

Haskell County Animal Hospital

Animal Health Update

Bill Hessman DVM
P. O. Box 876
Sublette, Ks. 67877
620-675-8180

MASS TREATING DOES IT PAY?

The new term for mass treating is metaphylaxis. The purpose of metaphylaxis is to reduce morbidity and mortality in newly received calves. The ultimate question is whether it is cost effective or not. Many studies have shown a consistent return on investment in high-risk cattle. There are a few studies that show return in low-risk cattle.

To understand how metaphylaxis can be cost effective we need to understand the costs of sickness in recently received calves. We now have many years of information from the Texas Ranch to Rail program that shows what the costs of treating BRD are. The first episode of BRD costs producers close to \$90! Of this cost only about \$22 comes from medications. The balance of the loss is from less performance. About \$68 is lost from performance from the first episode of BRD.

Another study by Morck *et al.* reported that healthy calves gained 0.39 lb more per day during a 90-day post arrival period than did cattle that were treated once for BRD and responded. Cattle, which were, treated two or more times gained 0.73 lb less per day than the healthy cattle.

Wittum *et al.* in a study completed at the Meat Animal Research Center in Clay Center, Nebraska showed that cattle with lung lesions at slaughter had a 0.17 lb reduction in ADG over a 273-day feeding period. The most important finding from this study was that 68% of the animals with lung lesions were never treated for BRD at anytime during their life. You can conclude from this that those that did show clinical BRD had a greater reduction in ADG, which is confirmed in the Morck study. The Wittum study also shows us that sub-clinical illnesses are much more prevalent than we ever thought. Sixty-eight percent of slaughtered animals had lung lesions but never showed clinical illness in this study. Of the cattle that were treated for clinical BRD, only 78% had lung lesions at slaughter.

In a third study by Canadian researchers, (Bateman) they saw a 0.14 reduction in ADG in BRD treated cattle over a 235 day feeding period.

Using the Wittum data the total weight loss during a 273 day feeding period is 46 lbs. At \$70/lb this is a loss of \$32/head from all animals having lung lesions, with or without having had clinical BRD.

Now that we know the potential losses, what are the costs to reduce these losses? Depending on the therapy used the costs of metaphylactic treatment range from \$3 up to \$8 per head. Investing \$8 to return as much as \$32 sounds like a good investment to me. This return will not occur on all sets of cattle but using mass therapy on high-risk arrivals does pay.

There are even studies that show return in lower-risk arrivals. Remember in the Wittum study, 68% of cattle at slaughter had lung lesions from sub-clinical illnesses. These calves never showed signs of BRD. With this high of percentage of sub-clinical illness it is easy to see why metaphylactic therapy returns money to our clients. I am not proposing we mass treat all arrivals, just re-emphasizing the potential benefit in medium to high-risk cattle.

What are the best products to use for metaphylaxis? Long acting tetracyclines (Biomycin) are good but I believe Micotil is the best. Multiple studies have shown Micotil is the most effective product for mass treating in most instances.

We need to remember that metaphylactic treatment works best when used early in the incubation phase of a disease. It is also beneficial when you expect more stressors than normal on newly arrived calves. Metaphylactic treatment combines veterinary consultation and evaluation of factors such as animal age, source, shipping history, environmental conditions, conditions of animals on arrival and historical data on similar sources of animals.