

# FEEAD Outreach Brief

A newsletter about foreign, emerging and endemic animal diseases

# Anthrax

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#### What is anthrax?

Anthrax is a worldwide bacterial disease that causes sudden death, primarily in livestock. In the U.S. it commonly occurs in Nebraska, Mississippi, Arkansas, Texas, Louisiana and California.

# Is the disease a foreign or emerging/ endemic disease?

Anthrax is endemic to the U.S.

# What animals are affected?

Anthrax occurs in many animal species as well as in people, but livestock are mostly affected.

# Can people be infected?

Yes. People exposed to anthrax should seek medical attention immediately.

#### Is there a vaccine?

Yes. A live-strain vaccine is available for livestock where anthrax is endemic.

#### How is it transmitted?

Anthrax bacteria in bloody exudates from the mouth, nose, and anus of a dead infected animals contaminate the environment and develop into resistant spores. Animals become infected by ingesting or inhaling these spores.

# What is the incubation period of the disease?

The incubation period is 1 to 20 days, with illness usually becoming apparent after 3 to 7 days.

#### What are the symptoms?

Different species of animals exhibit different symptoms. In ruminants, these may include staggering, trembling and dyspnea, followed by rapid collapse, terminal convulsions and death. The acute symptoms are usually seen about 2 days before the animal dies. Other symptoms that might be observed are fever and excitement followed by depression; stupor; disorientation;

muscle tremors; abortion; congested mucous membranes; bloody discharge from the nose, mouth, and anus; and subcutaneous swellings.

Symptoms in horses include fever, chills, anorexia, depression, severe colic, bloody diarrhea, and swelling. A horse with these symptoms usually dies within a week.

Swine that contract the anthrax bacteria Texas AgriLife Extension Service may exhibit mild chronic infections followed by fever, swelling and enlarged lymph nodes. Swine usually recover from this type of infection, but some are asphyxiated by the swelling and die.

In the field, good indicators that an animal has died from anthrax are poor blood clotting and no rigor mortis. The carcass will also bloat and decompose rapidly, sometimes with a dark, tar-like, bloody substance oozing from the animal's orifices.

# Is this disease preventable?

Yes. Anthrax can be prevented by vaccinating animals in endemic areas. USDA-APHIS restricts the importation of animal products from countries where anthrax occurs. If you suspect an animal has died from anthrax, do not open the carcass. If the carcass remains closed, the bacteria will not be exposed to oxygen and cannot turn into spores. In an unopened carcass, the bacteria will decompose rapidly and not contaminate the

# Is this a reportable disease?

Yes. If a veterinarian diagnoses a case of anthrax, it must be reported immediately to state or federal animal health and public health officials.

Health:

Sarah White Editor Lead Office Associate for Veterinary Medicine State 4-H Veterinary Science Coordinator College of Veterinary Medicine & **Biomedical Sciences** 

College Station, TX



#### Additional information:

Texas AgriLife Extension Service Extension Veterinary Medicine http://aevm.tamu.edu

If you have comments concerning the "FEEAD Outreach Brief," please contact: Mrs. Sarah White, swhite@cvm.tamu.edu

\*Source of material: "Quick Facts about Foreign and Emerging Animal Diseases" Bulletin. 2008. Texas AgriLife Extension Service

# Additional information:

# The Center for Food Safety and Public Security:

http://www.cfsph.iastate.edu/DiseaseInfo/default.htm

### **USDA-APHIS:**

http://www.aphis.usda.gov/lpa/pubs/fsheet\_faq\_notice/fs\_ahanthrax.html
http://www.aphis.usda.gov/lpa/pubs/fsheet\_faq\_notice/fs\_ahanthradiag.html

# Texas Department of State Health Services:

http://www.dshs.state.tx.us/idcu/disease/anthrax/

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