

Avoiding Disasters with Freestall Design

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Introduction

Mistakes in freestall design are commonplace, and a matter of inches can make the difference between a satisfactory stall design and a herd disaster. A systematic way of assessing a freestall from a cow's perspective is required to accurately identify the problem and provide a least-cost solution.

Materials and Methods

A five-point system of analyzing freestall design is presented. Steps involve determination of the following: 1) Is there adequate surface cushion? 2) Is there

adequate body resting area? 3) Is there room to "lunge and bob"? 4) Is there adequate room below and behind the neck rail? 5) Is the curb height appropriate?

Results and Conclusions

Four examples of freestall design and management problems are presented using the five-point system of assessment described above. For each scenario: 1) Color pictures will be used to depict the problem. 2) Stall dimensions and bedding type will be clearly shown. 3) Associated cow health problems will be summarized. 4) A Cow Comfort Index will be given. 5) A diagnosis will be suggested. 6) A solution to the problem will be described.

Using an Individual Cow Somatic Cell Count Diagnostic Algorithm to Investigate Herd Milk Quality Problems

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Introduction

When investigating herds with high somatic cell counts (SCC), how do we direct our advice to target areas with the biggest impact on herd profitability? Analysis of individual cow SCC from the current and previous six months Dairy Herd Improvement (DHI) recordings using Wisgraph to calculate a number of udder infection parameters; comparison of these data with benchmark performance for the top 10% of herds; and using the algorithm described below may help.

Materials and Methods

The algorithm follows a sequence of questions:

- 1) Is herd prevalence of infected cows predominantly chronic cows (>200,000 for at least the last two tests), or are there many new infections each month?
- 2) If herd new-infection rate is elevated, is this due to a high rate of fresh cows calving with a first SCC > 200,000/ml, or are the new infections occurring in cows which are already lactating?

- 3) Is the new infection rate in dry cows greater than that in heifers? If not, go to question 4. If it is, do the environments in which the heifers and cows are housed differ?
- 4) Is the new infection rate in heifers greater than that in dry cows? If so, do the environments in which the heifers and cows are housed differ?
- 5) Is the new infection rate in both heifers and dry cows elevated?

Results and Conclusions

This algorithm forms the basis of milk quality investigations performed by the University of Wisconsin-Madison, School of Veterinary Medicine. It has proven an effective way of structuring an action plan for an individual farm, which will have the greatest impact on milk quality over the shortest period of time.

Effect of Left Displacement of Abomasum Corrected by Toggle Pin Suture on Lactation, Reproduction and Health of Holstein Dairy Cows

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Introduction

This study evaluated the effect of left displacement of the abomasum (LDA) corrected by toggle pin suture (TPS) on lactation performance, reproduction and health in Holstein dairy cows in a commercial dairy farm.

Material and Methods

Cows diagnosed with LDA and corrected by the TPS procedure (188 cows) during the first 70 days postpartum were matched with control herdmates (186 controls) according to lactation number, calving date, and previous lactation 305-day mature equivalent milk yield. Cows were grouped according to parity and days-in-milk and fed the same total mixed ration throughout a 321-day lactation. Data collected included yields of milk and 3.5% fat-corrected milk (FCM); concentration and yields of milk fat; somatic cell count; and incidence of mastitis, abortion, death and culling, in addition to reproductive parameters.

Results

Cows affected with LDA corrected by the TPS procedure produced less milk and tended to produce less 3.5% FCM than control cows, but production decreased only during the first four months of lactation. Left displacement of abomasum did not affect the interval from calving to conception and conception rates, but extended the period from calving to first postpartum artificial insemination. Incidence of abortions and mastitis was not influenced by LDA. Cows affected with LDA remained in the study for a shorter period than their control herdmates, and a higher proportion of LDA cows were sold or died. Death and culling were more pronounced immediately after the diagnosis of LDA and the TPS procedure.

Conclusions

Further evaluation of LDA corrected by TPS is needed in different types of dairy management around the country.