



Impact of Bovine Respiratory Disease During the Receiving Period on Feedlot Performance and Carcass Traits

**T.C. Stovall, D.R.
Gill, R.A. Smith and
R.L. Ball**

Story in Brief

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Key Words: Health, Morbidity, Receiving Period, Carcass Value

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the Willard Sparks Beef Research Center, Stillwater, OK, through finishing in commercial feedlots in the Oklahoma and Texas panhandle to harvest. Management of the calves during the receiving period were discussed in a previous paper (Stovall et al., 1999).

Cattle included a sub-sample of 406 head (Trials 1 through 7) from the 906 head used in the previous study (Table 1). Feedlot gain (LOTADG) was calculated from shrunk body weight at the end of the receiving period (42-d wt) to final live weight. Overall average daily gain (TOTALADG) was calculated from the start of the receiving period to final live weight.

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Value Determination. Carcass values were calculated using a basic grid (Table 3) from the Excel Corporation, based on a yearly average U.S.D.A. Choice to U.S.D.A. Select spread of \$7.50/cwt. Gross values were determined by multiplying carcass value by hot carcass weight. A final net value was calculated by subtracting the medical cost from the gross value.

Results and Discussion

Finishing Performance. Final weights and gains of cattle classified by number of antibiotic treatments for BRD during the receiving period are presented in Table 1. No significant differences (2.83 vs 2.85 vs 2.90 for 0, 1, and >1 treatments, respectively) in LOTADG were detected. Similarly, performance was not different among treatment groups in TOTALADG despite lower feedlot entry weight for heifers that had been treated with antibiotics more than once. These results might suggest that calves that exhibited signs of BRD and received antibiotic treatment did not depress subsequent feedlot performance.

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Choice or above for heifers that received multiple treatments (66.19 vs 59.36 vs 41.11 for 0, 1, and >1 treatments, respectively).

Carcass Value. Economic losses associated with BRD and treatment for BRD are summarized in Table 1. The decrease in marbling score lowered ($P=.05$) carcass value by a mean of \$2.31/cwt of carcass. Combined with the reduced carcass weight, gross value was decreased by about \$4 for heifers with one treatment for BRD and \$19 for heifers receiving more than one treatment for BRD. Medical costs for these groups averaged \$7.48 and \$18 (Table 1). Combined with gross value for the carcass, these medical costs mean that when compared to untreated heifers, heifers treated once or more than once netted \$11.48/head and \$37.34/head less, respectively.

Implications

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Initial wt (0	464.72	464.72	464.72				

d), lb							
Receiving 42-	554.02	555.24	541.45	4.30	.6	.009	.003
d wt, lb					7	7	3
Final wt, lb	1094.2	1093.1	1089.0	13.6	.9	.73	.78
	0	7	4	8	1		
LOTADG,	2.83	2.85	2.90	.07	.6	.40	.57
lb/d					1		
TOTALADG	2.70	2.73	2.70	.06	.5	.99	.73
, lb/d					9		
Hot carcass	705.76	705.10	702.43	8.82	.9	.73	.78
wt, (HWT) lb					1		
Marbling	288	266	249	.15	.0	.02	.31
score ^a					3		
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