



**Notification for Health Care Providers: Anthrax
August 2023**

One case of animal anthrax was recently reported in a goat in Edwards County.

Background: Anthrax is a bacterial disease endemic in herbivorous animals in southwestern parts of Texas. Naturally-occurring animal anthrax can occur anywhere in the state, however cases are most often confined to areas near Crockett, Edwards, Kinney, Maverick, Sutton, Uvalde, and Val Verde Counties.

Cutaneous infection is the most common form in humans and is caused by contact with fluids from infected animals. Consider anthrax in patients presenting with indurated, cutaneous lesions especially if there was a high-risk exposure where anthrax is endemic.

Risk Factors for Cutaneous Anthrax in Humans, Southwestern Texas

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| High risk activities | Exposure to contaminated carcasses, meat, tissue, wool, hides, leather or hair products of infected animals |
| High risk professions | Ranchers, ranch-hands, meat processors, hunters, tanners, taxidermists, veterinarians |
| High risk animals | Deer, cattle, goats, sheep, antelope, horses |
| High risk counties | Crockett, Edwards, Kinney, Maverick, Sutton, Uvalde, and Val Verde |

Clinical Presentation: Symptoms of anthrax depend on the route of exposure and can take anywhere from 1 day to 2 months to appear. All types of anthrax can cause severe illness and death if left untreated.

Cutaneous infection:

- Typically develops within 1-7 days after exposure of anthrax spores through cuts or scrapes in skin.
- Typically begins as a papule resembling an insect bite. Within 1-2 days, the papule develops into a vesicle and then a painless ulcer, usually 1-3 cm in diameter, with a characteristic black eschar.

Inhalational infection:

- Typically develops within one week after exposure, but may take up to 2 months. Exposure includes individuals who have breathed in spores when working with infected animals, such as vets and ranch hands conducting necropsies.
- Symptoms may include flu-like illness, including fever, chills, shortness of breath, cough, fatigue, myalgia.



Gastrointestinal infection:

- Typically develops 1-7 days after consumption of contaminated meat or unintentional ingestion of infected fluids.
- Symptoms may include fever, chills, lymphadenopathy, abdominal pain, nausea, vomiting, and diarrhea.

Diagnosis: Diagnostic specimens for cutaneous anthrax may include swabs of lesions for PCR and/or full thickness punch biopsies. Avoid direct contact with wound or wound drainage. Blood, lesion swabs, and other clinical specimens can be cultured to diagnose anthrax. All specimens must be collected BEFORE initiating antimicrobial therapy and must be coordinated through DSHS.

Treatment: The recommended treatment for cutaneous infections in adult patients is ciprofloxacin 500 mg every 12hrs for 7-10 days. Doxycycline or amoxicillin are suitable alternatives.

Post-exposure prophylaxis: If a person has a known exposure to an animal anthrax case, they can take antibiotics to prevent illness. People with an inhalation exposure must take ciprofloxacin every 12hrs or doxycycline every 12hrs for 60 days. People with only a skin or mucus membrane exposure can take PEP for 7 days, with 14 days of symptom monitoring. Anthrax vaccine should be considered for those with high risk for anthrax exposure.

If you suspect your patient has an anthrax infection, please contact the Region 8 Zoonosis Control Program. Our staff will assist with specimen submission and implement measures to prevent additional cases.

For more detailed information:

<https://www.dshs.texas.gov/idcu/disease/anthrax/>

<https://www.cdc.gov/anthrax/>

For More Information, Contact:

Region 8 Zoonosis Control

Main Office: 210-949-2000

24-hour reporting line: 210-949-2121

Fax: 210-692-1457