K-STATE Research and Extension

Program Focus Team Action Plan

2019-2020 Livestock Production Program Focus Team

Vaccine Storage and Handling

The Situation

Despite advances in animal health product technology, overall BRD morbidity and mortality in feedlot cattle has remained stagnant. Research shows that less than 30% of producers have a storage site for vaccines and other pharmaceuticals that maintains the correct temperature range. Even fewer have a system to control temperature at chute-side during administration. Improper storage and administration of vaccines and animal health products reduces efficacy of said products. Effective use of vaccines is an important tool in the effort to reduce the need for antibiotic use in cattle.

Short-Term (Knowledge)

Increase the knowledge of producers of the frequency of improper storage conditions.

Increase knowledge of the potential problems created by improper storage.

Increase knowledge of proper cleaning methods for syringes

Increase knowledge of proper administration of parental animal health products

Indicators

~ Producers demonstrate increased knowledge of frequency of improper storage condition and problems created by incorrect storage temperature

~ Producers demonstrate increased knowledge of proper cleaning methods for syringes

~ Producers demonstrate increased knowledge of proper administration of parental animal health products

Medium-Term (Behavior)

Producers maintain a thermometer in refrigerators where vaccines are stored and check the reading regularly.

Producers have a storage system for use chute-side to ensure vaccine quality immediately prior to use.

Indicators

~ Percentage of producers that now have and check a thermometer in their refrigerator.

~ Percentage of producers that report they now have a chute-side storage system for vaccines.

Long-Term (Change in Condition)

Reduced incidence of disease on cow/calf, stocker, and feedlot operations

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

Indicators

~ Reduced weaned calf death loss

Public Value

Stronger immune function leads to improved animal welfare throughout the production chain. Reduced risk of illness also reduces the need for antibiotics through every stage of the industry. Reduced production costs, and carcass trim from injection site lesions improves beef production efficiency which improves economic sustainability of the industry and rural communities.

Outputs

- We will reach clientele via workshops, demonstrations, individual consultation, mass media and industry events.
- Development of plans for creating a home made chute-side vaccine storage container.
- Video demonstration of making chute-side vaccine storage container.