



**NEWS RELEASE  
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**Proper Protocol Can Reduce Antibiotic Use for High-Risk Calves**  
**Preventative antimicrobial treatment protocol can reduce morbidity and antibiotic use in beef calves, according to a new article in *Applied Animal Science***

Philadelphia, PA, June 17, 2019 – Bovine respiratory disease (BRD) is estimated to cost the beef industry \$750 million each year. Preventative administration of an antibiotic during initial processing is one effective management strategy for mitigating the effects of BRD in cattle arriving at a new facility; however, treatment protocols differ in performance, effectiveness, antibiotic usage, and cost. Scientists at the University of Arkansas recently studied two commonly used treatment protocols for high-risk calves.

During the study, 176 calves from auction markets were transported to the University of Arkansas Agricultural Experiment Station (Receiving Unit) near Savoy, Arkansas. Upon arrival, the calves received a preventative antimicrobial treatment using tulathromycin or tilmicosin. During the 42-day study, researchers removed calves that met the treatment criteria for BRD from their home pens and gave them further treatment before returning them to their home pens.

“Percentage BRD morbidity for first-treatment antibiotic, the percentage of calves treated with a second antibiotic for clinical BRD, and the percentage of calves that relapsed were greater in calves initially treated with tilmicosin compared with calves treated with tulathromycin,” senior author Beth Kegley said. “However, there was no significant difference across treatments in terms of overall medical cost. The greater initial cost of tulathromycin leveled out overall antibiotic costs.”

*Applied Animal Science* Editor-in-Chief David K. Beede said, “Stressors such as weaning, transport, and receiving at a new facility can create risk for development of BRD. The majority of cases occur within 3 weeks of stress. Establishing a preventative antimicrobial treatment protocol for BRD is imperative to address and affect BRD-related sickness, morbidity, and profitability in high-risk cattle.”

“Establishing a treatment protocol for BRD is imperative for morbidity, profitability, and growth parameters in high-risk cattle,” Kegley added. “The use of preventative treatment potentially can be a management tool for reduction of BRD-related sickness in high-risk, newly received beef calves.”

An article detailing the study appears in the June issue of *Applied Animal Science*.

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#### **NOTES FOR EDITORS**

“Comparison of treatment protocols for bovine respiratory disease in high-risk, newly received beef calves,” by J. J. Ball, E. B. Kegley, J. Sarchet, and J. G. Powell (DOI: <https://doi.org/10.15232/aas.2018-01836>), *Applied Animal Science*, Volume 35, Issue 3 (June 2019), published by FASS Inc. and Elsevier Inc.

Full text of the article is available to credentialed journalists upon request; contact Brittany Morstatter at +1 217 356 3182 ext 114 or [arpas@asochq.org](mailto:arpas@asochq.org) to obtain copies. To schedule an interview with the authors please contact Beth Kegley at +1 479 575 3050 or [ekegley@uark.edu](mailto:ekegley@uark.edu).

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