Use of Antimicrobials and Vaccines For Bovine Respiratory Disease In Western Canadian Beef Herds

In 2014, 100 cow-calf herds in Alberta, Saskatchewan, and Manitoba reported antimicrobial usage (AMU)¹. In 2017, vaccine usage was studied in the same herds. Median size of herds was approximately 230 cows².

Respiratory Disease is a Major Reason For AMU In Western Canadian Beef Cattle



of herds used AMs in pre-weaning Calves. Less than 5% of calves were treated for respiratory disease in 48% of herds.



of herds used AMs in Cows. Less than 5% of cows were treated for respiratory disease in 30% of herds.



of herds used AMs in Bulls. Less than 5% of bulls were treated for respiratory disease in 12% of herds.

AMU In Pre-Weaning Calves:

Florfenicol, with (53% of herds) or without (20%) flunixin meglumine

Oxytetracycline (15%)

Macrolides (tilmicosin 10%, tulathromycin 9%)

AMU In Cows

Florfenicol with (**16%** of herds) or without (**5%**) flunixin meglumin

Macrolides (tilmicosin 2%, tulathromycin 3%)

Respiratory viral vaccines						
	BVD	IBR	PI-3	BRSV		
Pre-Weaned Calves	82%	85%	85%	85%		
Cows	91%	91%	86%	86%		
Bulls	55%	55%	53%	53%		

Respiratory Bacterial Vaccines

	Mannheimia hemolytica*	Pasteurella multocida	Histophilus somni
Pre-Weaned Calves	67%	17%	45%
Cows	4%	2%	22%
Bulls	2%	1%	14%

Conclusions

Respiratory disease is the leading cause of AMU in calves, with florfenicol the most frequently used AM. Given the devastating impact of IBR and BVD in a naive herd, more herds should be vaccinating for these viruses, with particular attention to herd bulls.

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