CERVID SOLUTIONS

Pasteurella

What is it?

Pasteurella are gram negative bacteria that are non-motile and aerobic in nature. Pasteurella Multocida and Bibersteinia (formerly pasteurella) trehalosi are both seen in Cervid. Pasteurella Multocida has been known to cause septicemic pasteruellosis. Bibersteinia trehalosi was formerly included in a single species of Pasteurella haemolytica but was recently reclassified as B. trehalosi, it is associated with systemic pasteurellosis or septicemia (blood poisoning) in lambs and respiratory diseases in small ruminants.

What symptoms are typically seen in Cervid?

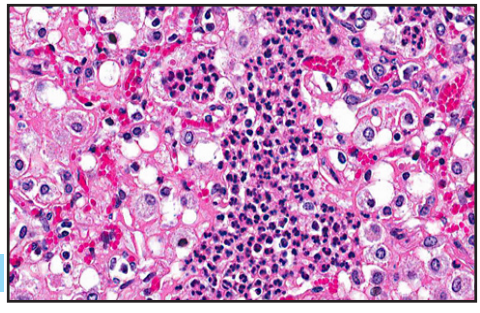
Pasteurellosis, also known as hemorrhagic septicemia or shipping fever, is an infectious disease usually caused by P multocida. P multocida is thought to be part of the normal flora of the upper respiratory tract of many animals. In stressed, young or compromised animals it also causes upper respiratory infections and bacterial pneumonia. B. Trehalosi has been shown to cause respiratory disease and septicemia.

How is it spread?

Disease is spread and perpetuated by a number of stressors, including but not limited to high temperature, humidity, subsequent infections and nutritional deficiencies. When stressed these bacteria are shed through mucous membranes. Outbreaks occur when there is direct contact with oral or nasal secretions with infected carriers or it is spread through contaminated water and feed sources.

Signs and Symptoms

- There was an outbreak of pasteurellosis at the National Elk Refuge in Wyoming in the late 1980's, most of the Elk were found dead or showed severe depression less than 24 hours before death.
  - Some signs could be animals hanging head low with ear drooping and excess salivation
  - In Wyoming at that time, tremors were seen in 2 of 120 animals that died
- When observed in the form of pneumonia, severe respiratory signs are seen and often result in acute death. Sometimes the only visible signs of pneumonia are flared nostrils and increased respiratory rate.



- Coughing and nasal discharge can be absent.
- Decreased food intake of animal may also be noted.

Disease Management

- Proper management is important to minimize disease and reduce the contagiousness of the bacteria. Keeping deer in a clean, minimal stress environment and not overcrowding them will decrease the spread of the disease. Stress such as heat, cold, overcrowding or poor nutrition predispose to infection.
- 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.

Points to Remember

- Pasteurella multocida is part of the normal flora of the upper respiratory tract in healthy animals, but in stressed, young or compromised animals it can cause bacterial pneumonia
- Bibersteinia Trehalosi has been known to cause respiratory disease and septicemia
- Both bacteria are spread through direct oral contact between animals or through contaminated water and feed sources
- Pasteurellosis, when observed as pneumonia, has a quick onset of symptoms and often results in acute death
- Proper management along with a vaccination protocol is important in prevention. Pneu-Vac 3 covers Pasteurella Multocida and Bibersteinia Trehalosi