

Anthrax in Texas

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TEXAS ANIMAL HEALTH COMMISSION
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Outline

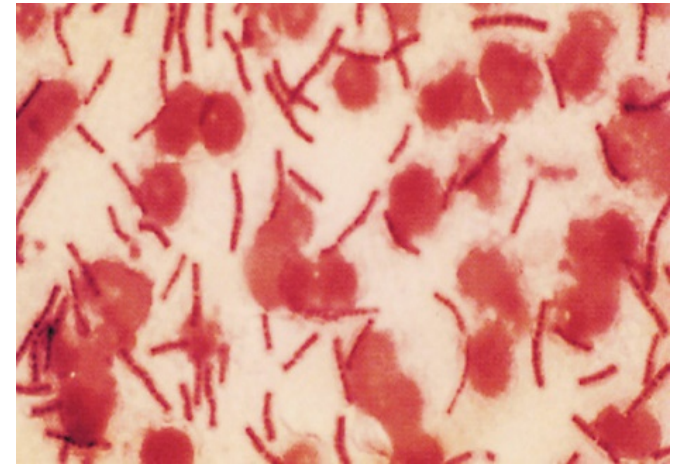
- About Anthrax
- History of Anthrax in Texas
- Current Situation
- TAHC Response to Anthrax Outbreak



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About Anthrax

- Is caused by *Bacillus anthracis*; a spore-forming bacteria.
- Anthrax is a naturally occurring disease affecting deer, livestock, exotic livestock, horses, swine and humans.
- The spores are odorless, colorless and tasteless.
- Source: herbivores, hides, hair, soil





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About Anthrax cont.

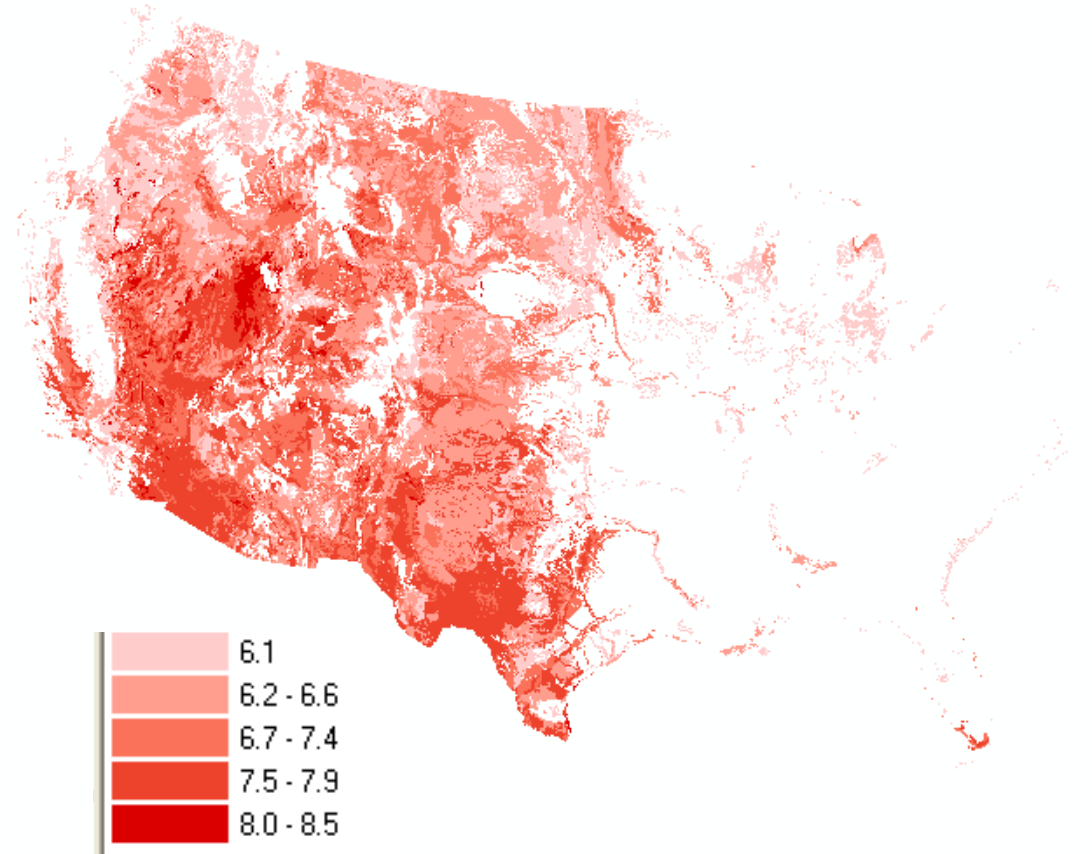
- Spores are resistant to adverse conditions
- Sporulated anthrax is resistant to heat, cold, chemical disinfectants, and drying
- The bacteria can surface, contaminating soil and grass after periods of wet, cool weather, followed by hot, dry conditions
 - Animals ingest the anthrax bacteria when they consume contaminated grass and hay, or by inhaling the spores.
- Outbreaks will usually end when cooler weather arrives. The bacteria will then become dormant.
- The spore may survive indefinitely



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Anthrax Spread

- Air
- Flooding pastures
- *Bacillus anthracis* spores do not survive long in acid soils. The Russians estimate it is only for some 18 months while it is for decades in alkaline soils.





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Signs and Symptoms

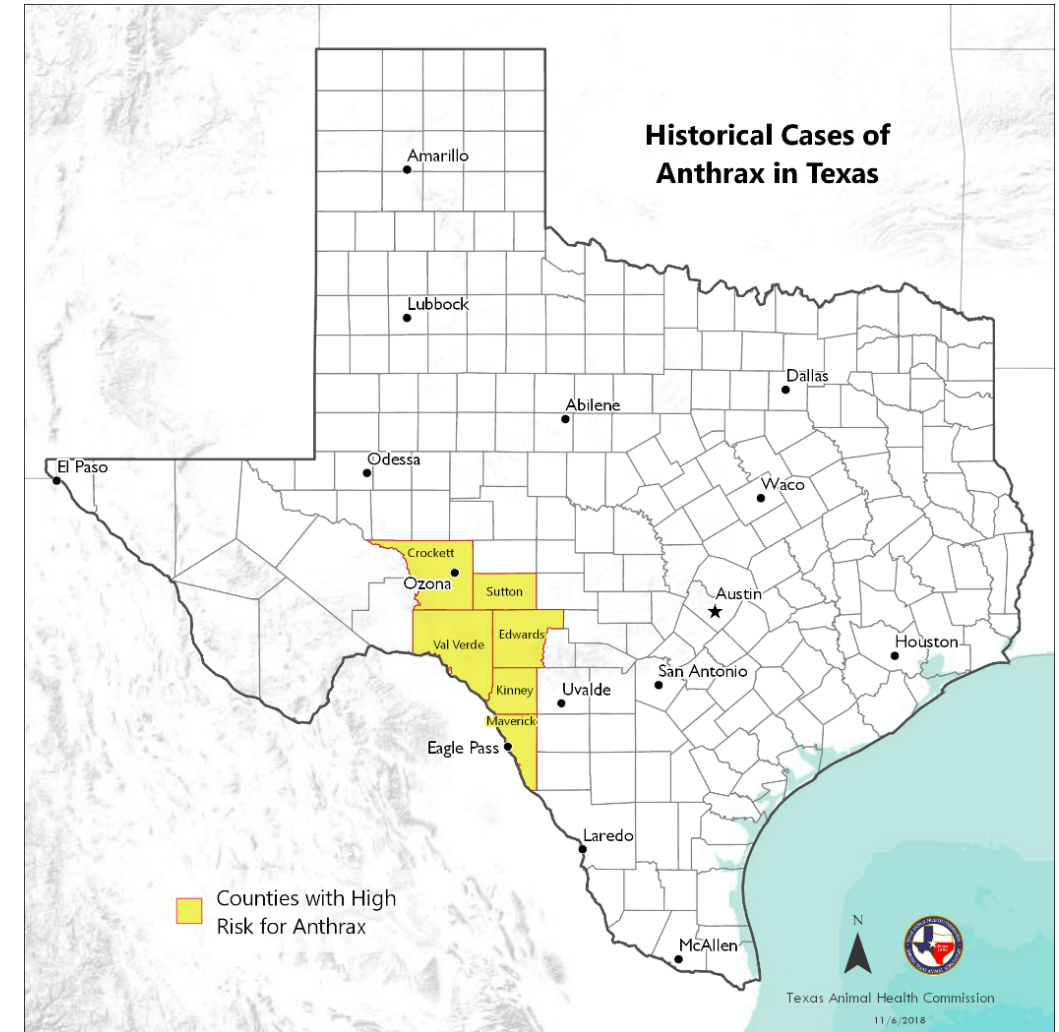
- After exposure, it usually takes 3-7 days for animals to show symptoms of anthrax.
- Once symptoms begin, death will usually occur within 48 hours.
- Acute fever followed by rapid death with bleeding from body openings are all common signs of anthrax in livestock.
- Carcasses may also appear bloated and appear to decompose quickly.
- Infection is usually less severe in swine, horses and humans. Although they may become ill, they can fully recover.



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History of Anthrax in Texas

Anthrax is found worldwide in mammals, but in Texas, cases are most often confined to a triangular area bound by the towns of Uvalde, Ozona and Eagle Pass.





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History of Anthrax in Texas

2013

- 1 case: **Kinney County** - Antelope

2014

- 2 cases: **Kinney County** - White-Tailed Deer
Jim Wells County - Cattle

2015

- 0 cases

2016

- 2 cases: **Val Verde County** - Cattle
Kinney County - White-Tailed Deer

2017

- 2 cases: **Crockett County** – Cattle
Kinney County - White-Tailed Deer

2018

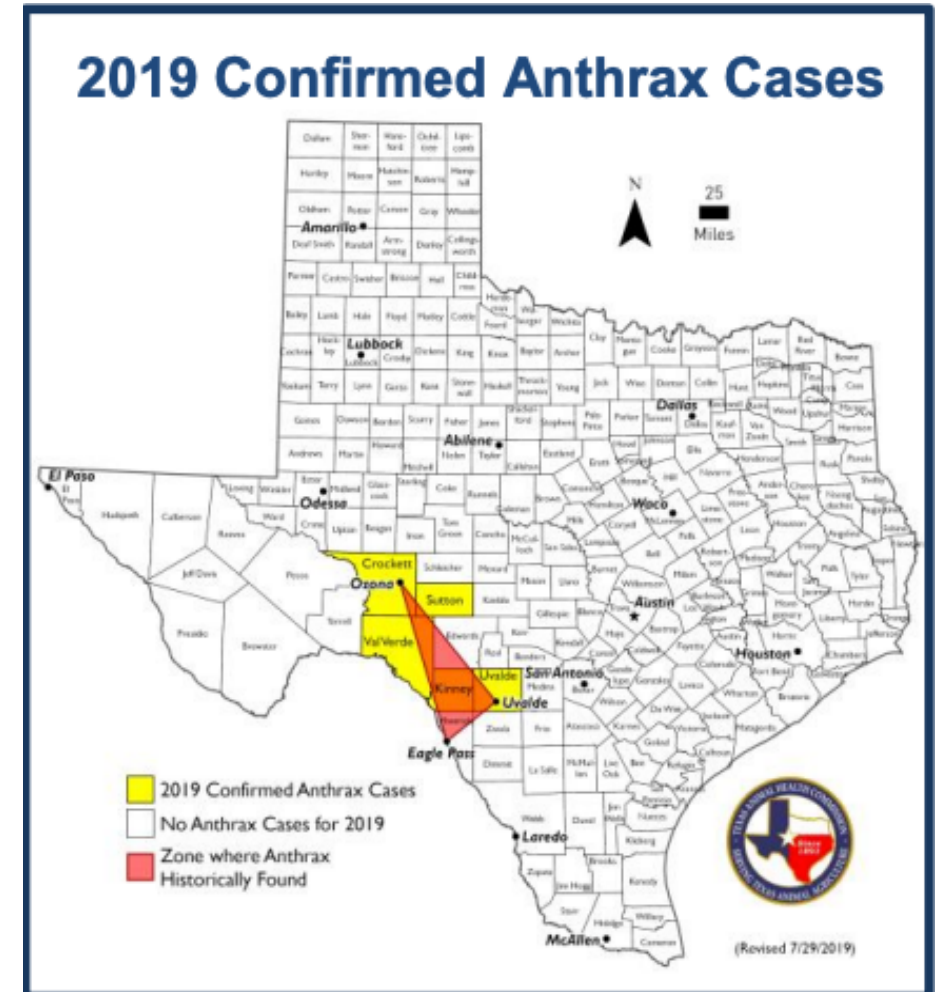
- 2 cases: **Jim Hogg County** – Cattle
Kinney County - White-Tailed Deer



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Current Anthrax Situation

- First anthrax case was June 19, 2019 in Uvalde County.
- To date, 20 premises have confirmed anthrax in Crockett, Kinney, Sutton, Uvalde and Val Verde Counties.
- Animals confirmed positive include: antelope, goat, horses, deer and cattle.





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TAHC Response to Anthrax: Diagnosis

- A veterinarian who makes a presumptive diagnosis that an animal may have died from anthrax shall immediately prepare a suitable specimen from the animal and submit it to the Texas Veterinary Medical Diagnostic Laboratory in College Station or Amarillo for examination.
- The specimen shall be accompanied by the name and address of the owner or caretaker of the animal and the location of the premises on which the animal died. Information describing the species of animal, any clinical symptoms, and number of mortalities is to be furnished.

Note: The provisions of this §31.2 adopted to be effective December 18, 1992



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TAHC Response to Anthrax:

- Upon laboratory confirmation of the disease by approved laboratory methods, the Texas Animal Health Commission (TAHC) shall:
 - establish quarantines upon infected and exposed animals and premises,
 - advise the owner or caretaker how to properly dispose of carcasses,
 - require such treatment and vaccination as may be necessary to control and eradicate the disease.
- TAHC will notify the Texas Department of Health of the quarantine.
- Unless otherwise specified by TAHC, a quarantine will be released 10 days after vaccination of the herd with a product approved by TAHC and after proper disposal of carcasses as specified in §31.3 of this title (relating to Disposal).



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TAHC Response to Anthrax: Carcass Disposal

- Any person who is the owner or caretaker of animals that have died from anthrax, or who owns or controls the land on which the animals have died, is responsible for assuring that the carcass of each animal is set on fire and burned until it is thoroughly consumed.
- Carcasses should be
 - burned to ashes
 - In counties under a burn ban, burning **MUST** be coordinated with local fire authorities prior to carcass disposal.



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Anthrax Prevention

- An effective anthrax vaccine is available (Colorado Serum Co.)
- Vaccination should be done 2-4 weeks prior to the normal outbreak season, usually in early spring.
 - Because this is a live vaccine, antibiotics should not be given within one week of vaccination.
- The vaccine is recommended for:
 - Livestock residing in an area known to have anthrax
 - Animals that will be moved into the area, such as horses transported to trail rides
 - Some cervid breeders use it off-label

Questions?

Thank you

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