

NAVAN VETERINARY SERVICES – OCTOBER 2013 NEWSLETTER

Late summer, early fall is always a good time to think about respiratory vaccines. Cool nights and warm days bring an annual stress to dairy cows and calves, as barns begin to close up and air quality begins to suffer. Less natural ventilation might cause increasing levels of ammonia in calf/heifer pens or higher levels of stale humid air as compared to summertime.

Cows and calves with longer hair coats will begin to feel damp this time of year. Passing your hand over the back of unclipped calves will show you how wet they can be. It seems that the stress on these damp animals as they try to keep warm at night and cool during the day is partially responsible for them becoming more susceptible to pneumonia. Add on top of this the fact that in some vaccination programs, fall is when the herds protective immunity is at its lowest. Keeping cows and calves clipped this time of year will go a long way to keeping them healthy.

The respiratory vaccines are classified as either killed (Triangle 9, Cattlemaster) or live (Bovishield, Express or Pyramid). Both types of vaccines, if used properly are very effective to prevent or minimize the effects of pneumonia (keeping in mind that vaccines cover the 9-10 major agents of pneumonia, but not all of them). Also, each component of the vaccine will provide different levels and durations of protection. This means that even though you may be faithfully vaccinating every 12 months, parts of the vaccine may last 6 months, 9 months or 12 months. With killed vaccines calves should be vaccinated at 6 months of age (typically when maternal antibodies are thought to be gone) and boosted 2-4 weeks later, and then done annually, not 13 or 14 months later. If for some reason calves (or cows) go longer than 12 months between vaccinations with a killed product, they need to be given a 2 dose series again.

Calves that are less than 6 months of age today will likely not be vaccinated. If you wait until next year, these calves will be 12-17 months of age, may be bred or pregnant and have never seen vaccine. This is now a breakdown in a protocol can occur. It is critical that users of killed vaccines booster their young stock every 6 months. Calves that are too young today get vaccinated in 6 months rather than 12 months. Dairies that have switched to live vaccines don't usually have this problem. Calves are vaccinated quite young with either intranasal products (Inforce III) or injected in groups of 5-10. There is not a seasonal vaccinating time for cows with live vaccines. They are done either as fresh animals (min 30 DIM) or as dry cows depending on the individual farm issues.

We feel that using live vaccine is a better strategy as the "herd" immunity is always fairly higher. Outbreaks in pneumonia often occur when the protective level of the entire herd is low. (like in the fall when cows are due for annual booster). As with most vaccines, the cows will often have a slight fever and subsequent appetite and milk drop. This is normal, but difficult to accept when fall milk incentives are an issue. What we often see is a delay in vaccinating the herd with killed product until the end of fall incentives. Cows need their immune system functioning well as the weather transitions from warm to cold. Not when the weather has stabilized. Another good reason for switching to live vaccine use.

So, to summarize, both vaccines are effective, each has their pros and cons. Don't delay fall vaccines because of milk incentive days, cows need it now. Never go beyond 12 months with killed vaccine. Don't vaccinate fresh cows less than 30 DIM with live product and keep cows and calves clipped this time of year to help reduce environmental stress that can lead to pneumonia.

There will be a CQM classroom training session held at the clinic in October. We recommend preparing for CQM 6 months prior to your assigned validation month. If you are interested in attending the classroom session please contact the clinic.