Disaster Information Resources

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Potential Livestock Disease Problems Following Disasters

Cattle, goats, horses, pigs and sheep surviving hurricanes or other disasters are vulnerable to several diseases, including infectious diseases and toxicities. Owners should contact their local veterinarian for assistance should any signs of disease occur.

Stress-induced Disease

Animals surviving disasters, especially animals that have been evacuated or displaced and relocated, are under a tremendous amount of stress. They also may be commingled with other livestock. This combination of stress and exposure to new diseases can lead to outbreaks of respiratory and gastrointestinal diseases. Abrupt feed changes are also stressful and can cause significant disease and even death, so feed changes should be minimized as much as possible.

Infectious Diseases

- **West Nile Virus and Eastern Equine Encephalitis.** These deadly diseases have the potential to increase with increasing mosquito populations. They may cause lameness or bizarre behavior. However, they are easily prevented through vaccination.
- **Anthrax.** This disease can occur during times of drought or as a post-flood disease. It causes acute death in all livestock species, but especially cattle. Signs are excessive bleeding from body orifices. It is contagious to other animals and people. Proper carcass disposal is critical to prevent future cases.
- **Blackleg.** This disease and other clostridial diseases can occur in cattle, sheep and goats following floods, particularly in areas where grass is short and animals are grazing close to the ground. The signs vary with the particular disease, but acute death is common with all. These diseases are easily prevented with an inexpensive vaccine. Surviving animals should be removed from areas where these diseases have occurred.
- **Tetanus.** All livestock, but especially horses, sheep and goats, are susceptible to tetanus. Animals with injuries should have wounds treated and tetanus vaccinations initiated or given booster shot.
- **Botulism.** Botulism toxin can proliferate in decaying animal carcasses or vegetables and can contaminate water supplies. Birds and horses are particularly susceptible. This disease causes paralysis, which shows up first as weakness with difficulty eating and swallowing. Treatment is supportive care, and prevention is avoiding exposure to stagnant water and decaying carcasses and vegetables.
- **Listeriosis.** This disease affects the nervous system and causes circling, blindness and other abnormal behavior. It occurs on pasture when grass is grazed too close; in old, wet hay; and improperly ensiled corn or other feedstuffs. Cattle and meat goats seem to be particularly susceptible. Antibiotics are necessary for treatment. Prevention includes removing animals from the source of the Listeria bacteria.
- **Foot rot.** Animals standing in mud or water for prolonged periods of time may develop foot rot (cattle, sheep, goats) or thrush (horses). Animals should be removed from the muddy, wet environment, the hooves and soft tissue should be cleaned, and dead tissue should be trimmed away. Antibiotics may be needed in severe cases.
- **Mastitis.** Bacteria in mud and water can cause acute, severe, life-threatening mastitis in animals, particularly dairy cattle. This type of severe mastitis generally requires veterinary assistance for treatment. Intramammary antibiotics can be administered, but only after sterilizing and thoroughly drying the teat ends. Injectable or oral antibiotics also may help.

Toxicities

- **Oak and red maple toxicity.** Livestock owners should be on the lookout for toxicity due to downed trees, particularly oak in cattle and red maple in horses. Signs of oak toxicity are constipation, then diarrhea and thick brownish nasal discharge, depression and weakness. Horses with red maple toxicity have pale gums and show signs of weakness and breathing difficulty.
- **Plant toxicity.** If pastures are destroyed by flooding or cattle are penned in areas with toxic plants, they may ingest them and become sick. Alternative sources of feed should be provided to discourage cattle from eating anything potentially toxic.
- **Water deprivation/salt toxicity.** Animals going without water for prolonged periods of time should be given small amounts of water frequently until they are rehydrated. Watch for altered behavior and other nervous-system signs, plus red urine, weakness and breathing difficulty. Severely dehydrated animals should have veterinary treatment.
- **Spoiled feedstuffs.** Hay and other feedstuffs that became wet because of rain or flooding can have toxic molds growing in them that are a danger to livestock. Any feed that was damaged during a storm should be evaluated before given to animals.

Injuries

- Lacerations. These may occur in animals, particularly on the legs. Minor lacerations may only need cleaning and application of an antimicrobial ointment. More severe lacerations may require suturing.
- Fractures. Young animals with fractured limbs may benefit from a temporary splint while veterinary service is sought. Adult livestock with fractured bones should have immediate veterinary attention or should be euthanized.

Heat Stress

If shade/shelter is destroyed by wind, storm surge or fire during hot weather, cattle will be prone to heat stress. Efforts should be made to provide temporary shade and plenty of water and to decrease stress. In arid environments, hosing cattle down may help, but this may be detrimental in humid environments.

Author:
Christine B. Navarre, DVM, MS, DACVIM
Extension Veterinarian, LSU AgCenter
Department of Veterinary Science

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Louisiana State University Agricultural Center
William B. Richardson, Chancellor
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