



## Trueperella Pyogenes

### What is it?

Trueperella Pyogenes are a species of bacteria that are non-motile, facultatively anaerobic, meaning they thrive best in an anaerobic environment (without oxygen) but can live in an aerobic environment, and gram positive, therefore they are more receptive to antibiotics due to the composition of their cell wall.

### What symptoms are typically seen in Cervid?

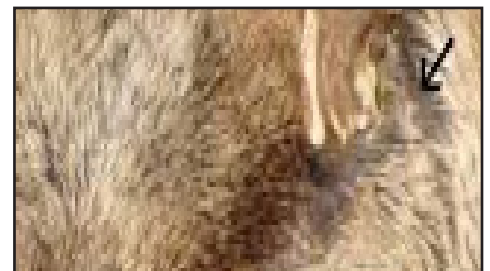
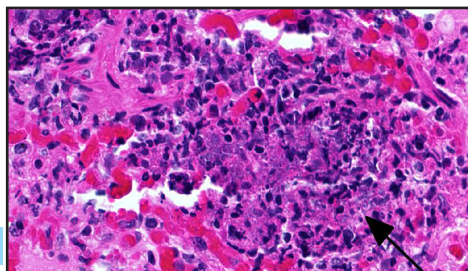
- T. pyogenes bacterium is the most common cause of abscesses and pneumonia in deer and elk. The abscesses or lesions are generally on the face, ears, neck, lungs, legs and lymph nodes. It can contribute to lumpy jaw.
- In fawns it is often found to be fatal.
- The bacterium usually causes infection locally but if not treated it can easily travel to the lungs or other organs and become life threatening.

### How is it spread?

- This bacterium is a normal inhabitant of the intestinal tract of many ruminants, including deer. Sick animals can shed the bacteria in their feces and deer become infected by eating contaminated feed or dirt.
- It can also spread through open cuts in their skin and by flies from animal to animal.
- It is possible for transmission directly from mucus and open wounds during animal to animal contact, but seems to be more often from the contaminated soil.
- The disease usually only affects one or a few adult deer at a time but the bacteria can rapidly spread through fawns.

### Signs and Symptoms

- Abscesses-especially of the mouth, legs and lymph nodes.
- Lameness
- Pneumonia, including raspy breath associated with onset of pneumonia can be another sign of infection.
- Thick nasal discharge green or yellowish in color
- In post-mortem tests it is often found accompanied by Fusio Bacterium
- Open sores on the legs can be a first sign of illness. On mature bucks it can be at the base of the antlers.



## Disease Management

- As always environmental conditions can make an animal more susceptible to disease. Stress, including heat and humidity, can make them more prone to infection.
- Because *Trueperella Pyogenes* is most often transmitted through feces or infected dirt or soil, keeping pens clean and dry is important. Overcrowding could also play a factor in susceptibility and transmission.
- Fawns are more protected when kept in clean areas with flooring that can be easily disinfected.
- Daily check your animals and when infected treat wounds and abscesses/lesions topically along with treatment of the other symptoms in accordance with your VCPR (veterinary client patient relationship.)
- Do not reuse needles from one animal to the next.
- As usual, follow a procedure of quarantining new animals for 30 days before introducing to your herd and vaccinate before transferring them in.
- Introduce and maintain a vaccination protocol.

## Statistics

- A study from 2015 of deer in Georgia noted cranial and intracranial abscess disease as being a cause of mortality in male white tailed deer. *T. pyogenes* seems to be the most commonly isolated bacterium in this diseased animal.
- According to the University of Florida Extension office, in 2016 more than 10 percent of all farmed fawn deaths were attributed to *trueperella*.

## Points to Remember

- This is a common bacterium among deer and elk that is often the cause of abscesses and pneumonia.
- Abscesses are often located on the mouth, legs and lymph nodes and open sores on legs can be first signs of illness.
- *Trueperella Pyogenes* bacteria are shed in feces of infected animals and then other cervid most often become infected by eating contaminated feed or dirt, but can spread through open cuts or by flies
- Good management practices including not overcrowding and keeping pens clean and dry is crucial to maintaining your herd health
- Be sure to implement a vaccination protocol for best protection from infection and spread of *Trueperella Pyogenes*. Penu-Vac 2 covers *Trueperella Pyogenes*.

