



During the first ten years I was in practice, I constantly saw new antibiotics become available to treat infectious diseases. In the past thirty years, I've seen fewer and fewer products available to producers, especially dairy producers, and the requirements for use are getting stricter and stricter. California just removed all drugs from sale except veterinary prescription. This means no penicillin will be sold at the feed store. In California, it will only become increasingly more strict. Every time someone makes a mistake and sells an animal that has a residue, (people do make mistakes), the regulators have more reason to further regulate drug usage. We all need to avoid residues and try to change management to minimize drug usage.

Drug and Vaccine handling review:

Time flies by as good habits slowly erode. This is especially true in a busy environment like a dairy farm, which I would say is the most chaotic work environment in the world short of a battle field in a war zone. Once in a while it helps to review how products are handled so they work, because after all, you purchase them with the idea that they will work.

- 1. Vaccines: They need to stay cold before they are used. They can withstand a trip home in your truck, even if it's 80 for an hour, but you can't store them anywhere except a refrigerator. This is all vaccines, period.
- There are two kinds of vaccines: killed, (that you don't mix), and modified live (that you do mix). The killed can have some of the vaccine withdrawn from the bottle and used, and the remainder can go back in the refrigerator. However, the vaccine product is a good environment for molds and yeasts to grow, so if you contaminate the bottle pulling product out, and then wait a couple months to use the rest, you probably will be vaccinating for some weird mold, and not the disease you intended to protect your animal from when you bought the product. Yeasts and mold grow in cold, just slowly.
 - Minimize the holes in the bottle.
 - Refrigerate
 - Pitch the product you don't use within a month.

Modified live vaccines,(the ones you mix), must be used right away. Some are only stable for thirty minutes, especially if it is warm out. When I used to do a lot of chute work, I mixed as I needed, or maybe thirty minutes out. These vaccines are designed to live in your animal and that is why they work so well, but they die really fast in the bottle once mixed. We still see people mistakenly keeping partial bottles, thinking they work if refrigerated. They are totally worthless if not really fresh.

- 2. Antibiotics: These are not as simple as vaccines because there are all kinds of different requirements that are unique to each product. An example is Naxcel or Cephtiflex. This is the same drug as Excenel, same dose as Excenel and comes as powder that is stable at room temperature. However once you mix it, it is only good for twelve hours at room temperature. The next day the potency significantly decreases if stored at room temperature. So if you leave it out, how much do you use? The answer is: Obviously more because it is less potent, but how much more, no one knows, plus if you use more, what are the withdrawal times.

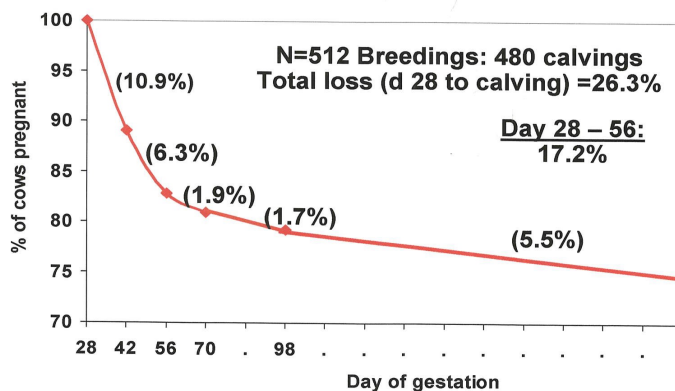
The better alternative is you can leave Naxcel in the refrigerator for a week once it's mixed and it will be OK. You can also freeze it, then it's good for a couple months. Excenel has none of these problems

Because there is no water present in the bottle. Ampicillin is similar, in that keeping it cold after mixing extends the shelf life. Even penicillin can be an issue because yeasts can grow in penicillin bottles. I've seen old bottles of penicillin that had been partially used, sitting at room temperature actually explode from the yeast.

It's also important to note that sometimes drug reactions in old bottles of vaccine or antibiotics are caused by the bugs growing in the bottle, not the vaccine or the antibiotic.

Drugs and vaccines are expensive, so get your money's worth by correctly handling them before use.

Dairy Cows



Vasconcelos, et al., Biol. Reprod. 56(1

The attached graph shows the spontaneous abortion rate for pregnancy in dairy cattle. Note that from day 28 to day 56, 17% of pregnant cows abort, this is one in six, and this is why we recommend a second pregnancy check sometime after 60 days, and many farms do a third check before dry-off. Many farms just do a blood BioPRYN test as it fits their schedule better, and just have the vet check any cow the BioPRYN test finds open.

Calf Scours

Calf scours is a multifactor disease that is usually preventable by following the following check list. At the same time, often people miss some of these steps and don't have a problem. Then when a problem does arise they want antibiotics to solve the problem, when in fact they would be better off just checking these twelve steps. Drugs are not the solution to calf scours, management and environment changes are.

- 1. Calving Pen clean, dry, well bedded. Cleaned between calvings
- 2. Clean Pen gates and walls clean
- 3. Calf with the cow as short a time as possible
- 4. Navels dipped at birth.
- 5. Colostrum harvested and given to the calf before 4 hours of age
- 6. Adequate colostrum volume given (1 gallon for a 100 pound calf)
- 7. Colostrum quality evaluated with colostrometer or Brix.
- 8. Clean calf feeding utensils.
- 9. Calves fed and handled youngest to oldest.
- 10. Calves kept isolated from older animals
- 11. Adequate milk replacer quality and amount - a big issue when it gets cold out!
- 12. If using a pasteurizer, is it kept clean and plate counts run periodically to be sure.