DAIRY VETERINARY NEWSLETTER

September 2024

2025 Trichomoniasis Tags Available

The Utah Department of Agriculture and Food (UDAF) has announced that 2025 Utah Trichomoniasis tags can be ordered from:

State Veterinarian's Office Utah Department of Agriculture and Food 4315 S 2700 W - TSOB South BLDG, Floor 2 Taylorsville, UT 84129-2128 PO Box 146500 Salt Lake City, UT 84114-6500

Contact the Animal Health Program at (801) 982-2235 or statevet@utah.gov for additional information.

Fax: (385) 465-6026





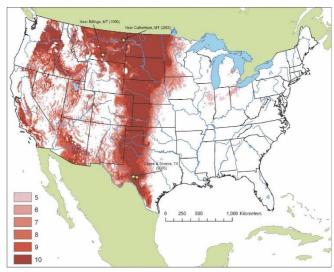


2025 Trichomoniasis tags are yellow

Ultra Tamperproof tags must be applied only with a RED or GREEN ALLFLEX applicator

Anthrax in Wyoming and Facts About Anthrax

In what is apparently the first reported diagnosis in their state in 50 years, Wyoming announced on September 4, 2024 that "anthrax had caused the death of a moose and approximately 50 to 60 cattle around Elk Mountain in Carbon County". *Bacillus anthracis*, the etiologic bacteria, is found in many parts of the western and midwestern United States (see map on following page).



Map from Blackburn, J, et al, Modeling the geographic distribution of *Bacillus anthracis*, the causative agent of anthrax disease, for the contiguous United States using predictive ecological niche modeling, American Journal of Tropical Medicine and Hygiene, 2007. 77:1103. (*From UDAF, Sept. 2024*)

"The last known cases in Utah were in 1975 in Tooele and Davis counties", according to the announcement of this Wyoming outbreak which came from UDAF. (We learned about the last known outbreak in Ohio when I was in veterinary school at Ohio State. It had occurred in 1974, which we thought sounded long ago even then.) The classical conditions for an outbreak are heavy rains after a drought or a hard winter.

Anthrax is believed to have been described since at least 1491 B.C.E., one of the longest historical records of any disease. The most common presenting sign is sudden death, with next most commons signs being generalized signs of illness, which complicates the diagnosis. Soon after death, however, some other signs that are strongly suggestive of anthrax may be observed:

Postmortem signs that suggest anthrax as a possible diagnosis

- Blood coming from body openings is common, often dark red or black blood
- Carcasses bloat and decompose rapidly



Anthrax often presents as sudden death, with rapid bloating and decomposition (Agri-coop)

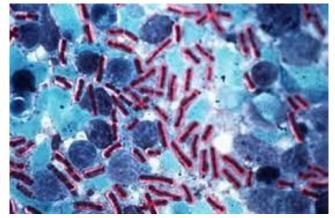
- Carcasses may not develop rigor mortis
- It is not advisable to open the carcass, which releases thousands of infectious spores which can be contracted including by inhalation; if opened, poor blood clotting and splenomegaly (see next point) are often observed
- The spleen is often <u>markedly enlarged</u>, especially in cattle and sheep



Bovine splenomegaly (this image was not from an anthrax case; poor blood clotting is not evident; Research Gate)

Diagnosis of anthrax

- <u>Alert any diagnostic laboratory to which samples are submitted that anthrax is suspected</u>; ideally the laboratory should use biosafety level (BSL) 3 conditions for safety
- Wearing gloves and a mask, blood smears can be made and stained, such as with polychrome methylene blue stain:



Bacillus anthracis stained with polychrome methylene blue

- The preferred specimen for microbial culture is also blood; *Bacillus anthracis* grows well on blood agar but does not grow on MacConkey agar
- PCR

The UDAF announcement of the Wyoming case above states, "Anthrax in livestock is a reportable disease in Utah."

Utah State College of Veterinary Medicine Hiring Many New Faculty Members

These are exciting times in the new College of Veterinary Medicine (CVM) at Utah State University. In addition to the new teaching building under construction, some other remodeling and expansion of existing facilities is underway. Even more critical to any professional education program, USU is in the process of hiring many new faculty members necessary for the instruction of veterinary students in the newly expanding 4-year curriculum. Please consider applying or informing colleagues who may be interested.

How to view open CVM positions and consider applying

Search usu.edu →About→Employment→Join Us. Then Search typing in "Veterinary". Pull down menus are: Category: Faculty; Position Type: Benefited Full Time; Location: US-UT-Logan

As always, thanks for all you do to maintain animal and human health and food safety. This includes vigilance for rare but deadly diseases such as anthrax.

Please let us know your comments and suggestions for future topics. I can be reached at (435) 760-3731 (Cell), or David.Wilson@usu.edu.

David Wilson, DVM, Dairy Extension Veterinarian

"Utah State University is an affirmative action/equal opportunity institution."