

# Unhealthy

Nature's hard knocks can plague your cattle with health problems.

by **Becky Mills**

**W**hen you're going through a hurricane, blizzard or other natural disaster, it is hard enough to deal with the immediate crisis. Unfortunately, nature's hard knocks can plague your cattle with health problems for months after.

Louisiana State University Extension veterinarian Christine Navarre became all too familiar with disaster-related health problems following hurricanes Katrina and Rita. While there were many illnesses affecting livestock, pneumonia was one of the most common.

"The stress caused the bacteria to take over," she explains. "They may have been stranded without feed and water. They may not have had any shade. They may have been relocated and exposed to different animals."

She said pneumonia hit mature cows and bulls as well as calves. "The same viruses that can cause pneumonia can also cause abortions or weak calves, particularly in unvaccinated herds," Navarre states.

She recommends keeping your herd vaccinated against the respiratory complex diseases as a preventative.

Digestive upsets, sometimes fatal, were also prevalent. "That came from limited access to feed," she says. "We didn't have any hay, and you can't just feed cattle concentrates." The hay and feed that were available were wet, moldy or contaminated with toxins from the floodwater. Barns were knocked down, and in some cases cattle had access to toxic chemicals.

"We had herds that had parasite problems," she adds. "Their facilities were destroyed, and they couldn't do routine herd health work like deworming and vaccinating."

The lack of shade and water also led to heat stress and dehydration.

Navarre says the same challenges of no facilities, feed, water and/or shade can also show up after a wildfire.

## Blizzards

Hypothermia and frostbite are the big challenges in blizzards.

Charles Stoltenow, North Dakota State University Extension veterinarian, says prevention is the cure in these cases. "We

need to keep 'em dry. Bed the animals. Get them off the frozen ground. Give them a place to curl up. That conserves a lot of heat. When cattle get cold they mobilize their own body reserves," he says.

"Our worst weather is in January and February," he comments. "Cows drop weight coming into calving season. We want them gaining weight the

last 30 days, not losing weight."

If cows lose enough weight, it can lead to abortions or weak calves.

The worst cold weather injuries are usually in young calves or in cattle that are already in bad shape, Stoltenow explains. Some studies suggest that as much as 80% of severe frostbite in cattle is linked to other health-related conditions.

Frostbite is no minor thing. Animals can lose hooves as well as the tips of their ears and tails.

**"Make sure your cattle are vaccinated, dewormed and stay on a good nutritional plane. Then they at least go into a disaster with a good immune system."**

— **Christine Navarre**



► Hay and feed available after a flood are often wet, moldy or contaminated with toxins from the floodwater.

# Disasters

Stoltenow says sudden deaths during frigid weather are probably linked to other diseases, like pneumonia, that already have the animal stressed. "The weather puts them under such an energy stress that they're putting everything they've got into producing heat," he says.

## Drought

Drought may not be as dramatic as a flood or a blizzard, but it brings its share of health woes to a herd, too. Nitrate poisoning heads Stoltenow's list.

"Drought-stressed plants accumulate nitrates," he says. "Producers bale the forage or turn cattle in to try to salvage crops. We lose cattle that way."

The veterinarian says nitrates cause a problem by hampering oxygen transportation in the blood. The blood turns chocolate brown, and the animal literally suffocates.

Cattle with nitrate poisoning often act nervous and disoriented and can go down. Get them out of the pasture or away from the forage you suspect, and call your vet immediately.

Nitrate poisoning can also be a problem with the water supply. When ponds and stock tanks evaporate, the mineral and nitrates are still there, just in more-concentrated doses. Not only can nitrate poisoning happen, but high concentrations of selenium (Se) and sulfates can cause problems with the uptake of other vitamins and minerals. As Stoltenow notes, that can wreak havoc with bovine immune systems.

## Equal opportunity disease

Anthrax can show up in both floods and droughts. "The anthrax organisms produce spores that can survive a very long time," Stoltenow says. "We think flooding can move those spores in the soil."

The spores have an electrostatic charge and cling to dust and vegetation. When a bovine gets a mouthful of dust, grass or weeds, the organism hitches a ride to their rumen. "The rumen sets up a really nice environment for anthrax organisms," Stoltenow remarks.

He says this is the systemic form of anthrax, the type cattle normally get, rather

than the pulmonary kind that made the news with humans in 2001.

While anthrax can hit cows and calves, it will probably infect bulls first. "When bulls act like bulls and paw and stir up the soil, it makes them more likely to ingest the anthrax organisms," Stoltenow explains.

Unfortunately, the major symptom — a dead animal — is quick and easy to spot. If you have an unexplained death, call your local veterinarian. He or she will know how to dispose of the carcass without spreading the infection even more.

There is a vaccine, but it is regulated and only available in areas that have anthrax. While Stoltenow says this can be anywhere from the Gulf of Mexico to the Northwest, he says it isn't found everywhere in those regions. If you aren't sure if you are in an anthrax area, ask your local or state veterinarian.

If he or she suggests vaccinating against anthrax, it is an inexpensive drug. The main expense is getting the cattle rounded up to process. The first year cattle are supposed to be vaccinated twice, about four weeks apart. After that they can be vaccinated once a year.

In his area, Stoltenow recommends vaccinating the cattle at turnout in the spring. He says July, August and September are when he normally sees the disease.

## Prevention

While you can't prevent natural disasters, Louisiana's Navarre says you can prevent part of the losses. "Make sure your cattle are vaccinated, dewormed and stay on a good nutritional plane. Then they at least go into a disaster with a good immune system."



## Be prepared

The Boy Scout motto is a good one when it comes to natural disasters. While the details depend on the type of disaster you're most likely to have in your area, there are common essentials.

Start with a list of phone numbers. David Smith of the Texas Extension Disaster Education Network (EDEN) recommends the following:

- ▶ Employees
- ▶ Neighbors
- ▶ Veterinarians
- ▶ Poison Control Center
- ▶ Animal shelters
- ▶ County Cooperative Extension Service
- ▶ Livestock transport resources
- ▶ Feedstock providers

Another must is to identify your cattle. "Even though brands are not used as much now, they don't come off," says Christine Navarre, Louisiana State University Extension veterinarian. "You can also take pictures of your cattle."

Navarre recommends making an evacuation plan before you experience a disaster. "Partner with another farm or ranch outside the area so you'll have some place to go," she advises.

"If you do decide to evacuate, go early," Navarre says. "Once evacuation is mandatory, trucks and trailers may not be permitted on the roads."



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