

Calving Ease

July 2016

By Sam Leadley of Attica Veterinary Associates



Managing Protocol Drift

- What is “protocol drift?”
- How can we find protocol drift?
- How can we reduce the pressures that create protocol drift?

What is “Protocol Drift?”

We all know there will always be differences between what we plan and what actually happens on the dairy. The dairy may have a specific procedure for mixing milk replacer; that’s our plan. The step-by-step procedure, often called a protocol, specifies what to do, the sequence of steps and related standards for performance. For example, step one may say to fill the container one-half full of 120° water. Step two specifies the weight of milk replacer powder to add before manually blending the water and powder. Step three is to add water to fill the container using the appropriate temperature water to end up with a 105° mix to feed the calves.

Example #1 of protocol drift: A worker has discovered that he can reduce the manual mixing time by using 150° water rather than the water temperature specified on the milk replacer tag. Then, uses cooler water to achieve the 105° feeding goal. Example #2: Another worker innovated by eliminating the manual mixing by using high pressure water – dump in powder and blast with water from a hose. Hotter water, 170°, works even better for mixing using the blast mixing method - the original protocol is no longer being followed. End result? We have a really poor product being fed to the calves.

We “drifted” away from the original protocol in a number of small steps.

How can we find protocol drift?

Observation in the context of the job is the gold standard. Go where the job is being done and watch – it is that straight forward. It is very unreliable to quiz workers about what they “should” do.

Standards for valid observation include:

1. Schedule regular observation times – put it on a calendar. Unplanned observation often turn into no observation until a crisis occurs.
2. Make sure that it is possible to do the job following the protocol. In the example above, are the required containers present, is the required temperature water available in the quantity needed, if

scales are used for powder do they work properly, is the whisk used for manual mixing present, is the rapid-read thermometer used to check final temperature of the mix present and accurate?

3. Observe actual behavior. It is not acceptable to just talk about intended actions. Ideally, for the examples above, as the supervisor you are present when milk replacer is being mixed.

How can we reduce the circumstances that create protocol drift?

1. Periodically review the time available to do the job. For example, over weeks or months the person whose job it is to mix milk replacer may be assigned additional tasks (dehorning, vaccinating, sorting heifers, bringing cows up to the milking parlor, cleaning the holding area between groups, feeding other animals). In order to get calves fed on time and save time mixing milk replacer they introduce short-cuts like using overly hot water. Having too much to do is one of the most common reasons for departing from standard protocols.
2. Consistently provide active and immediate feedback on job performance. No feedback is frequently interpreted as passive approval. Waiting until job performance degrades to the point where there is a crisis in calf survival, health or growth is a “head-in-the-sand” approach is really non-management.
3. Maintain an open communications environment. Workers need to know that when they tell the boss about broken equipment that the response will not be to kill the messenger. Hot water heaters do break down. Thermometers get broken. Scales have to be replaced. Even if the problem is one of too little time to do the job properly the worker(s) need to know it is acceptable to share this information with the “boss.”
4. Schedule time for training and re-training. It has been shown that protocol compliance is higher among employees that understand why the job must be done in given steps in a certain order rather than just how to perform the steps. Knowing “why” can be just as important as “what.” Scheduled re-training has more value than sporadic, crisis initiated sessions that have a strong “fix-it” orientation.
5. Accommodate variations in literacy skills and language comprehension in order to get good communication during protocol training. Pictures may be needed to assure adequate awareness of each step in the protocol. You can be sure that any gaps in understanding will be filled in with imaginative innovations not all of which will be good.
6. Make protocol compliance as easy as possible. Have cleaning chemicals convenient to the washing station. Provide a brush at each sink used to wash calf feeding equipment. Purchase a colored bucket to weigh milk replacer powder – one that is used exclusively for that job so the tare is a constant. If moving water use a hose rather than carry pails.

Thanks to Merck Animal Health for their support of Calving Ease calf management newsletter.