



COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

UConn Extension

Preparing Farm Operations for Extreme Weather: General Strategies for Producers

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Introduction

Extreme weather events and seasonal changes, including flooding, strong winds, and first frost, can pose risks for farm operations. Between 2023 and January 2025, over 72 million dollars in weather-related losses were reported to the Connecticut Department of Agriculture (Connecticut Department of Agriculture, 2025).

Weather-related events are increasing in frequency and severity (Intergovernmental Panel on Climate Change, 2020). Preparing for extreme weather can help mitigate impacts on farm workers, infrastructure, crops, and animals.

This resource is the first part of a series of fact sheets and checklists that can be used by producers to inform short-term and immediate responses for farm operations in preparation for impending extreme weather events.

This factsheet focuses on general preparation strategies.



An Essential Element of Emergency Preparedness is Staying Informed

In addition to staying tuned in to local and state weather conditions, consider signing up for the following notifications:

- Emergency Alerts: portal.ct.gov/ctalert
- Forest Fire Danger listserv: portal.ct.gov/DEEP/Forestry/Forest-Fire/Forest-Fire-Weather-Information-and-Danger-Explanations
- Air Quality Reports and Monitoring: enviroflash.info/ and airnow.gov/airnow-mobile-app/

Before You Can Prepare Your Farm, it is Important to Prepare Yourself and Your Family

Working with your family on preparation strategies will allow you to respond in a coordinated and efficient manner. Consider developing a written family communication plan. All family members should know the plan and have practiced it. Your plan should include contact information for family members and at least one out-of-state contact.

Develop a family protocol for scenarios related to staying at home and for if and when you will decide to leave before extreme weather, such as hurricanes or tornadoes. Determine where you could go if you had to evacuate your home and farm, and in what situations pets can stay with you. Depending on the situation and the severity of the incident, you may need to identify an alternate location like a local shelter for cats, dogs, and other pets. Livestock require different preparation compared to pets.

Prepare emergency supply kits for each member of the family and for each pet. An emergency supply kit contains all necessary nonrefrigerated food, water, clothing, and other important items needed if evacuating your home due to a weather-related emergency.

Create paper and digital copies of important documents, such as insurance policies and identification documents, and store them in a safe and accessible location. If possible, develop an emergency savings fund that you could use during or after an extreme weather event.

Learn more about emergency supply kits by visiting: eden.uconn.edu.

Prepare Your Operation by Keeping Accurate and Organized Records

In addition to your family communication plan, develop and maintain a comprehensive farm emergency plan. You can find a template at mass.gov/info-details/farm-emergency-plan.

The farm emergency plan should include contact information for all farm personnel, emergency and veterinary services, and other important individuals such as milk transporters. Farm emergency plans should also include detailed protocol for responding to emergencies, such as a power outage.

For insurance purposes, keep an up-to-date farm inventory, including pictures, which can be useful if you incur any property losses due to extreme weather. Creating a detailed map of the farm, including livestock, as well as flammable and hazardous substances, and sharing it with your local fire department will familiarize first responders with your farm in case of an emergency. Consider offering a farm tour to local responders. Sharing the map of your farm emergency plan.

If you keep livestock, consider including a biosecurity plan within your farm emergency protocols. A biosecurity plan can be used to minimize the risk of zoonotic disease transfer within your farm as well as between your farm and other operations.

In extreme weather, shedding of pathogens (i.e., bacteria, parasites, and viruses) and susceptibility to zoonotic diseases can be elevated, making biosecurity practices all the more important.

Learn more about biosecurity plans by visiting: publications.extension.uconn.edu/publication/biosecurity-plan/. Ensure that all livestock have a permanent form of identification, such as a microchip or tattoo, in case you are separated during extreme weather. Having pictures of each animal may help in identification as well.

Family communications, farm emergency, and biosecurity plans should be reviewed with the appropriate individuals (i.e., family members, farm staff) each quarter and with new employees during onboarding.

Share copies of plans and other important information with other farm decision-makers and consider storing an extra copy of each with your emergency preparedness checklist.

Update staff/family contact info and emergency contacts regularly, as well as relevant allergy and medical information.

Maintain Necessary Materials and Infrastructure

Keep a back-up supply of water, nonperishable food, and medications for both people and animals. Check these supplies regularly to ensure that they maintain quality and safety and have not been contaminated by pests or other external influences such as mold.

Keep and restock first aid kits for people and animals; ensure these kits are readily accessible in all locations where people regularly work on your farm, including all farm vehicles.

Examples of important items to include in a human or animal first aid kit include bandages, antiseptics, and shelf-stable anti-inflammatory medication. Check for working flashlights and headlamps; make sure these tools have fresh batteries and keep a fresh supply of back-up batteries on hand.

Ensure that farm infrastructure, such as fences and buildings, is in good repair. It is also vital to develop and maintain a quality relationship with your veterinarian in advance of extreme weather events.

Take Action to Manage Fire Risks

Establish a fire emergency plan and practice drills with your staff/family. Learn more at osha.gov/sites/default/files/publications/OSHA3870.pdf. Check fire extinguishers and smoke alarms at least quarterly. If possible, consider installing fire extinguishers and smoke alarms in barns and outbuildings.

Clear flammable materials such as leaves, brush, over-hanging branches, and debris from the periphery of buildings. Determine fire risks that are presented by your own operation, such as heat lamps, and identify ways to mitigate fire risk. For example, keep heat sources away from hay and other flammable material and remove dust frequently from stalls and storage areas.

Take care to prevent heat build-up in baled hay. Only use extension cords temporarily, not for long-term electricity needs. Follow best practices for disposal of oily rags and note the location of flammable materials on your farm map.

Learn more about preventing barn fires by visiting: publications.extension.uconn.edu/publication/fire-safety-prevent-prepare-and-take-action/.

Prepare for Power Outages, Impassable Roads, or Downed Trees that Can Restrict Movement On and Off the Farm

Evaluate vulnerable systems and have a back-up plan for freezers/coolers, furnaces, greenhouse heating systems, ventilation fans, heat for chicks, poult, and other young animals, electric fencing, water pumps, and other electric equipment.

Identify equipment that needs to be turned off before or during an outage. Making a list of vulnerable systems can help you ensure you have a back-up system and will keep you organized if the power goes out, or equipment fails.

Check your back-up systems, such as generators or auxiliary water pumps, for functionality at the start of each season. Perform maintenance on these systems quarterly or annually to keep them in good condition. Keep a well-maintained chainsaw to manage downed trees, if needed.

It is also best to keep extra materials on hand during key seasons, such as lambing or kidding. Organize all necessary materials for these events in case extreme weather events prompt early deliveries or conditions make travel to supply stores unsafe.

Conclusions

Responding to expected and unexpected extreme weather events and seasonal changes requires intentional preparation. Consider using UConn Extension resources to prepare for specific events during each season. Furthermore, there can be additional steps to take after extreme weather occurs, such as monitoring livestock and plant health and assessing water and soil quality for contamination.

Learn more at <https://eden.uconn.edu/agricultural/>

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