

Effects of Facility on Udder Health

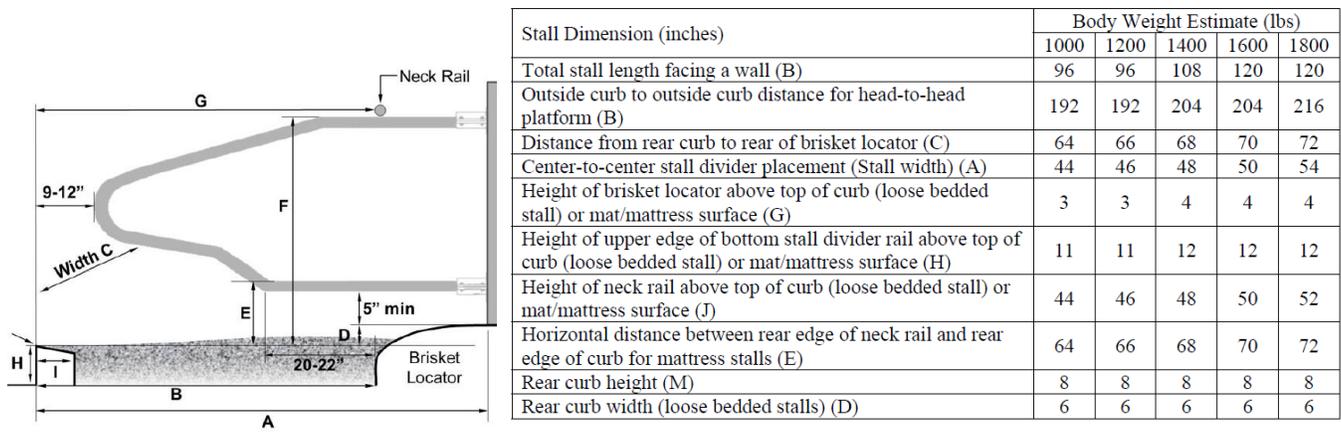
by Megan Thompson, DVM, Northern Valley Dairy Production Medicine Center

www.dairymed.com | www.facebook.com/northernvalleydairy

Over recent years, U.S. dairymen have continued to improve their herd bulk tank somatic cell counts but still fight clinical mastitis due to environmental pathogens. Environmental mastitis pathogens are found in manure and bedding. The bacteria living in these reservoirs enter the udder through teat canals during the housing period or during milking. Strategies to reduce clinical mastitis due to environmental pathogens can be summarized in 2 points: keep the cow clean in her housing environment and attach milking units to clean dry teats.

Facility design is an important element in keeping udders clean and bedding bacterial counts low. The freestall should be designed to accommodate the size of the cows using them and allow enough space for the cow to lunge forward when rising and lying down with no obstruction. The stall should also encourage correct alignment of the cow with manure landing in the alley. Important freestall dimensions to consider include the following:

1. Width (measured on center between divider loops)
2. Length (from rear point of curb to furthest forward point the cow can lunge to)
3. Distance from rear curb to brisket locator



Typical lunge space for a mature Holstein cow would be an additional 3 to 4 feet beyond the resting length, making the total required stall length again a side wall about 10 feet. In head-to-head stalls, a platform of 16-18 feet is recommended to allow the cow to lunge to the front while avoiding the cow in the opposite stall. Brisket locators are helpful for the alignment of the cow when lying in the stall, resulting in manure landing in the alley rather than the stall. However, care should be taken to avoid obstructing the forelimb when the cow rises. Brisket locators should not be higher than 4 inches above the stall surface.

Next month, we will continue the discussion on bedding.