

Alternatives to Medicated Feed in Managing Pneumonia

With weather patterns of freezing and thawing, and winter finally making its arrival, this is the time of year when we typically notice an increase of coughing in our cattle barns. We then find ourselves looking for a solution to keep our animals healthy. Historically, many of our herds have used chlortetracycline premix (Respiraid) as a feed top-dress to treat and prevent pneumonia in a group of non-lactating cattle. However, we have been informed by our supplier that production of chlortetracycline premix has been discontinued, which has caused us to reflect on why we have used it in the past, should we continue to use it, and with the lack of access, what alternative options exist?

Feeding medication can be a convenient way to treat animals, yet the use of fed antibiotics at subtherapeutic (below treatment) levels poses various issues. Firstly, many antibiotics are identified as medically important, in that they are used to treat not only animals, but people as well. Inappropriate use of these drugs can lead to resistant populations of bacteria. Consequently, antibiotics can become ineffective. As veterinarians and farmers, we must steward this resource to ensure its use in the future. I can think of a few cases I have seen recently where a bacterial culture has been followed by antibiotic sensitivity testing to find that the bacteria are resistant to many antibiotics, likely due to excessive and incorrect use.

Further, our intent when feeding antibiotics is to prevent at risk animals from becoming ill, and to treat affected animals so they can recover. Yet despite our best of intentions, many of the animals considered to “need it most” are likely not ingesting an adequate dose. Our poor-doers, and actively sick animals often have a decreased appetite, and are not as aggressive at the bunk. For a group, we calculate a dose “per head” based on the average animal size, but individual size variation can lead to larger animals ingesting suboptimal levels. Finally, there is always the risk of the wrong group of animals accessing medicated feed leading to concerns with milk and meat withdrawals.

While medicated feed has its place, in the scenario of coughing and pneumonia, I think we can push ourselves to try alternative strategies. Access to antibiotic premixes will become increasingly challenging. Many manufacturers are only agreeing to make the product with a valid veterinary prescription written for a specified farm, and in large quantities per farm. This is due to the intensive labour involved in creating the product and ensuring equipment is properly cleaned to avoid contamination in other processed feeds.

Consider your own farm protocols. Facilities should have adequate air exchanges to ensure good ventilation. Pens should be cleaned frequently to avoid ammonia build up. Overcrowding should be avoided as this will increase the pathogen build up in the air space to a point where recommended air exchanges will not be enough to keep the air clean. Sick animals can be separated from the main group to

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avoid disease spread, and new arrivals can be isolated for disease monitoring before joining the herd. A vaccine program can be developed with your herd veterinarian to protect against respiratory disease (Inforce, Nasalgen, BoviShield, Triangle, One Shot, Protivity just to name a few...). In some cases, laboratory testing of samples can be useful in identifying specific causes of pneumonia to aid in tailoring the vaccine program to your farm. All calves should receive adequate colostrum (4L within 12 hours of birth for Holsteins) and animals have a good plane of nutrition to allow their immune system to function at its best. Individual sick animals can be identified early and administered prompt treatment... of the correct medication at the correct dose given by the correct route. In the face of a pneumonia outbreak, prophylactic treatment with long-acting injectable antibiotics may be a useful alternative to medicated feed that avoids many of the challenges. Consult your veterinarian on how to utilize these options effectively.

The team of vets at Heartland is here to help you navigate this change, and we are happy to help you with any questions you may have.

Dr. Melanie Thompson

Upcoming Holiday Hours

The clinic will be closed Monday February 17, 2025 for Family Day. As always, veterinarians will be available 24-7 for emergency service.

Save the Date – ANNUAL DAIRY DAY

This year's Dairy Day has been planned for Wednesday February 26, 2025.