



Successful Preventive and Treatment Measures for CRD In Poultry During the Cold Season

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Introduction

- Respiratory infections in chickens and turkeys are observed globally, particularly in regions that produce poultry in temperate areas during the winter season.
- CRD, or Chronic Respiratory Disease, is a highly significant ailment in the chicken industry that is caused by the bacteria *Mycoplasma gallisepticum*.
- The organism mostly inhabits the respiratory tract and proliferates in the lung, trachea, and air sacs. The prevalence of CRD, as determined by gross lesions, ranged from 9.87% to 12.84%.
- The primary economic costs associated with CRD primarily stem from elevated death rates, carcass condemnation, diminished egg production, lower hatchability rates, impaired feed efficiency, and reduced weight gain.
- The transmission of Chronic Respiratory Disease (CRD) in poultry primarily occurs through horizontal or vertical routes.
- The diagnosis is established by considering the hen's medical history, clinical signs, and symptoms, as well as post mortem findings as potential contributing factors.
- Dust, ammonia, and other gasses, along with other factors related to inadequate ventilation, can serve as predisposing factors.
- Major clinical signs of *Gallisepticum* in hens include those that are associated with respiratory distress, such as coughing, sneezing, and rales that range from mild to severe when they are present and having trouble breathing in air.



Another Crucial Clinical Manifestation of The Disease

- Swelling of the hocks and shank, as well as unusual discharge
- Swollen eyelids, ocular discharge, and loss of sight are significant signs and symptoms for these disorders.
- Mycoplasma Synoviae and Mycoplasma Gallisepticum infections can result in substantial financial losses in chicken due to chronic respiratory illnesses, diminished feed efficiency, stunted growth, and reduced egg production.
- A commonly utilized molecule in the treatment of clinical respiratory diseases (CRD) is tiamulin, which is a pleuromutilin antibiotic. The administration of tiamulin, along with chlortetracycline, has shown a notable decrease in the severity of clinical respiratory diseases after treatment. Additionally, there is a significant reduction in the number of Gallisepticum bacteria in the respiratory tract following treatment.

Optimal Solution for Managing Chronic Respiratory Disease (CRD) In A Farm

- Tiamulin or Tiamulin hydrogen fumarate, Tilvalosin, Tilmycosin
- Worked well against Mycoplasma gallisepticum and Mycoplasma Synoviae
- Absorbs quickly and reaches target tissue
- Minimizes CRD-related illness and death
- Chlortetracycline can be used to boost activity.
- No time limits for withdrawals

Improves

- The benefits include improved hatchability and chick quality for breeders, increased egg production for layers,
- A marked decrease in mortality for broilers, and an improvement in feed conversion ratio (FCR) broilers.



Important Oil to Help with the CRD:

- Oils derived from plants, known as essential oils, are a type of water-soluble plant extract. Essential oils are becoming more relevant as a supplement to or replacement for conventional methods, especially considering the present situation around antibiotic use and the rise of resistant bacteria.
- These compounds have a variety of beneficial benefits, including as antibacterial action and beneficial effects on digestion and breathing. Not only do essential oils have different effects on the respiratory systems, but many of them also have antibacterial qualities.

Reference

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