture, Food and Rural Affairs

omafra.gov.on.ca/english/livestock/dairy/facts/hayfires.htm

IV. Generators

On-Farm Generators for Emergency Use

This factsheet is intended to help farmers in the selection, installation and operation of a commercial size generator on their farms.

Ontario Ministry of Agriculture, Food and Rural Affairs

ontario.ca/page/farm-generators-emergency-use

Understanding Portable Generators

This factsheet looks at some of the factors you should think about in purchasing and operating portable generators in the 3 to 12 kilowatt (kW) size to ensure production of quality power.

Ontario Ministry of Agriculture, Food and Rural Affairs

http://www.omafra.gov.on.ca/english/engineer/facts/00-057.htm

V. Handling Livestock

Livestock Transportation Emergencies Resource Kit

The attached information is designed to help farmers and drivers be aware of their responsibility to have contingency plans in the event that a trip does not run smoothly.

Farm & Food Care Ontario

www.farmfoodcareon.org/download/livestock-transportation-emergencies/

VI. Health and Safety

Hazardous Gases on Agricultural Operations, OMAFRA Factsheet 14-017 omafra.gov.on.ca/english/engineer/facts/14-017.htm.

Mental Health Resources, *Ontario Pork* (see Section 7 of this Guide)

Workplace Safety and Prevention Services Farm Safety Factsheets

Workplace Safety and Prevention Services (formerly the Farm Safety Association), has produced factsheets covering a wide range of agriculture hazards including: battery safety, chain saws, flammable liquids, electric shock, harvesting equipment, hydraulic systems, flowing grain entrapment, tractor safety, and silo safety. English versions of the factsheets are included on the USB stick which accompanies this guide. Additional information can be found at wsps.ca.

VII. Foreign Animal Disease

Foreign Animal Disease (FAD) Decision Tree - Breeding and Multiplier Herds, *Ontario Pork,* (see Section 5, page 17 of this Guide)

Foreign Animal Disease (FAD) Decision Tree - Weaner and Suckling Pigs , *Ontario Pork,* (see Section 5, page 19 of this Guide)

Foreign Animal Disease (FAD) Decision Tree - Market Hogs, *Ontario Pork,* (see Section 5, page 21 of this Guide)

VIII. Financial Consideration and Business Decisions

Financial Considerations and Business Decisions – Response and Recovery Procedure

Having a plan already in place will help you to efficiently and effectively assess the situation. The plan can be divided into three parts: immediate, short term, longer term.

Ontario Pork, (see Section 5, page 16 of this Guide)

IX. Animal Activists, Protests and Trespassers

Jurisdictions for Reporting Non-Emergencies to Police, *Ontario Pork,* (see Section 6, page 6 of this Guide)

Protest and Trespasser Procedure, *Ontario Pork,* (see Section 6, pages 4 to 5 of this Guide)

Sample Animal Care Code of Conduct for Employees, *Ontario Pork,* (see Section 6, page 7 of this Guide)

Sample Animal Care Code of Conduct for Visitors and Subcontractors, *Ontario Pork,* (see Section 6, page 8 of this Guide)

Appendix 3

Additional References

Additional References

This section lists additional websites and on-line documents relating to emergency preparedness and planning. Canadian resources are listed first followed by those on U.S. websites and then a few from other countries. The websites listed were active at the time of writing.

A. Canadian Resources

Websites:

10 Ways to Reduce the Risk of Barn Fire

Factsheet from OMAFRA

omafra.gov.on.ca/english/engineer/facts/18-013.htm

Alert Ready

The province issues an Alert Ready notice via text or email to subscribers to provide recommended immediate actions to protect citizens, their families and others when there is an imminent threat to life, public safety or property.

From the Ontario Ministry of Community Safety and Correctional Services

alertready.ca/

Electrical Systems in Barns

Factsheet from OMAFRA

omafra.gov.on.ca/english/engineer/facts/16-043.htm

Emergency Preparedness for Farm Animals

A guide aimed at Canadian farmers explaining the steps that should be taken to ensure farm animals, livestock, and poultry are protected during an emergency

From the Government of Canada

getprepared.gc.ca/cnt/rsrcs/pblctns/frm-nmls/index-eng.aspx

Emergency Preparedness - Wellington County

If an emergency happens in your community, it may take emergency workers some time to reach you. It is your responsibility to be prepared to take care of yourself, your family and your pets for at least 72 hours. Learn how quick and easy it is to #BeBetterPrepared before, during and after an emergency.

wellington.ca/en/resident-services/em-emergency-preparedness.aspx

Farm Fires & Livestock Emergencies

These emergency resource videos and fact sheets provide information for first responders to use when dealing with loose livestock or barn fire situations. The video series takes a look at the basics of handling farm animals in a calm manner, how to deal with loose livestock, tips for responding to accidents involving farm animals, and priorities in dealing with a livestock emergency.

From Farm & Food Care

farmfoodcareon.org/livestock-emergencies/

Farm Fire Prevention Videos

From Farm and Food Care Ontario

farmfoodcareon.org/livestock-emergencies-2/

Humidex, Weather Reports and Smog Alerts

Humidex-based, heat stress calculator. Enter temperature and percent humidity and the site will generate a humidex value and any work related cautions.

ohcow.on.ca/edit/files/general_handouts/heat-stress-calculator.html

Environment Canada – Weather Information: weather.gc.ca

Air Quality Ontario Smog Advisories: airqualityontario.com/

Occupational Health Clinics for Ontario Workers (OHCOW) – Humidex-Based Heat Stress Calculator and Plan (Indoor Workers): ohcow.on.ca/posts/humidex-based-heat-stress-calculator-indoor/

Ontario Pork Industry Council

This site contains multiple resources relating to swine health and biosecurity opic.on.ca

Swine Health Ontario

Swine Health Ontario (SHO) is an industry-wide leadership team collaborating to improve and better coordinate the industry's ability to prevent, prepare for and respond to serious swine health threats in Ontario.

swinehealthontario.ca

Documents:

Before, During and After an Emergency

It is important to be prepared for the unexpected and have important documents ready.

From the Alberta Emergency Management Agency

alberta.ca/what-to-do-before-during-and-after-an-emergency.aspx

Emergency Management Guide for BC Pork Producers

An interactive guide for BC pork producers to prepare for and mitigate the impact of potential emergencies on farm.

Produced for BC Ministry of Agriculture, prepared by Zamaca Consulting with BC Pork Producers' Association

www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/farm-management/emergency-management/bc_pork_emergency_management_guide.pdff

Emergency Preparedness for Farm Animals

This brochure is intended to address interruptions in normal services due to the consequences of natural hazards and emergencies.

From the Government of Canada

getprepared.gc.ca/cnt/rsrcs/pblctns/frm-nmls/frm-nmls-eng.pdf

Emergency Preparedness

Canadian facts about emergencies.

From the Alberta Emergency Management Agency

alberta.ca/emergency-preparedness.aspx

Mass Carcass Disposal Guide for Municipalities

This guide is to assist municipalities in incorporating emergency carcass disposal provisions into their existing municipal emergency response plans. From the Ontario Livestock and Poultry Council

ontlpc.ca/pdfs/downloads/Mass%20Carcass%20Disposal%20Guide%20Full.pdf

Planning for and Responding to Disasters in Canada

This publication is intended to be used as a guide to emergency planning and response.

FromAgriculture and Agri-Food Canada

ablamb.ca/images/documents/resources/planningforandrespondingtodisastersincanada.pdf

Power Outages - What to do?

You can greatly lessen the impact of a power outage by taking the time to prepare in advance. This involves three basic steps: find out what to do before, during, and after a power outage; make a family emergency plan, so that everyone knows what to do, and where to go in case of an emergency; get an emergency kit, so that you and your family can be self-sufficient for at least 72 hours during a power outage.

From Public Safety Canada

getprepared.gc.ca/cnt/rsrcs/pblctns/pwrtgs-wtd/pwrtgs-wtd-eng.pdf

Recovery After a Disaster or Emergency

Information and tips on what to do and how to recover after an emergency or disaster.

From the Alberta Emergency Management Agency

myhealth.alberta.ca/Alberta/Pages/recovery-after-disaster-emergency.aspx

Severe Storms – What to do?

You can greatly lessen the impact of a severe storm by taking the time to prepare in advance. This involves three basic steps: find out about the risks and the type of storms in your region; make a family emergency plan, so that everyone knows what to do, and where to go in case of an emergency; get an emergency kit, so that you and your family can be self-sufficient for at least 72 hours during a severe storm.

From Public Safety Canada

getprepared.gc.ca/cnt/rsrcs/pblctns/svrstrms-wtd/svrstrms-wtd-eng.pdf

Your Emergency Preparedness Guide

If an emergency happens in your community, it may take emergency workers some time to reach you. You should be prepared to take care of yourself and your family for a minimum of 72 hours.

From Public Safety Canada

https://www.getprepared.gc.ca/cnt/rsrcs/pblctns/yprprdnssgd/yprprdnssgd-eng.pdf

B. U.S. Sources

Websites:

A Disaster Kit for Staying at Home

This publication covers the supplies you will need at home in the event of an emergency or disaster.

From North Carolina State University

content.ces.ncsu.edu/a-disaster-kit-for-staying-at-home

Animal Health Emergency Management

Develops strategies and policies for effective incident management and helps coordinate incident responses.

From the USDA. APHIS. Veterinary Services

aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management

Animals in Disasters: Awareness and Preparedness

An independent study course to increase awareness and preparedness of animal owners to reduce the impact of disasters on animals.

From the Federal Emergency Management Agency (FEMA)

training.fema.gov/is/courseoverview.aspx?code=IS-10.a

Backup Generators For Emergencies

Having a backup generator in place will provide your home with temporary power during an emergency.

From State Farm

statefarm.com/simple-insights/smart-ideas/emergency-backup-generators-which-kind-is-right-for-you

Dealing With Flooding on Your Farm or Ranch

Documents and information in order to prepare and deal with a flood in your crops.

From North Dakota State University

ndsu.edu/agriculture/ag-hub/ag-topics/disasters/flood/dealing-flooding-your-farm-or-ranch

Disaster Planning with Animals

Website to learn how to protect your livestock from disaster and emergency situations.

From the U.S. Department of Agriculture, National Agricultural Library

nal.usda.gov/animal-health-and-welfare/disaster-planning-animals

Evacuation

Website with information on evacuating prior to a disaster and measures to take to stay safe.

From the to 'U.S. Department of Homeland Security'

ready.gov/evacuation

Farm Emergency Plan

A template to assist in creating a farm emergency plan.

From the Massachusetts Department of Agricultural resources, Division of Animal Health

mass.gov/service-details/farm-emergency-plan

Farm Emergency Preparedness Planning

Protecting your farm involves a number of considerations – family members, co-workers or employees, buildings, equipment, livestock, and crops. Planning ahead for all-hazard situations can help to minimize the impact and speed the recovery process for you and your farm.

From Iowa State University, Center for Food Security and Public Health

prep4agthreats.org/All-Hazard-Preparedness/farm-emergency-preparedness-plan

Flood Recovery Checklists for Farmsteads

This publication is for farmers and ranchers affected by flooding.

From North Dakota State University
ag.ndsu.edu/publications/disasters/flood-recovery-checklists-for-farmsteads

Livestock Disaster Preparedness

Discusses the importance for livestock disaster preparedness due to the animals' size and their shelter and transportation needs. Disasters from barn fires to train derailments may require evacuation.

From the Humane Society of the United States

humanesociety.org/resources/livestock-disaster-preparedness

Livestock in Disasters Online Training Module

Online training module to increase awareness and preparedness among farmers, extension agents, emergency managers, etc. It describes the various hazards that animals can face and how to mitigate them, as well as how to respond to an actual disaster.

From the DHS. FEMA. Emergency Management Institute

training.fema.gov/is/courseoverview.aspx?code=is-111.a

National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP) Best Practices Library

Contains a selected list of reference materials for animal emergency response.

From the NASAAEP

thenasaaep.com/

NC Disaster Information Center

Hot topics, factsheets, and other resources to help survive a disaster.

From North Carolina State University
ncdisaster.ces.ncsu.edu/disaster-factsheets/preparedness/

Plants Poisonous to Livestock and other Animals

Database on many of the plants that grow in the U.S. that may be poisonous to livestock.

From the Department of Animal Science. Cornell University

poisonousplants.ansci.cornell.edu/index.html

Protecting Valuable Records

Many people assume that floods, storms, hurricanes, and other disasters happen to someone else, and many people postpone taking care of family papers. But protecting family papers prepares you to deal with natural disasters.

From North Carolina State University

content.ces.ncsu.edu/protecting-valuable-records

Technical Large Animal Emergency Rescue (TLAER)

TLAER is based in the U.S. but provides training internationally on the safe extrication of a live large animal from entrapments (trailer wrecks, ditches, mud, barn fires) in local emergencies and disaster areas. The courses are designed with a concentration on cattle and horses as these are the most encountered large animal at an emergency incident. The target audience is emergency responders and also veterinarians, owners, and animal control officers. Scenarios used by TLAER include barn fires, transport accidents/roll overs, and livestock mired in mud. The training involves the use of live animals, realistic mannequins, rope techniques, and heavy rescue operations. There is a textbook available through.

amazon.ca/Technical-Large-Animal-Energency-Rescue/dp/0813819989

From: tlaer.org/

The Hub for Biosecurity to Protect the Herd or Flock

Provides information on the precautions to take and how to prepare a farm disaster kit.

From the University of Vermont

healthyagriculture.org/?Page=Emergency%2FEmergency_Contact_List.html&SM=submenuemergency.html

Documents:

All-Hazards Preparedness for Rural Communities

A guide to help rural agriculture communities prepare for threats to their families, farms, animals and businesses.

From Iowa State University, the Center for Food Security and Public Health

prep4agthreats.org/Assets/Factsheets/All-Hazards-Preparedness-for-Rural-Communities-Book.2014.pdf

Caring for Livestock Before Disaster

Factsheet on measures to take to prepare your animals before disaster situations.

From Colorado State University Extension

extension.colostate.edu/topic-areas/agriculture/caring-for-livestock-before-disaster-1-814/

Caring for Livestock During Disaster

Factsheet on measures to take to protect your animals during a disaster situation.

From Colorado State University Extension

extension.colostate.edu/topic-areas/agriculture/caring-for-livestock-during-disaster-1-815/

Flood Recovery Checklists for Farmsteads

This is a checklist of buildings and equipment that should be checked after the water from a flood subsides.

From the NDSU Extension Service

ag.ndsu.edu/publications/disasters/flood-recovery-checklists-for-farmsteads

Preventing Hay Fires

An information sheet on how to prevent hay fires and what to do when a fire occurs.

From NDSU Extension Service

ndsu.edu/agriculture/ag-hub/ag-topics/farm-safety-health/farm-safety/livestock-safety/preventing-hay-fires

Purchasing a Back-Up Generator for the Farm

This publication contains important information and safety tips regarding gasoline-powered generators to be used in an emergency or disaster.

From North Carolina State University

content.ces.ncsu.edu/purchasing-a-back-up-generator-for-the-farm

ReadyAG Workbook

The workbook contains worksheets that can help identify vulnerable areas of production and management, prioritize areas to strengthen, create an action plan specific for your operation, develop an accurate inventory of your assets, identify and engage local critical services, and find additional help

From Pennsylvania State University

extension.psu.edu/readyag-workbook