

Emergency Preparedness

A Job in Constant Progress

By Robin Stanback

Be it a hurricane, a fire, a blizzard or an insidious virus, nature is, in the words of one of the world's leading equine disease specialists, "like a Pandora's box."

Peter Timoney, MVB, PhD, FRCVS, explained, "A disease will appear and then disappear, only to come back again with a vengeance." So it is as well with natural disasters like Hurricane Katrina and, more recently, the blizzards in the northwest. Forecasting provides the illusion of knowing what nature has in store, but there is no guarantee. Humans believe in their ability to handle whatever the natural world can produce until nature tells them differently.

Hurricane Katrina roared through four states before losing some of its devastating power. "I don't know that anyone can be prepared for something like that," said Barbara Poole, DVM, one of the first responders to the battered Gulf Coast. The vastness of the destruction, the smell, the sounds even days afterwards...they were all inconceivable. You just cannot describe it adequately."

What Poole witnessed were hundreds of displaced, injured, frightened animals:

horses, cattle, dogs, cats, snakes, ostriches and pot-bellied pigs. In contrast, Timoney battles diseases that can invade a herd of horses without a single sneeze to give away their presence before disaster strikes. One such disease came in the form of abortions that killed scores of unborn foals. Both caregivers are among a legion of dedicated veterinarians, researchers and scientists whom horse owners rely upon to be the advance guard against whatever nature has to deliver. Are they better prepared today than they were five years ago, or 20? Perhaps...but what might the next disaster be? How does any industry prepare for the unknown?

“Communication is a key factor in responding to any emergency

Where We Are Now

“We are developing a capacity for emergency management,” said Kentucky’s State Veterinarian Robert Stout, DVM. “We are learning to communicate, to work together among groups of people to share information. Homeland Security, state agriculture response teams, extension agencies and volunteers are in the process of learning how to cooperate and to communicate.”

Manuel Thomas, DVM, has recently assumed the chairmanship of the Emergency Preparedness Committee for the American Association of Equine Practitioners (AAEP). He brings to the job more than 30 years of working for and with federal agencies that play significant roles in protecting humans and livestock. “Communication,” he said, “is a key factor in responding to any emergency or disaster. The lines of communication need to be set up well in advance. So, before anything else can happen, a plan should be developed and put in place. My guess is that a lot more people have plans today than they did two years ago. The hurricanes and firestorms have made us all more aware of the need to do something to be better prepared.”

For the individual horse owner, the plan, according to Thomas, needs to be a tiered structure rather like that used by the fire department. “There are emergencies; for instance, you are sick and have to go into the hospital. You have a plan for who will take care of your livestock. That is a one-alarm emergency. A disaster is more widespread, perhaps a disease outbreak or an approaching hurricane or firestorm. That would be a three-alarm or more.”

The plan for each level includes names and phone numbers of people to call upon for help or assistance. In the case of an illness, it may be a neighbor who can feed the animals. That plan should include a list of what feeds need to be distributed, whom to call in case an animal is ill, and who will help if a fence is down.

In the case of a more involved emergency or disaster, the plan needs to be upgraded. A well-stocked emergency kit (see sidebar on page 64) might be hard to transport easily. A smaller, more mobile container holding absolute necessities should include good, clear photographs of each horse, copies of any health certificates and a record of vaccinations.

Until the National Animal Identification System (see sidebar on page 65) covers every horse, photographs can be extremely valuable in identifying animals. “Most show horse people have already got papers and records for their horses in their trailers or tack boxes,” said Thomas. “They need to include clear photographs of markings or brands. These can be invaluable in determining horse ownership. Every horse

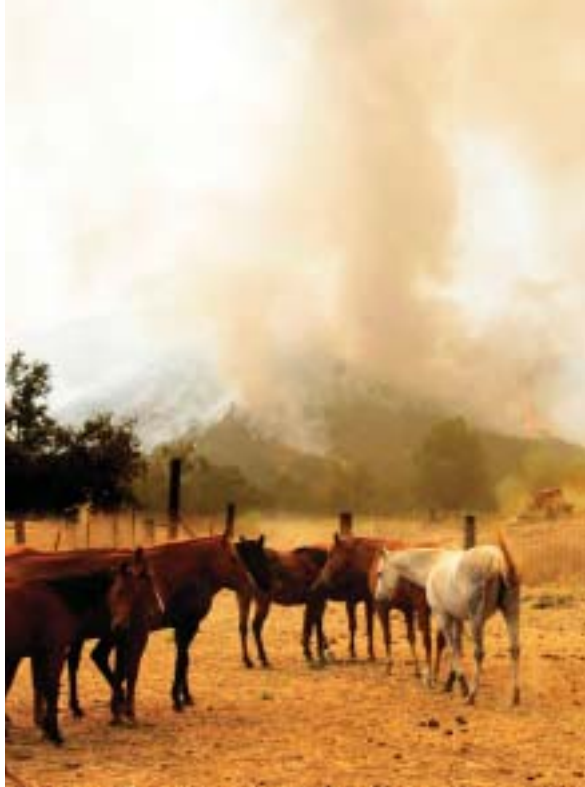
or disaster. The lines of communication need to be set up well in advance.”

Manuel Thomas, DVM



AP Photo/Andy Newman, Opposite page—Snow: Nadezda Pysalova/Wide: Karmine from dreamstime.com

Horses running through the high waters in a South Dade County pasture on October 16, 1999, after Hurricane Irene moved through the area, leaving an estimated 18 inches of water behind.



AP Photo/Mark J. Terrill

Horses stand in a corral as fire burns behind them and a California Department of Forestry bulldozer works to combat a wildfire in Simi Valley, CA, on September 20, 2005.

owner should have these.”

Identifying horses in Louisiana after Hurricane Katrina was made easier because of a law requiring formal identification. Tim Turney, Director of the Kentucky Department of Agriculture’s Division of Producer Services, explained, “In an effort to keep EIA [equine infectious anemia] out of their state, officials in Louisiana insisted that every horse getting a Coggins test have a formal form of identification, either a brand, tattoo or an electronic implant device. As a result, those animals recovered were more easily returned to their rightful owners.”

When disasters on the magnitude of a Katrina strike, animal lovers responded quickly with offers of assistance, gathering feed, halters, lead ropes and veterinary supplies. One thing they should not do, according to the experts, is rush to take those supplies to the scene themselves. “I have a dually and a trailer I could pack full, but I can’t pass up too many gas stations,” said Thomas. “People don’t take that into consideration. They don’t realize that when there is no power, there is no way to pump gas.”

“The language of emergency preparedness today is the Incident Command System, or ICS,” Thomas stated. It is a proven method of layering responsibilities and organizing relief and rescue efforts (see sidebar on page 66). If people want to be able to assist in emergencies and disasters, they should take a course in ICS so they can better understand what role they can play.”

Tomas Gimenez, DMV, is a founding member of the Department of Homeland Security and has been providing certified training courses in technical large animal emergency rescue for over 10 years. He has responded to floods, earthquakes, hurri-

The All-Important Equine Emergency Kit

A good equine emergency kit starts with a list of all contents taped to the lid along with the phone numbers of veterinarians, insurance providers and other emergency contact people. There are many similarities between the human and equine emergency kits, but both should always be available.

The at-rest values of heart rate, respiration rate, capillary refill time and temperature of any horses on the farm or in the trailer should be on a paper either in the kit or attached to it. Also included should be copies of health papers and identification photographs for each animal. Other essential items include:

- Charged cell phone
- Saline wound wash
- Hydrogen peroxide
- Alcohol wipes
- Povidone iodine
- Betadine surgical scrubs
- Hand-sanitizing towelettes
- Epsom salts
- Brown paper bags
- Poultice
- Liniment
- Antiseptic ointment
- Triple antibiotic ointment
- Bloodstop
- Eye wash
- Electrolytes
- Ichthammol
- 30 feet of good rope
- 30 to 50 feet of webbing

- Sterile gauze pads of varying sizes
 - non- and self-adherent
- Roll of cotton
- Diapers or sanitary napkins
- Hand and bath towels
- Vetrap bandaging tape
- Cotton sheet and flannel leg wraps
- Adhesive tape
- Long-handled cotton swabs
- Wood applicators
- Tourniquet
- Stainless steel bandage scissors
- Bandage pins
- Splint material (PVC pipe cut in half in lengths of 1½ – 2 feet for emergency splints)
- Some form of cold pack (frozen peas or refrigerated equine boots)
- Flashlight
- Extra batteries

- Wrap cutter
- Duct tape
- Ear plugs (baby socks stuffed with cotton work well)
- Latex gloves
- Fly and insect repellents
- Hoof pick
- Clinch cutter and shoe puller
- Thermometer with string and clip attached
- Stethoscope
- Forceps
- Tweezers
- Twich
- Wire cutters
- Horse blanket or cooler
- Steel cup or container
- Aspirin and ibuprofen



National Animal Identification

The National Animal Identification System (NAIS) is a fledgling information system created by the United States Department of Agriculture (USDA) that is designed to help producers and animal health officials respond quickly and effectively to animal emergencies and major disease outbreaks in the United States. The system is a partnership between state and federal governments and animal industry organizations. It could also be of great assistance to emergency response teams in case of weather emergencies, and could also aid in the identification of displaced animals.

Still in its developmental stages, the system is changing as it grows and as the public provides feedback, which has been both positive and negative. While Congress supports the program, various aspects have definitely made this issue a hot topic for discussion in the horse industry. Opponents worry about whether the program will be an invasion of privacy from the federal government, about security concerns and about who will ultimately fund the project, among other concerns.

In February, the USDA and Animal and Plant Health Inspection Service (APHIS) requested comments on the latest round of NAIS documents as these issues and others are addressed as work on the system progresses. Those documents can be found at http://animalid.aphis.usda.gov/nais/naislibrary/docs_for_comment.shtml, along with instructions on how to leave comments.

At this point, participation in NAIS is free and voluntary. Any information provided is kept confidential. As of late February, more than 365,000 premises nationwide, an estimated 25% of the nation's farms, have registered with NAIS. In the event of a widespread disease outbreak or weather emergency, such as the blizzards of this year in Colorado and Wyoming, registered farms would be contacted immediately with up-to-date information and to see if assistance is needed.

Bruce Knight, Undersecretary of USDA's Marketing and Regulatory Programs, said, "Making sure we have what amounts to an emergency contact list is the backbone of

an emergency response system; we want this system to be there for producers when and if an animal health emergency arises."

Tim Turney, Director of the Kentucky Department of Agriculture's Division of Producer Services, explained how, in Kentucky, NAIS might be used to allow officials to quickly react to a disaster to limit its impact. Turney brought up the chemical train derailment that happened in Bullitt County, KY, in mid-January as an example of how the NAIS system could assist federal emergency management personnel. "Thankfully, this situation did not require the mass evacuation of people and livestock, but if it had and the county's farms were registered with NAIS, we would have been able to immediately locate the affected farms," he said. "We would have known the number of animals needing evacuation, and we would have been able to concentrate our resources to provide immediate assistance."

To learn more about the program and to register a premise, go to <http://animalid.aphis.usda.gov/nais/index.shtml>.

canes and fires in his career, and agrees that one of the hardest things to do is to discourage well-intentioned but untrained people from trying to assist. "Without proper training, it is entirely possible that the people rushing to help will be in need of rescuing themselves," he said. "There are other considerations as well. Vaccinations are extremely important to keep volunteers healthy. Often, during large-scale disasters, there is a real shortage of housing, safe food and water. Good Samaritans don't always take those things into consideration. ICS provides the means for a safe, organized and efficient rescue effort."

Communication and cooperation are the buzzwords in emergency

Silent Killers

It is easy to recognize the disaster in a natural catastrophe like a hurricane or an earthquake, but a quiet killer lurks in diseases like equine herpes virus (EHV-1), mare reproductive loss syndrome (MRLS) or equine viral arteritis (EVA).

Doug Byars, DVM, former head of internal medicine at Hagyard-Davidson-McGee Veterinary Clinic in Lexington, KY, was recently called to Florida to consult with horse owners after an outbreak of EHV-1, one of a number of different herpes viruses that affect equines. A horse suffering from an active infection can show signs that include fever, coughing, nasal discharge, loss of balance, urinary retention and recumbency. One particular form of this virus, sub-type 1, can cause fetal abortion. It is an extremely infectious virus, but a short-lived one outside of its host. Byars praised the efforts made in Florida to limit the spread of the virus. "They handled the quarantines and sick horses very well," he commented. "Barns were quarantined, movement of horses to and from those areas affected was contained and the outbreak was limited."

MRLS and EVA, two completely different problems, have one glaring similarity: unchecked, they can be responsible for a massive number of fetal and foal deaths. Each has drawn an unprecedented amount of attention from the Thoroughbred

preparedness, whether the emergency is a natural disaster or a virulent disease outbreak.

Communication is of utmost importance during a rescue in which a horse has been injured, such as in a trailer accident.



Eureka Fire Protection District

Incident Command System Provides for Orderly Rescue Efforts

Incident Command System (ICS) is a management system developed in the 1970s. It is described by Tomas Gimenez, DMV, as providing “a safe, organized and efficient method of rescue.” It has been adopted by the United States, parts of Canada, the United Kingdom and other countries as a way to organize emergency responders. An Incident Management Team (IMT) is formed from these responders, including people from multiple agencies using concepts outlined within the Incident Command System to react to an emergency situation.

The size of the team is determined by the magnitude of the disaster. In each case, one of the first things established is a leader. That person delegates responsibility within the group and over all subsequent groups. The span of control is usually between five and seven people. A clear framework of responsibility is established and communication is key to the success of the overall effort.

Courses in ICS are available over the Internet. One site that offers a beginning course is <http://training.fema.gov/EMIWeb/IS/is100.asp>. Gimenez recommends that anyone taking his class in technical large animal rescue also take classes in ICS. “It is something everyone can use,” he added.

industry and from the veterinary community. As a result of combined efforts and open communication, the hitherto unknown syndrome was defined, and EVA has been demystified and controlled.

An EVA outbreak in New Mexico last June was quickly traced to one popular Quarter Horse stallion, but not before his shipped semen was sent to 18 states and two Canadian provinces. Six states saw complications arise as a result of mares contracting the virus from the shipped semen. “Diseases like this can be restrictively expensive,” Stout explained. “It doesn’t matter if the horse is worth \$100 or \$1-million. Contracting this virus can be very costly for the horse that loses training time or for the mare that aborts a foal.”

Dave Fry, DVM, New Mexico’s State Veterinarian, commented, “Our efforts to encourage the use of the modified live vaccine were hampered by the limited amount available to us last year after the outbreak occurred. We had to work with the United States Department of Agriculture (USDA) to bring back to the United States from Canada a large amount of the vaccine that had been shipped up there. We were fortunate that everyone in the industry worked together to contain the spread of this virus.”

Communication and cooperation are the buzzwords in emergency preparedness, whether the emergency is a natural disaster or a virulent disease outbreak. As Thomas suggested, the communication can start from the ground level—horse owners talking to their friends to arrange backup feeding plans or to secure a safe haven for horses that need to be evacuated from a storm’s path. Veterinarians like those in New Mexico, who utilized the laboratories at the Gluck Research Center in Lexington, KY, to get a quick and accurate handle on a killer virus, worked together to obtain the diagnosis. Veterinarians and rescue personnel who join forces to offer assistance and save lives during the aftermath of catastrophic natural disasters define cooperation.

Important steps have been taken, but there is still work to be done. Thomas said, “We learned so much from the recent disasters. We learned that people would put themselves in jeopardy before they would leave their animals. Now we know to take the animals too. Emergency responders are rethinking the best methods of evacuating major metropolitan areas. We need to keep the level of awareness raised if we are to avoid having to relearn those lessons.” ■

Robin Stanback lives in Central Kentucky where she and her husband have operated a rehabilitation farm for 25 years. She has edited The World Equine Veterinary Review, Horse World and Equineus magazines, and writes for a wide variety of others. She can be reached at robin@tripletrity.com.