

How to Prepare for Equine Disasters



By Jennifer Nadeau, M.S., Ph.D Assistant Professor Equine Extension Specialist

We have all watched the evening news and seen horses stranded in floods or have heard about the latest barn fire in our communities. First, some shocking statistics. Every year, floods in the United States cause \$2 billion in damage and animals risk death from hypothermia or drowning. Annually more than 300,000 people are driven from their homes by floods. An estimated 20,000 agricultural fires per year result in \$102 million in direct property loss.

Emergency preparedness, reflecting on hazards that threaten your family's safety and that of your animals, requires developing a plan on how to prepare for these threats. There are four phases of emergency management: mitigation (preventing future emergencies or minimizing their effects), preparedness, response, and recovery. The basis of the emergency management system focuses on Personal Responsibility – ensuring you will have familiarity with potential disasters in your community and that you will create an emergency plan to care for your animals. Other entities that have responsibilities in natural disaster include local, state and federal government. We will focus on preparedness in this article as part of your personal responsibilities.

The four main types of disasters horse owners could possibly face are power outages, fires, floods and tornadoes. We are lucky that we rarely have wildfires here in Connecticut but other types of fires may occur, which are primarily caused by electrical issues. Flooding can be an issue here as well. Flooding results when heavy or continuous rainfall exceeds the absorptive capacity of rivers, streams, and coastal areas causing the watercourse to overflow its banks onto adjacent lands. There are two types of floods. The first type is a slow rising flood in which water moves down a river or stream and can be predicted to reach a certain height. Fast rising floods are flash floods that are usually the result of extremely heavy rain, melting snow, or dam or levy failure. Tornadoes can also affect Connecticut. A tornado can form when there is a thunderstorm and there is warm, humid air near the ground and cold, dry air above which makes the atmosphere very unstable. In a severe thunderstorm there will also be a layer of hot dry, air in between which allows the sun to further heat the warm, humid air. Wind shear, in which wind at the ground is moving in a different direction and speed than the air above, develops the rotation in a thunderstorm that is essential for tornado formation.

There are several methods you can use to identify your horse in the event of an emergency. A livestock crayon can be used to write your name, cell phone number, and address on the horse's body. Alternatively, you can use clippers to shave this information into the horse's coat, or braid an identification tag into your horse's mane. In addition, you should have at least 10 recent photos of your horse (from different angles and at different times of the year), some of which show you with your horse. Keep these in a sealable plastic bag in your disaster kit with other important documents such as your negative Coggins papers, proof of rabies vaccination, medications and insurance papers. Also, keep a copy of the Bill of Sale for your horse or other documentation that can prove ownership, such as registration papers, with your disaster supplies. If you are interested in a permanent form of identification you can have your horse microchipped, branded or tattooed.



The aspects you need to consider in the short term are:

- You may not have much time to react
- You should have a plan in place
- You should have a disaster kit on hand in case of emergency
- Know how you will evacuate your horse(s), and have a trailer ready to go or have one that you can borrow
- Have a way to identify your horse

The aspects you need to consider in the long term include:

- What you will do if you cannot return to your home/property?
- Where can you stay for a while until you can return to your home/property?
- Have a way of identifying your animals as described above in case you need to set them free (worst case scenario) or reclaim them from a shelter. It is usually best not to leave them in the barn in the event of a flood or tornado since there is potential for roof collapse.
- Write on a piece of paper the name, address, and phone number of your regular veterinarian to keep with other important documents for your horse
- Locate a mobile equine veterinarian you can use in the event of a disaster if you don't already have one in case your horse is too injured to be moved for treatment
- Write out a release form authorizing another party to give medical treatment for your injured or sick horse, keep the form on file with your regular veterinarian and an alternate veterinarian. Give a copy of the form to your neighbor or the person who will take care of your horse if you are away.

Finally, you should prepare a disaster kit. Here are the recommended contents to include in the kit:

- Feed – at least a week’s supply in airtight, waterproof container, replace feed every 3 months so it stays fresh and feedable
- Extra feeding bucket for each horse
- One week’s supply of water for each horse, 50 gallon barrels can be used, store in a cool, dark location and check regularly to be sure the water is still usable. It won’t go bad unless there is contamination in it.
- Extra water bucket for each horse
- One week’s supply of shavings/straw
- Extra pitchfork
- Shovel
- Extra wheelbarrow/muck bucket
- First aid kit
- Grooming supplies including shampoo (in case you need to wash off any foreign substances), sweat scraper, etc.
- Non-nylon leads and halters or breakaway halter
- Shipping boots and head bumper for evacuation
- Wire cutters and a sharp knife
- Hoof pick
- Leg wraps
- Portable radio with extra batteries
- Flashlight with extra batteries

The first aid kit should contain:

- 2-4 quilted or padded wraps
- Household scissors and/or knife
- Tweezers
- Ice bags or chemical ice pack
- Rubbing alcohol
- Veterinary or human rectal thermometer
- Lubricant for the thermometer
- Stethoscope
- Antibacterial solution (Betadine or Nolvasan)
- Antibiotic ointment
- Sterile gauze sponges and pads
- 2 to 4 disposable diapers or wrapped sanitary napkins
- Bandages – Ace, 2 ½” gauze bandage roll, leg bandages
- Adhesive tape – 1” and 2” rolls
- Twitch or some form of restraint such as a chain
- Human hand wipes
- Latex gloves
- Saline solution for flushing wounds or eyes
- Rubbing alcohol for sterilizing tools
- Another hoof pick
- Duct tape
- Cotton wool

Following these tips will help you prepare for potential disasters. Hopefully they won’t happen, but keep in mind the old saying “By failing to prepare, you are preparing to fail”-Benjamin Franklin. So, take time to prepare yourself for whatever disaster may befall you and your horse.

Sources and Suggested Reading

1. Federal Emergency Management Agency www.fema.gov
2. FEMA Independent Study Courses
<http://www.training.fema.gov/EMIWeb/IS/crslist.asp>
3. United States Geological Survey
4. Floodsmart.gov
5. http://www.calfire.ca.gov/communications/downloads/fact_sheets/Animalevacuation.pdf
6. UConn Extension Disaster Education Network <http://eden.uconn.edu/>
7. <http://wxguys.ssec.wisc.edu/2011/05/01/what-causes-tornadoes/>

Acknowledgements:

I am grateful for the reviews by Dr. Debra Hagstrom, Horse Extension Specialist of the University of Illinois, Dr. Liv Sandberg, Equine Extension Specialist of the University of Wisconsin and her intern Ellen Schenider.