

Calving Ease

MAY 2008

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Too Many Sick Calves

From an ideal point of view even one sick calf is one too many. But, you and I know that life is seldom ideal. However, there are times when it seems that there are entirely too many calves that require treatment for one malady or another.

Troubleshooting

When we start to look into a surge in sick calf numbers it is tempting to start out looking for “The Bug” that is causing the illness. A much more productive approach for trouble shooting is to focus on two big opportunities for improvement.

Immunity

One area of investigation is the level of immunity among calves. Most of the bacteria, viruses and parasites that cause calf illnesses are present in her environment nearly all the time. If this is true, doesn't it seem reasonable that a calf should be sick most of the time?

No, our calves are not sick most of the time. Immune defenses are strong enough to prevent infections. However, unanticipated changes occur. We drift away from the correct procedures or protocols. When this happens our defenses are compromised.

For example, there is a change in personnel. The new person was told to feed two bottles of colostrum to newborn calves. However, he understood that he was to feed two quarts, only half as much as is called for by the farm's protocol.

Or, the new person was told to use a warm water bath to heat up refrigerated colostrum. However, he understood using the water bath but missed the part about using moderate water temperature – you can guess what went wrong – he used the hottest water available because it warms up the colostrum more quickly. In both cases, an unanticipated change occurred due to breakdowns in communication.

Protocol drift happens more slowly but with the same results. Newborn calves end up with inadequate passive immunity. We can monitor immunity levels achieved through colostrum feeding by blood testing. See www.atticacows.com in the Calf Facts section; scroll to “Testing for transfer of passive immunity” for more details.

Pathogen Exposure

Immunity is only half of the picture to be examined when trouble shooting. A second area of investigation is the level of pathogen exposure among calves. Low levels of many pathogens are in a calf's environment constantly. However, we frequently drift away from protocols designed to keep these levels low. Or, we make a change that has unintended consequences.

For example, we are short one or two persons when planting or harvesting crops in the spring. By pulling these folks away from their dairy duties we are able to cover our cropping needs. However, this can result in calves being moved out of calving areas more slowly. Or, bedding that normally gets done daily now is only done once a week. In both cases bacterial exposure for calves increases dramatically.

Equally significant are lapses in colostrum management and equipment sanitation. A colostrum program may start out chilling colostrum to 60° within 30 minutes after collection before it goes into the refrigerator. After a few months this turns into 60 minutes and a couple of months later no prechilling gets done at all. Coliform bacteria counts go over 50,000 cfu/ml.

An equipment cleaning program started out following a rinse-wash-rinse-dry protocol (see www.atticacows.com in the Calf Facts section scroll to "Washing Milk Containers Protocol). Gradually the recommended temperatures for rinsing and washing are no longer observed. Pails are stacked inside each other rather than allowed to dry upside down.

Or, we decide that checking for BVD-PI calves is an unnecessary expense. Then, a calf comes along that is a BVD-PI animal. Her discharge of virus particles suppresses the immunity of other heifers. Then, we see a surge in all kinds of illnesses related to this high exposure to BVD virus particles.

Bottom line

The least productive approach when experiencing a surge in calf illness is to go on a witch hunt for "The Bug." More productively, we can:

- Check out immunity status of calves and make sure compliance for our colostrum management protocols is good.
- Check out procedures designed to limit pathogen exposure – are they working?

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