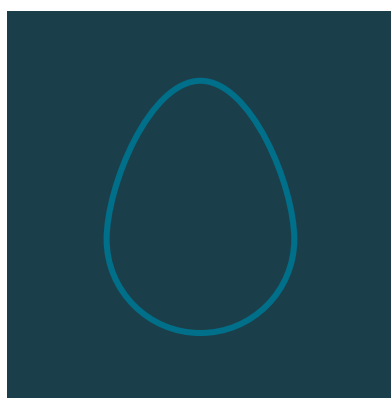


Poultry
Industry
Council

POULTRY FARM

Emergency Planning Resource

Your guide to successful planning



CHAPTER

4

Deadstock – Mass Mortalities and Disposal



Deadstock

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.

Disposal

In Ontario, disposal and management options and regulations for dealing with livestock and poultry mortalities are outlined on the OMFRA website.

They include but are not limited to:

- 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 (e.g. landfill) IF approved under the Environmental Protection Act (most 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).

The Regulation requires all deadstock be disposed of within 48 hours of its death or prior to 48 hours if putrefaction begins. 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. For non-infected animals, the full range of disposal choices is available with marketing being the preferred option.

Most on farm incinerators may not be legally used for deadstock disposal. Incinerators require an ETV certificate. Refer to OMAFRA deadstock disposal webpage for the most up to date information.

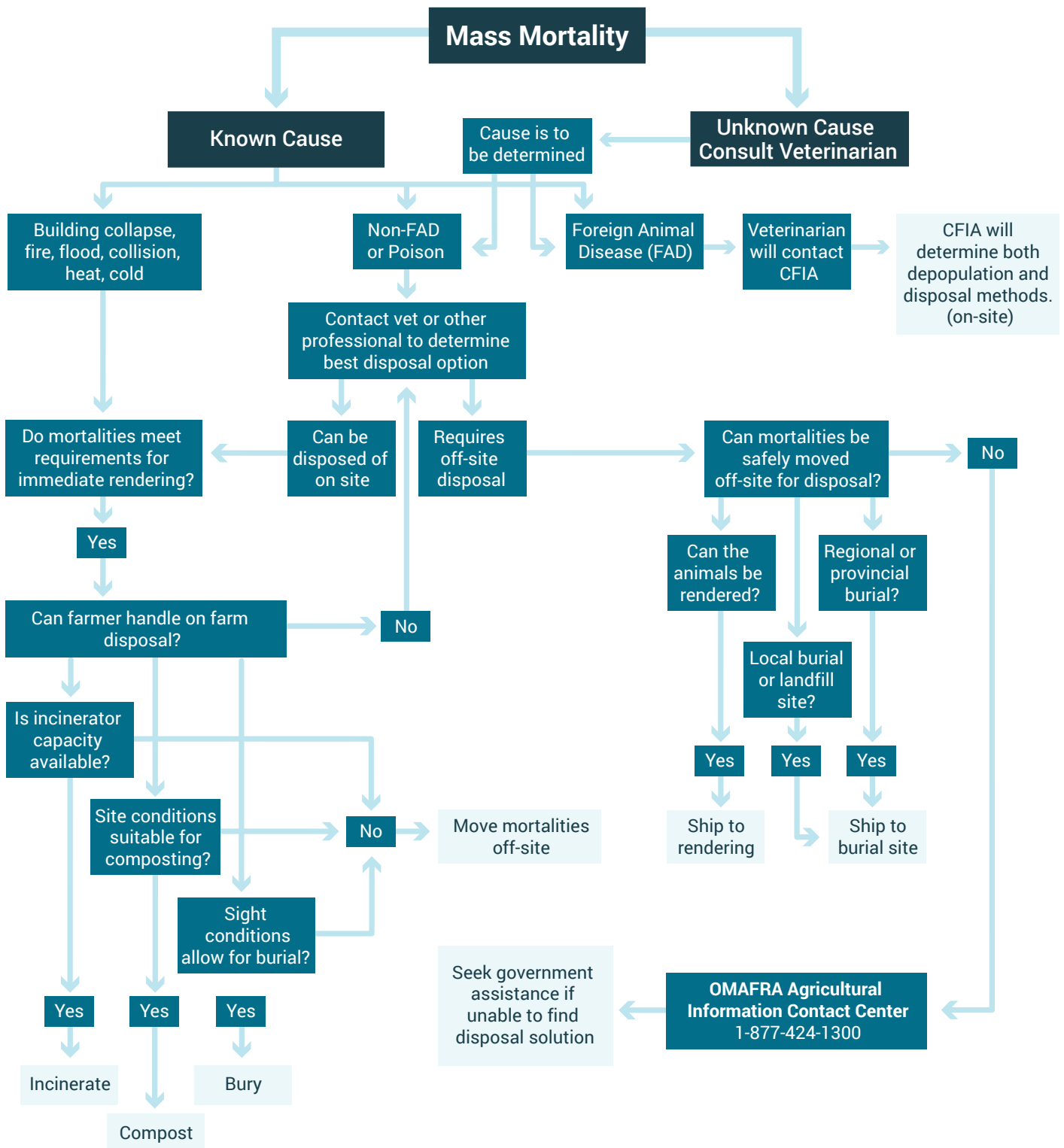
The following chart provides a schematic of the various decision points to be considered when determining how to handle large numbers of livestock and poultry mortalities. The cause of the mass mortality will initially guide the disposal decisions. Animal deaths resulting from a foreign animal disease must be reported to CFIA. They will direct the disposal options. Complete the When disposing record mortalities, disposal method and disposal location.



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



Mass Carcass Disposal Considerations



Deadstock Mass Mortalities Response Procedures

Use your Emergency Contact List of who to call and follow your General Procedures as well as the following:

Call Veterinarian, Deadstock Collection, Insurance Company, Municipal Contact, Industry Board Representative and Equipment Suppliers if Needed (Backhoe, Shavings ext.)

The flock veterinarian will determine if the Ontario Ministry of Agriculture, Food and Rural Affairs and/or the Canadian Food Inspection Agency need to be called based on disease risk assessment. Upon laboratory test results and if suspect reportable or notifiable diseases, laboratory must inform CFIA.

Contact other personnel as appropriate for additional assistance and/or to advise them of the potential disease risk if one is present (employees, neighbours, feed company, transport company, service suppliers, other visitors listed in your log book for previous 14 days, other farming operations, etc.).

Disposal and Clean Up Steps or Actions that Should Be Taken and, if Applicable, Who is Responsible:

Outline how deadstock will be disposed (licensed collector, bury, compost, etc.). Identify possible appropriate locations where disposal will occur onsite (composting, burial, etc.)

Clean and disinfect the area after carcass removal and wear protective clothing when handling deadstock. Describe your cleaning and disinfecting protocol and state what protective clothing should be worn.

Appropriately dispose of contaminated bedding, manure or feed. Describe how and where you will complete these tasks:

Date Prepared: _____

Initials of Person Completing: _____

Date Updated: _____

Initials of Person Updating: _____

Date Updated: _____

Initials of Person Updating: _____

Date Updated: _____

Initials of Person Updating: _____

On-Farm Mass Depopulation Methods			
Euthanasia Method	Acceptability by Bird Type	Conditions	Comments
Gas Inhalation: Carbon Dioxide (CO ₂)	Acceptable with Conditions: All Birds	Requires specialized equipment (pressure-reducing regulator, CO ₂ cylinder or tank) and a closed chamber to contain gas. Gas must be supplied in a precisely regulated and purified form without contaminants or adulterants.	May cause brief periods of distress before birds become insensible. Birds should be placed in the chamber in a single layer. (MAC Cart) Use in a well-ventilated area for operator safety. Operator needs gas safety training
Non-Penetrating Captive Bolt	Acceptable with Conditions: All Birds	Correct placement of the device on the head is critical. Humane restraint methods (e.g. two people, appropriate restraint device) may be necessary.	May be more appropriate for large birds.
Manual Cervical Dislocation	Acceptable with Conditions: All Birds	Crushing of the neck bones is unacceptable prior to loss of sensibility. This method is restricted to smaller birds (e.g. ≤ 3 kg), although this may vary depending on operator ability.	Other methods should be considered when large numbers are to be euthanized due to operator fatigue. Performed correctly (training and technique to be validated by a veterinarian), cervical dislocation results in the luxation (dislocation) – never crushing – of the cervical vertebrae. Alternative methods should be considered (e.g. non-penetrating captive bolt) as in some classes of poultry there is evidence that cervical dislocation may not cause rapid loss of sensibility. The site of the dislocation should be as close to the head as possible. Cervical dislocation is difficult to perform correctly in large birds, and therefore may not result in immediate loss of sensibility. It is recommended that larger birds be rendered insensible prior to applying cervical dislocation.
Manual Blunt Force Trauma	Acceptable with Conditions: All Birds	Humane restraint methods (e.g. two people, appropriate restraint device) are necessary. The impact must be of sufficient force and accurately placed in order to result in immediate insensibility and death in a single blow.	Due to the impact on operators and observers, other methods should be considered, especially when large numbers are to be euthanized. Alternative methods should be considered (e.g. non-penetrating captive bolt) due to the potential for incorrect application.

Preparing for On-Farm Depopulation and Disposal

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

1. Contact Information

Farm name: _____

Premises ID: _____

Farm address (911 address, GPS coordinates if you have them):

Premises owner: _____

Site manager: _____

Farm phone number: _____

Home phone number: _____

Mobile number: _____

Location of farm and directions from nearest major intersection: _____

2. Animal Inventory

Animal Type	Average Number of Birds Per Barn	Number of Barns at This Site	Holding Capacity of Barn	Barn Set-up/ Configuration e.g. Free-range, Conventional, Free Run, etc.	Maximum Days You Could Hold Animals Without Shipping Due to Reaching Maximum Density Thresholds.
Layers					
Broiler Chickens					
Pullets					
Breeders					
Turkeys					
Ducks					

3. Feed Capacity

What is your feed capacity? How much feed do you typically maintain onsite?
How long will it last?

4. Propane and Heat Capacity

Is your propane or other heat supply adequate for the length of time?
How long will it last?

5. Euthanasia Methods

Are staff willing and able to assist with 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 birds requiring euthanasia for each method.

Can animals be moved outdoors/off-site for euthanasia? Yes No

6. What is Your On-farm Emergency Disposal Plan (Check All That Apply)?

Composting Burial Other – specify method: _____

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

Can you handle partial disposal only? Yes No

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.

7. Site Map

Create a farm site map using the template provided on the on page 119 in the On-Farm Emergency Response Planning Guide of where you propose to locate your disposal site(s) and attach it to this plan. Alternatively, using google maps draw it over an aerial photo of your property.

You could also use OMAFRA’s on-line Agricultural Information Atlas to access surface drainage, soil type and aerial maps.

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.

8. Size and Number of Burial Pits

Number of burial pits: _____

Approximate size: _____

Name of heavy equipment supplier if required, e.g. backhoe, loaders, dump trucks:

Office number: _____

Mobile: _____

Email: _____

Name of additional equipment or service supplier: _____

Office number: _____

Mobile: _____

Email: _____

9. Composting

Indicate below what type of composting method you intend to use, e.g. windrows, bin system.

Based on your animal inventory, how many compost sites will you require? This should be based on your worst-case scenario. Refer to restrictions on size and setbacks under Points to Consider.

The compost mixture should be no more than 25% deadstock and 75% co-composting material (substrate) as per Provincial Regulations O.Reg.106/09. How much substrate will you require?

What type(s) of substrate are you proposing to use? Allowable substrate includes; clean sawdust, straw, corn silage, horse manure, and poultry manure (NOT layer manure).

Name of substrate supplier: _____

Office number: _____ Mobile: _____

Email: _____

Name of additional substrate supplier: _____

Office number: _____ Mobile: _____

Email: _____

Date Prepared: _____ Initials of Person Completing: _____

Date Updated: _____ Initials of Person Updating: _____

Date Updated: _____ Initials of Person Updating: _____

Date Updated: _____ Initials of Person Updating: _____



Poultry producers are reminded to refer to the requirements for mass depopulation that each species must adhere within the National code of Practice as set out by the National Farm Animal Care Council.

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 or processing plants 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.

Direction for depopulation and disposal will depend on the type and severity of the emergency. It is of critical importance that individuals involved in the depopulation be appropriately trained and be comfortable with performing the activities to which they are assigned to protect human health and safety including mental health.

Animal deaths resulting from a reportable animal disease must be reported to CFIA. CFIA will order destruction of live animals on disease-positive farms. The preferred option for disposal of infected carcasses is on-site unless environmental factors dictates other choices. If movement of carcasses off-site for disposal is required, this will be carried out according to strict biosecurity controls. You will have to present a disposal plan and CFIA will either approve or deny it, however, do not expect CFIA to run the disposal for you.



Check your insurance coverage with both your insurance company and with your marketing board to see what coverage is available. 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: In the event that flock depopulation or partial depopulation is necessary due to a reportable animal disease or large-scale supply chain interruption, monitor your industry website for guidance (FBCC, board website, etc.) and work with your feed mill, processor/grading station and/or hatchery. Under those exceptional circumstances, additional industry resources in terms of people and large-scale euthanasia options may be available.

Consider

- Situation is disease issue or market disruption?
- Practicality – age, number and size of birds, barn design and ventilation system, equipment needed
- Technical skills and equipment required and availability of trained personnel (third party provider)
- Diagnosis and biosecurity
- Public perception (method of depopulation, view from public property, etc.)
- Operator and observer impact
- Worker health and safety
- Time constraints –disease spread and/ or market disruption
- Cost

Work with your veterinarian to develop a plan for depopulation as a result of each of the emergencies listed in this guide. Planning requires use of methods listed in AVMA guidelines under preferred methods. Depopulation method must be appropriate for the species and age and be implemented according to professional standards. This involves consulting with your veterinarian during the depopulation planning process and implementation.

- Plan with several alternatives – use stakeholders to help provide insight;
- Consider man hours needed for set up and clean up after a depopulation event;
- Even if you were able to use a method with a high success rate it is important to confirm death before disposal; and
- Have a backup method if primary method was not effective for whole flock such as cervical dislocation or non-penetrating captive bolt.



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 disruption with significant financial implications for individual farm businesses and the broader rural community. By completing the Financial Considerations and Business Decisions listed below, you will gain the background information you need to help work through some difficult financial and business decisions.

Insurance may be available to you for compensation for issues with animal disease or otherwise. Check with your feather board to see what you may be entitled to.

Protecting Records and Documentation

Critical business records should be backed up by one or more methods (e.g. second print copy plus and electronic version or cloud) 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?

If you have employees, payroll continuity is an extremely important consideration, especially if you are dealing with a widespread emergency. Providing this continuity would assist with 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; and
- One week's pay or other amount even if your business is not operational.



Although market interruption is an industry-wide problem, we cannot fully rely on government to provide financial compensation. Do what you can to build a safety net to get you through a few months without income.





If you had to evacuate or could not return to your home or farm, how would you access your important personal documents: passport, medical, (list of prescriptions or other medication, health card), financial, insurance, etc.? Ensure they are copied and backed up as well.

Use fire-proof filing cabinets or boxes for important documents and computer records stored on-site. If you are not able to scan documents, snap a close-up photo with your cell phone.

Lastly, contact your insurance agent. Review your insurance coverage. Consider additional coverage for “all-hazard” situations (e.g. flood, hail damage).

Points to Consider Related to Protecting Your Business

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 disruption 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?
- If income is lost due to market disruption (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; and
- If required, what non-essential equipment/capital can be liquidated or traded-in to eliminate or reduce debt payments?



A special note on passwords: Have you considered how someone else might access your passwords, should you become incapacitated? Have a plan in place!



Discuss the global threat of foreign animal diseases 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.

- 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 exclusion.

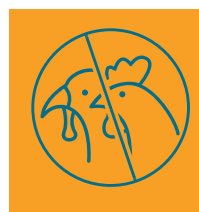
- Would large scale burial on your property impact your property insurance coverage?
- Are there any insurance programs or products that will cover loss of income and environmental risks in which you could participate, and which would apply to market interruption?
- If you have business interruption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

Confer with your accountant or tax advisor regarding 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 industry 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.



Should you focus on paying down debt and/or building up your savings in anticipation of weathering a large-scale market disruption?



Financial Considerations and Business Decisions Recovery Procedures

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, flock 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:

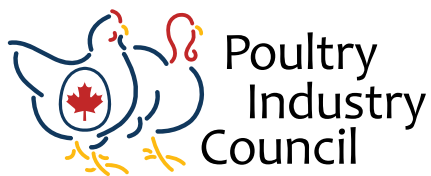
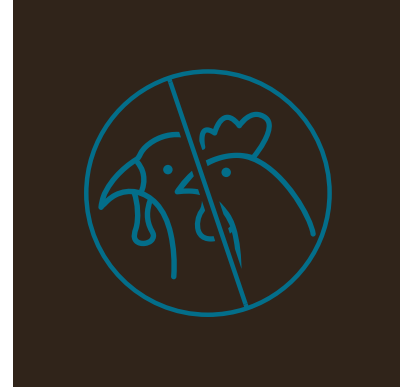
List Who to Call:

Call the following people/offices to discuss the financial implications of disease detection and anticipated market interruption: Financial institution, Business advisor, Processor, Other Customers, Holders of leases and rental agreements, Accountant or tax advisor, Insurance Broker or Agent, and Lawyer. Make contact now and again in the event that a disease outbreak does occur. Note any insurance coverage restrictions relating to on-site disposal:

Contact other people as appropriate for additional assistance and/or to advise them of the potential market and financial risk (employees, transporters, feed company, service suppliers, etc.).

Date Prepared: _____	Initials of Person Completing: _____
Date Updated: _____	Initials of Person Updating: _____
Date Updated: _____	Initials of Person Updating: _____
Date Updated: _____	Initials of Person Updating: _____

Note: In the event that flock depopulation or partial depopulation is necessary due to a reportable animal disease or large-scale supply chain interruption, monitor your industry website for guidance



www.poultryindustrycouncil.ca

Poultry Industry Council,
483 Arkeil Road,
Puslinch, ON
N0B 2J0
519-837-0284

