

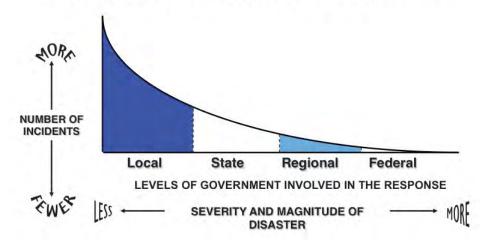
by Joanna Davis, D.V.M.

ow that your farm has completed a risk assessment, taken training courses and reviewed preparation websites (see Volume 29, Fall 2017), it is time to work through an inventory and supply list. This is a basic list, but a more extensive check off list may be found in the Penn Extension AgReady handbook http://extension.psu.edu/prepare/ readyag. It also has a template for mapping your farm so that you may plan your routes and stage supplies, and as a tool for first responders in case of an emergency. Farm MAPPER is a new mapping site that first responders may use by identifying hazards on a farm. More information can be found at http://www.nfmcfarmmapper.com/ Home/About

It is vitally important to review all of your insurance policies before a disaster strikes to find out what they will and will not cover in the event of a disaster. Be prepared to document what "normal" is on your farm. This should be done at least once annually as policy coverage may change each time it is renewed. Take pictures of your buildings, supplies and equipment once annually, and store them in a safe location (such as a safe deposit box or in the cloud), including serial numbers if applicable. Keep receipts of all purchases so that you have an accurate record of what was paid for a piece of equipment and when it was purchased. It is also important to keep and maintain records of animals purchased or born on your farm, including photographs when feasible. Photographs

Response to Disasters

Most disasters are handled by Local and State governments



should capture any animal identification and distinguishing markings. To receive reimbursement or indemnity for your animal losses, it is important to find out what documentation you will need before the disaster. The Farm Service Agency (FSA) offers disaster assistance programs for livestock producers, but one must be able to document their animal inventory, including age or production cycles of animals, and normal herd/flock mortality rates. Visit FSA's Disaster Assistance page or your state/county FSA office for more information.

https://www.fsa.usda.gov/ Assets/USDA-FSA-Public/usdafiles/ FactSheets/2017/fsa_disaster_ assistance_programs_at_a_glance_ oct2017.pdf

FEMA and the Small Business Administration (SBA) may also provide disaster recovery loans. Keep in mind that these loans will not provide immediate relief. It is vital that producers have adequate cash or immediate access to other funds the first several weeks after a disaster. Banks may be closed, ATMs may not work and businesses may not extend credit after a disaster.

https://www.ready.gov/

Responding to a Disaster

In the immediate wake of a disaster, it is imperative to "triage" the situation, assessing the health and safety of your family, employees, and animals as well as what damage has been done to structures and equipment. Bear in mind

that depending on the type and scope of a disaster, phone lines and cell towers may be down for prolonged periods of time. Traditional first responders may be on other emergency calls, unable to reach your farm, and have limited resources. In the aftermath of Hurricane Maria in Puerto Rico, over 90% of cell towers were damaged or destroyed, landlines were down for weeks, and many communities ran out of gasoline. Consider an alternative communication system such as a 2 way radio, HAM radio communications or satellite phones. It is important to remember that all disaster response begins locally. Some state or federal resources may be staged when a disaster such as a hurricane can be predicted, but local/county resources will respond initially. When local resources have been exhausted (or are expected to be), local governments may request a gubernatorial disaster declaration to provide state level resources to a disaster response. If the state resources are (or expected to be) exhausted, a Governor may request a Federal Disaster declaration to provide federal resources for a catastrophic disaster. Each level of government must request assistance from the next highest level. In most states, the state or federal government may not respond without the request. And it could take days or weeks to mobilize all requested resources to a disaster affected area. It is imperative that your farm is prepared to be self-sustaining in austere conditions in a major disaster. Government resources may be limited and responders may not be able to safely reach your property for several days after a disaster.

Depending on the scope of the disaster, your family should have both an evacuation plan, and a "shelter in place" plan. If evacuating, determine if you will be able to take all or some of your livestock, how they will transported and where they will be sheltered. If you cannot evacuate the animals, safely mitigate the effects on the animals. If floods are anticipated, try to move animals to higher ground (or build an earthen berm for them to stand on), open gates and fences to animals may escape floods or fires, or cut fencing if needed. Do not take unnecessary risks with your own life to prepare or rescue your animals. And if you must evacuate, you may not be allowed back on your farm until law enforcement has deemed the area safe for residents. Have a plan

Suggested Inventory and Supplies for Livestock Evacuation Kit

- 10-14 day supply of feed, hay, supplements, and water
- Feed buckets
- Livestock marking crayon, non-toxic, non-water soluble spray paint, or markers to write on the animal's side
- Bandanas (to use as blindfolds)
- Batteries (flashlight, radio), chargers
- Boots/appropriate footwear, N95 disposable face masks
- Blankets
- Copies of veterinary records and proof of ownership
- Cotton halter
- Duct tape
- Emergency contact list
- First aid kit (see item suggestions in the Saving the Whole Family brochure)
- Flashlight
- Fly spray
- Heavy gloves (leather)
- Hoof nippers
- Hoof pick
- Instructions
 - Diet: record the diet for your animals.
 - Medications: list each animal separately, and for each medication include the drug name, dose and frequency.
- Knife (sharp, all-purpose)
- Paper maps of local area and alternate evacuation routes in addition to GPS (in case of road closures)
- Non-nylon halters and leads (leather/cotton)
- Paper towels, trash bags, disinfectant
- Plastic trash cans with lids (can be used to store water)
- Portable livestock panels and/or rolls of polypropylene snow fencing, stakes for fencing
- Radio (solar, hand cranked and/or battery operated)
- Rope or lariat
- · Shovel, hammer
- Tarpaulins
- Trash bags
- Water buckets
- Shepherd's crook
- Wire cutters
- · Waste management equipment
- Clippers/shearers

***Adapted from AVMA at www.avma.org/disaster

for either treating or euthanizing animals if necessary, as veterinarians may not be able to reach your farm quickly. Develop a carcass management plan if your farm suffers high mortality from the disaster. Work with your local extension agent, state Departments of Agriculture and Environmental Protection and NRCS to determine local carcass disposal options after a disaster.

Have you considered where you may source hay or feed if the farm's current supply is destroyed during a disaster? Do you have a backup plan to source potable water for your sheep and goats if they cannot reach their water supply, or if there are prolonged power outages and well pumps cannot operate? If animal housing or fencing is damaged or destroyed, do you have access to supplies and equipment to provide temporary enclosures?

Take caution when checking for damage. Buildings and other structures may be unstable, live wires could be exposed, or there may be fire or water hazards that are not immediately apparent. When checking on your animals, be on the alert for dazed, frightened or injured animals so that no one gets hurt. Utilize temporary fencing (panels or webbed safety fencing).

Ensure that your farm has a plan for alternative transportation. If your truck is damaged or destroyed, or there is a gasoline shortage, consider what your backup means of transportation may be. Keep in mind that debris may block roads and alternative routes need to be considered. Many states were without power for several days in the wake of Hurricane Irma (and as of this publishing, much of Puerto Rico is still without power). Does your farm have a generator and is it an adequate size to meet the needs of the farm?

Finally, do not neglect your own physical and emotional health following a disaster. This may be a particularly stressful period. Response and recovery efforts may last for many months after a disaster and neglecting oneself can have negative long term impacts.

Recovery phase

After the immediate response to save lives has subsided, what will your family and farm do to return to normal? Continuity of operations during recovery is vital to protecting your income and your investment in your livestock. As soon as you are able, submit any claims for insurance, indemnity and reimbursement for losses. In general, reimbursements and indemnity payments for animals are based on market prices and not genetic value. Accurate and up to date record keeping during "peacetime" will facilitate a smoother recovery. It is possible that

livestock markets or other sales channels may be closed for several weeks following a disaster. If animals died or their breeding cycle will be interrupted by the effects of a disaster, consider how to replace the income the farm may lose during the downtime, and how you will restock your

As your farm begins rebuilding after the disaster, consider what you could do differently to mitigate the impacts of a disaster next time. What lessons did you learn and what improvements can you make in preparation for the next disaster? It is important to be a leader before the next emergency, having a plan and a backup plan to keep your family and your livestock safe.

"Although the world is full of suffering, it is full also of the overcoming of it." ~ Helen Keller

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Quick Reference Wallet- size Emergency Infomation Card My Livestock Emergency numbers My Livestock Emergency numbers Veterinarian Trailers/Haulers Poison Control Grain supplier Hay supplier Water supplier Animal control Police Extension office Area emergency coordinator Fire department Alternate caretaker information State Veterinarian **DIRECTIONS:** CUT along the dotted lines FOLD along the solid