

Mycoplasma in Beef Cattle in Ontario

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Abstract

Mycoplasma disease complex or Chronic Pneumonia Polyarthrititis Syndrome (CPPS) has become widespread in North American feedyards. CPPS presents as a progressive, non-responsive pneumonia and/or an acute onset non-responsive tenosynovitis. In Ontario many producers, as a result of CPPS, now expect a 2-3% death loss (up from 1%) in high risk cattle. Aggressive and varied feedyard vaccination and treatment strategies have not prevented the increase in health costs. That other management factors may be more important is evident because a subgroup of producers can start high risk cattle and consistently experience lower than average losses and health costs. The identifiable factors associated with improved animal health are described. Producers experiencing unacceptable animal health costs who are unable or unwilling to make the necessary management adjustments must either purchase lower risk animals or absorb the higher cost associated with CPPS.

An Overview of CPPS

The Mycoplasma disease complex, also referred to as Chronic Pneumonia Polyarthrititis Syndrome (CPPS), is a distinct and well recognized clinical syndrome which is similar in Ontario feedyards as described in other cattle feeding regions of North America. The typical presentation is a progressive non-responsive pneumonia, often with an insidious onset and/or an acute onset non-responsive tenosynovitis. Unweaned sales barn calves and light "first move" yearlings, both with no prevaccination history, are at highest risk for disease.

CPPS has changed the disease pattern in these high risk cattle in Ontario. "Wrecks" (higher than 5% death loss) are more common, delayed in onset and prolonged in duration. Many producers now expect a 2-3% death loss (up from 1%) and recognize that the majority of deads and chronics may not present for weeks and even months after arrival.

Aggressive on-arrival medication and vaccination strategies and every conceivable antibiotic treatment protocol have been unsuccessful in controlling CPPS. Limited benefit has been obtained from feedyard use of newly approved and improved vaccines and antimicrobials.

That other management factors play a critical role in CPPS is evident because there is a subgroup of producers who can consistently start high risk cattle without wrecks and with lower than average death loss. Management factors associated with improved animal health include:

- The main animal caretaker is competent, motivated, actively involved with the cattle and has the authority to make management decisions.
- The operation is capable of compensating for bad weather.
- The starting ration is palatable, hay based, moderate energy and contains minimal silage.
- Feed bunk design is suitable for size of calves and there is adequate bunk space (up to 18 inches per calf).
- Calves are started in grass paddocks with shelter or in barns with high roofs and walls to provide a large reserve air capacity.

Most cattle buyers believe "twice moved" cattle, regardless of age or size, will start with fewer health problems due to naturally acquired immunity. Verified prevaccinated calves (in particular if a complete herd immunization program is in place) also reduce health problems. Backgrounded cattle seldom are a problem.

Conclusion

Producers experiencing unacceptable health problems who are unwilling or unable to make the necessary management adjustments must either purchase lower risk cattle or absorb the higher costs associated with CPPS.

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