

Anthrax questions answered about livestock

Written by Holyoke Enterprise

A case of anthrax was diagnosed on a cattle ranch in northeastern Colorado this summer. Upon hearing this, many livestock producers may have questions about it.

Anthrax is not one of the livestock health issues that people readily think about. The last time it was diagnosed in Colorado was 31 years ago.

An anthrax case requires the “perfect situation” to occur.

First, the *Bacillus anthracis* spore has to be present in the soil. The soil needs to have a neutral or slightly alkaline pH; the appropriate soil environment can sustain the anthrax spores indefinitely.

Additionally, soil calcium needs to be within a specific range. Next, there needs to be an environmental stressor that initiates spore activity. This can range from extremely heavy rains to the current situation, severe drought.

Soil disturbances, such as dirt excavation, erosion or extreme livestock treading, can also enhance the opportunity for spore exposure and subsequent anthrax infection.

Any warm-blooded animal (including humans) can contract anthrax. Cattle and sheep tend to be more susceptible than other domesticated livestock. The signs can vary depending on both the species infected as well as the mode of transmission. Animals can ingest or inhale the anthrax spores. They can also become infected cutaneously through skin cuts or insect bites. In some outbreaks the first sign may be finding dead animals, as anthrax can kill quickly in acute cases. Other signs can include swelling around the head, muzzle or tongue.

Staggering, tremors, respiratory difficulty and collapse may all be seen in less acute cases. In cutaneous cases, the area of entrance may be hot and swollen initially and later become cold and lose sensitivity. Dead carcasses resulting from anthrax infection may have bloody discharges from body openings. Do not handle this discharge if present.

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Rapid bloating and decomposition of the carcass may also occur in anthrax cases.

If one suspects an anthrax outbreak, they should contact a veterinarian immediately.

Do not handle the carcass or any discharges from the carcass until advised to do so. The infected animal becomes a reservoir for the *Bacillus anthracis* organism, and when exposed to oxygen the organism is readily sporulated and hazardous.

An autopsy is not advised in anthrax cases. Once advised to dispose of the carcass, those doing so should wear protective apparel and no skin should be exposed to the carcass or its discharges. A local veterinarian and the state veterinarian's office will advise people of protective measures once a case is diagnosed.

Affected carcasses should be either burned on site or "deep" buried. The area will also need to be disinfected. The state veterinarian's office will consult with the owner on this.

People will not want to drag the carcass off, as this can spread the range of the anthrax spores and contaminate a larger area for both current and future exposures.

The Cattle Producer's Library contains an anthrax factsheet at <http://www.ext.colostate.edu/pubs/ag/anthrax-guide.pdf>

Additionally, the state veterinarian's office has posted information on their website at <http://www.colorado.gov/ag>

. Again, if one suspects an anthrax case on a operation, do not hesitate in contacting a local veterinarian immediately.

Be careful to protect oneself and other people from anthrax exposure. For questions about

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anthrax, contact the Colorado State University Extension office, the Colorado state veterinarian's office or a local vet.

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