Bovine Respiratory Disease & Diagnostic Procedures for Veterinary Technicians

An overview of the common pathogens that cause BRD and the Veterinary Technicians' role in performing diagnostics like thoracic ultrasounds, trans-tracheal washes, and deep nasal swabs.

Speaker Bio:

Meg Harrington BS, CVT, is a Certified Veterinary Technologist that specializes in livestock consulting and production animal care for Nashville Animal Hospital located in Nashville, Arkansas. Meg will sit for her Production Animal Internal Medicine board exam with the Academy of Internal Medicine for Veterinary Technicians in June 2023. Growing up on a cow/calf operation in southern Indiana, she has always had a passion for the cattle industry. She graduated from Purdue University School of Veterinary Medicine with a degree in Veterinary Technology in 2010. Meg has a strong desire to educate and develop herd health programs specific to the needs of her producers through risk assessment and disease surveillance, in addition to helping them see the economic benefit of utilizing certain products to boost production through weight gain, increased reproductive performance, and facilitate ways to decrease morbidity and mortality in high-risk cattle. Meg advocates for keeping production animals healthy, keeping our food supply safe, and keeping America fed.

Learning Objectives:

- 1. Develop an understanding of common pathogens that cause bovine respiratory disease.
- 2. Promote the use of technician's by allowing them to perform diagnostics for bovine respiratory disease cases.

Agenda:

- Immunology
 - Innate vs Acquired Immunity
 - Defense mechanisms in the body
- Pathogens
 - o **Viral**
 - o **Bacterial**
- Basic Anatomy Review of Respiratory Tract
 - Nasopharynx
 - Trachea
 - o **Bronchi**
 - Bronchioles
- Individual Pathogen Review
 - o BVD

- o IBR
- $\circ \quad \textbf{BRSV}$
- **PI3**
- \circ Coronavirus
- *M. haemolytica*
- P. multocida
- o **H.somni**
- *M. bovis*
- Technicians Role in Performing Diagnostics
 - Using DART system to identify sick cattle.
 - Physical examination
 - Thoracic ultrasonography
 - Deep nasopharyngeal swabs
 - Transtracheal washes
 - Necropsy