

# INFO SHEET

## Veterinary Services

United States  
Department of  
Agriculture

Animal and  
Plant Health  
Inspection  
Service

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## Weaning Management in Beef Cow-Calf Herds

Besides calving, the most stressful period in the life of a calf is at weaning. This time period is vital to the cow-calf producer also. Weaning is the end of the production process for most operators and represents the majority of annual income. Minimizing the stress the calf faces helps ensure that the year's work was not wasted and the calf continues through the production process to a consumer's plate.

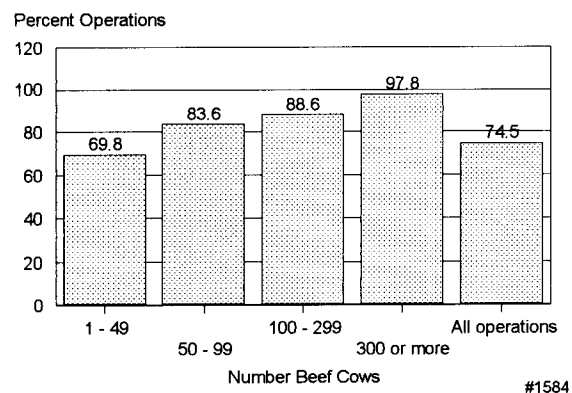
The USDA's National Animal Health Monitoring System (NAHMS) collected data on weaning management of beef calves. Phase one of the NAHMS Beef '97 Study included 2,713 producers from 23 of the leading cow-calf states<sup>1</sup>. This study represented 85.7 percent of U.S. beef cows on hand January 1, 1997, and 77.6 percent of U.S. operations with beef cows. Phase two of the study focused specifically on herds that had five or more beef cows and included 66.3 percent of all operations with beef cows and 85.0 percent of all beef cows in the U.S. Producers in phase two were asked specific questions about their castration and vaccination programs.

The easiest way to reduce stress at weaning is to minimize other management processes accomplished at the same time. Preweaning practices such as castration, dehorning and vaccination have been called preconditioning. By minimizing the number of procedures used at weaning, and thereby the amount of stress on calves, disease occurrence can be minimized. The preconditioning program should be tailored to the specific operation.

Castration of bull calves can be stressful, particularly on older animals. Therefore bull calves should be castrated as early as possible. According to the

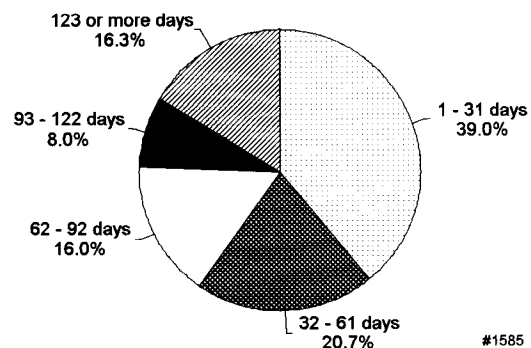
NAHMS Beef '97 phase two, 25.5 percent of operations did not castrate bull calves before they were sold. Calves from smaller operations were less likely to be castrated than those from larger operations (Figure 1). The average age of castration was 68 days. A wide range of ages was reported, varying up to 123 days or more (Figure 2).

Figure 1  
Percent of Operations that Castrated Male Calves Before Sale by Herd Size



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Figure 2  
Percent of Operations by Average Age Male Calves Were Castrated



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Dehorning is another stress that should be avoided at weaning. Slightly more than one-fourth (27.8 percent) of calves born during 1996 had horns. Only 61.1 percent of the non-polled calves were dehorned before being sold (Figure 3). The average age for dehorning was 130 days (Figure 4).

<sup>1</sup>Alabama, Arkansas, California, Colorado, Florida, Georgia, Illinois, Iowa, Kansas, Kentucky, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Virginia, and Wyoming.

Figure 3

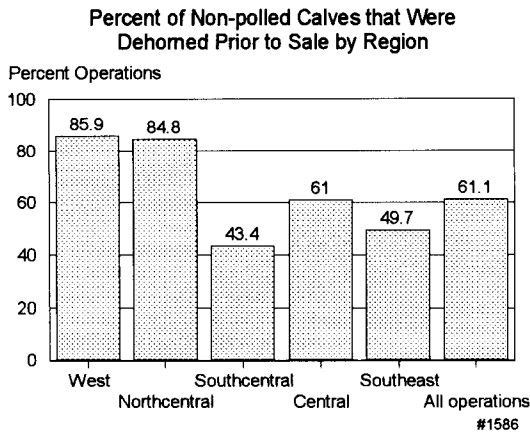
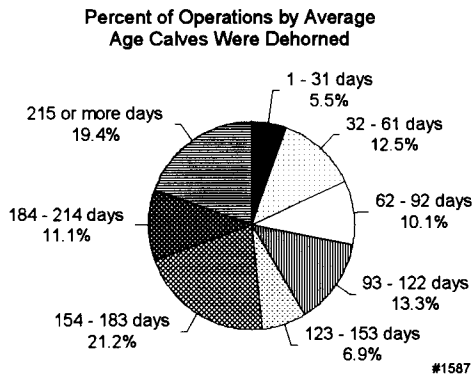
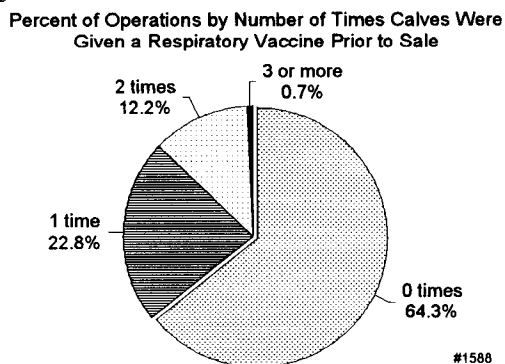


Figure 4



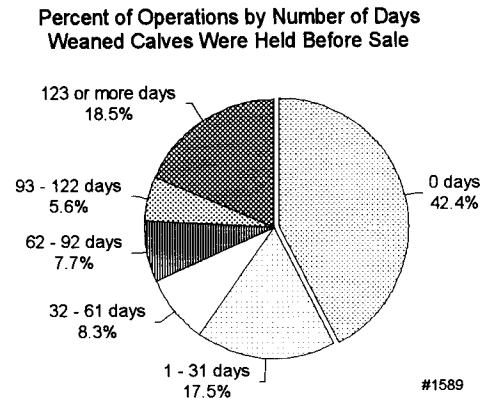
Shipping fever (or pneumonia) is the most common health problem affecting weaned calves. Vaccinating calves before they are exposed to the pathogens can reduce the incidence of pneumonia. Vaccinations should be accomplished before weaning or the stress of weaning may prevent an adequate immune response. Unfortunately most operations (64.3 percent) did not vaccinate calves for respiratory disease prior to sale (Figure 5).

Figure 5



Holding calves on the operation before shipping to a feedlot or sale can ease their transition from a milk and forage based diet to a concentrate diet. Not only are calves not stressed from shipping right away, but they also become accustomed to eating from a trough and drinking from a tank. This acclimation can help a calf achieve its full genetic potential in the feedlot. Less than one-half of operations (42.4 percent) did not, for

Figure 6

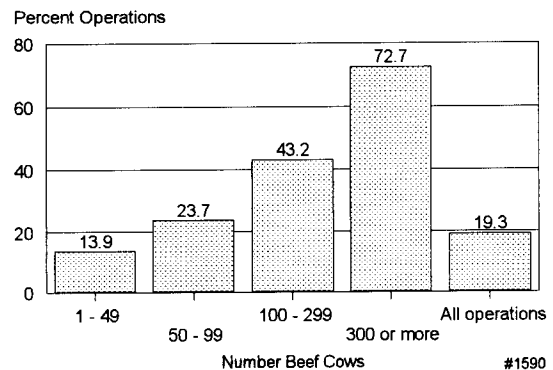


one reason or another, hold calves after weaning (Figure 6).

Many operations have not embraced a preconditioning program because of a perception that all rewards are seen by the next owner of the calf. However, a Colorado State University study has shown that a good health program and its communication to buyers can return \$1.00 to \$3.00 per cwt. more than a calf without a health program. Only 19.3 percent of operations provided any information to the buyer (Figure 7), and most of those who did provide information relied on oral (70.7 percent) rather than written (20.0 percent) documentation of the health program.

Figure 7

Percent of Operations that Provided Information About the Calf's Health Program by Herd Size



Today's consumers demand a high quality product for consumption. A good health program with optimal timing and documentation of management procedures will help ensure a quality product and appropriate rewards for the producer.

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