INFO SHEET
Veterinary Services
APHIS
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Attitudes Towards Pre-arrival Processing in U.S. Feedlots

Management of cattle prior to feedlot arrival may affect the level of sickness and death loss after cattle arrive on the feedlot. Procedures designed to improve an animal's likelihood of successful adaptation to the feedlot environment are often referred to as *pre-arrival processing* or *preconditioning*. Pre-arrival processing may include such procedures as vaccination against respiratory disease pathogens, castration of bull calves, and conditioning animals to a feed bunk. Benefits of pre-arrival processing may be greatest for cattle weighing less than 700 lbs on arrival at the feedlot.

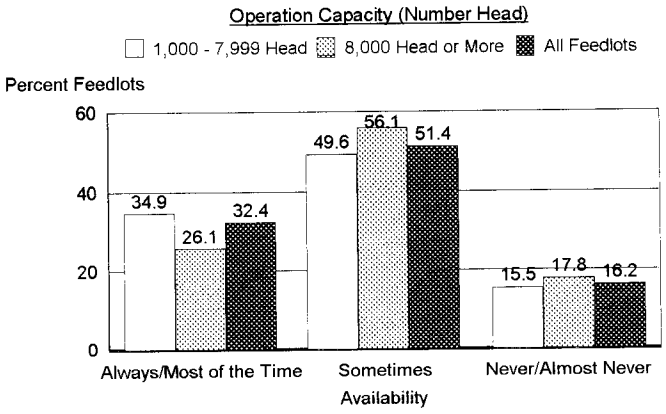
In the fall of 1999, the USDA's National Animal Health Monitoring System (NAHMS) conducted a study of feedlots with 1,000 head or more capacity within the 12 leading cattle feeding states.[1] These operations represented 84.9 percent of United States feedlots in 1999 with 1,000 head or more capacity and contained 96.1 percent of the U.S. feedlot cattle inventory on January 1, 2000, on feedlots with 1,000 head or more capacity. An initial questionnaire was administered by National Agriculture Statistics Service (NASS) personnel. At this time, a sample of feedlots agreed to participate in a second phase of the study. A state or federal veterinary medical officer or animal health technician administered a second questionnaire to participating feedlots. Feedlots were grouped into two size categories based on animal capacity (1,000 to 8,000 head and 8,000 head or more head.) Data were weighted to be representative of the feedlot industry with 1,000 head or more capacity in the 12 participating states.

Most feedlots were of the opinion that pre-arrival procedures were *somewhat* to *extremely* effective in reducing sickness and death loss in calves weighing less than 700 lbs. A majority of feedlots (67.2 percent) perceived that weaning calves at least 4 weeks prior to feedlot arrival is *extremely* or *very* effective in reducing sickness or death loss. Approximately two-thirds of feedlots believed introduction to a feed bunk, respiratory vaccines given at least 2 weeks prior to weaning, and calves castrated and dehorned at least 4 weeks prior to shipping were *extremely* or *very* effective in reducing sickness or death loss.

More than 64 percent of feedlots were aware of the vaccination history of the last group or shipment of cattle that arrived at their feedlot More than one-half of these groups of cattle were vaccinated against respiratory and clostridial diseases. Approximately one-third of feedlots were unaware of the vaccination history for the last group of cattle, whether they had been administered a dewormer, if they were introduced to a feed bunk, or if they were implanted. Additionally, 56.5 percent of feedlots were unaware of the mineral supplementation history of this group of cattle. Some care should be used when interpreting these results because the collection period for information was mid-October 1999 through mid-January 2000. Although not addressed by this study, the proportion of feedlots that were aware of pre-arrival

Figure 1

Percent of Feedlots by Availability of Pre-arrival Processing Information* and by Operation Capacity



* Such as vaccinations, implants, deworming history, or mineral supplementation.

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[1] Arizona, California, Colorado, Idaho, Iowa, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Washington.

procedures performed on the last group of cattle may vary throughout the year.

It appears that pre-arrival processing information, such as vaccinations, implants, deworming history, or mineral supplementation, is available at least *sometimes* for the vast majority of feedlots (Figure 1). Overall, 73.8 percent of feedlots received pre-arrival processing information either *always or most of the time* or *sometimes*.

Large feedlots were more likely to consider pre-arrival processing information as *very* important compared to small feedlots (70.2 percent compared to 54.6 percent, respectively, Figure 2). Overall, 86.7 percent of feedlots reported that pre-arrival processing information was *very* or *somewhat* important. Only 3.6 percent of large feedlots felt that pre-arrival processing information was *not* important.

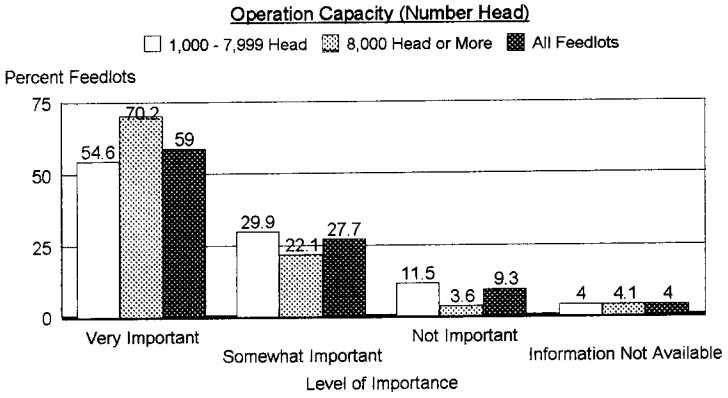
Thirty-seven percent of feedlots *always or most of the time* changed their management or processing procedures of new arrivals based on pre-arrival processing information (Figure 3). More than two-thirds (69.5 percent) of feedlots at least *sometimes* altered their management or processing of cattle based on pre-arrival processing information. Even though 86.7 percent of feedlots considered pre-arrival processing information important, 30.5 percent of feedlots *never or almost never* changed the way they manage or process new arrivals.

Large feedlots were more likely than small feedlots to provide information back to sources of cattle in their feedlot (90.5 percent compared to 50.0, respectively). This information may have included occurrence of disease, animal performance, or carcass characteristics and might be useful to cattle producers in developing pre-arrival management of cattle. Overall, nearly one-quarter (24.7 percent) of feedlots *always or most of the time* returned information to the cattle sources. Some of the lack of returning information may be due to the sources for some feedlots being intermediary owners or holders who have little opportunity to impact animal health.

Most feedlots reported that information regarding pre-arrival processing was available at least *some of the time*. Additionally, most feedlots felt that this information

Figure 2

Percent of Feedlots by Level of Importance of Pre-arrival Processing Information* and by Operation Capacity



* Such as vaccinations, implants, deworming history, or mineral supplementation.

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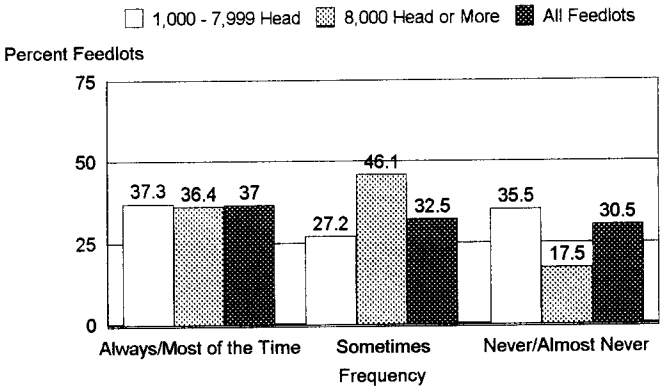
Figure 3

Percent of Feedlots* by How Often They Changed Their Management or Processing Procedures Because of Pre-arrival Processing Information and by Operation Capacity**



* Of those feedlots that received pre-arrival processing information.
** Such as vaccinations, implants, deworming history, or mineral supplementation.

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was important and many changed their management because of it. This study did not document whether or not there were beneficial affects on animal health; however, a majority of feedlots felt that certain pre-arrival procedures were indeed beneficial.

For more information, contact:

Centers for Epidemiology and Animal Health
USDA:APHIS:VS, attn. NAHMS
2150 Centre Ave., Bldg. B, MS 2E7
Fort Collins, CO 80526-8117
(970) 494-7000
E-mail: NAHMSweb@aphis.usda.gov
http://www.aphis.usda.gov/vs/ceah/cahm

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