

## Vaccine and Storage Handling Part 1

To ensure producers are handling and storing vaccines and using syringes properly along with proper injection sites, we will be offering a series of information articles. Part 1 will discuss handling and storage of vaccines. If you have not already done so,



make sure you establish a relationship with your veterinarian. A lot of vaccines and medications require a prescription and it's anticipated more will require a prescription in the future. Once you have your animal health products, read the label to find the proper storage temperatures. Storage is extremely important to ensure the quality and effectiveness of the vaccine. Make sure you have a process in place to keep the products at the temperature from the time of arrival, prior to use and also chute side when using.

**Refrigeration** The University of Nevada conducted research on 20 ranches and 4 feed stores. Through that research, 25% of the refrigerators failed to maintain vaccines in the safe zone (35 degrees-45

degrees F). The University of Arkansas conducted research and tested 180 refrigerators. With that research, they found 45 were only at the proper temperature range 5% of the time, 76% were unacceptable for storing animal health products and there was a wide range on the age of refrigerators. It is critical, especially for products requiring refrigeration are kept at the appropriate temperatures. Make sure you have a thermometer in your refrigerator and monitor the temperature.

**Records** As part of the Beef Quality Assurance program, record everything. Processing and treatment records should be kept with each product. These records should include: date given, animal or group, products utilized, dose and withdrawal time. Everything should be recorded every time you administer an animal health product. It's also a good idea to record the lot number on the vaccine. If there happens to be an issue with injection site issues, blemishes, or reactions it's important for the veterinarian to have that information. There could be issues in a production line, but it can't be addressed if all the information necessary is not recorded.

**Vaccines** When handling vaccines at chute side. First, make sure you protect the vaccines from the sunlight. Coolers with ice packs are a good way to help protect them from the sunlight and still keep them cool. Make sure you have a barrier between the vaccine and the ice pack so vaccine doesn't accidentally freeze or get too cold. It's also important if you're working cattle in the winter months that you don't let your vaccine freeze.

Do not mix vaccines together or even different bottle of the same vaccine. Only mix vaccines that are required to be mixed, such as modified live products. Speaking of mixing, you should only mix enough vaccine that you can use up in 1 hour. If it's mixed for over 1 hour, that live virus starts to break down and will not work like it should. Vaccines should also stay thoroughly mixed. Make sure it stays suspended and is not separated when drawing up for use. If you do use modified live vaccines, make sure to use a transfer needle, enter the diluent first. After rehydrating, gently roll. Do not shake the bottle.



**Vaccination Process** Mark syringes for different vaccines so you don't accidentally mix the vaccines. A piece of tape around the syringe with the drug name on is one way, or colored tape around a bottle matches colored tape around the syringe used for that vaccine. Find a process that works for you to make sure the right syringe stays with the right bottle. You should also use products from the original container and NEVER re-enter a bottle with a used needle. Make sure to keep the equipment clean and DO NOT use disinfectant with modified live or killed vaccines as it can cause damage to the vaccine. Next week I will share information on syringes, needles and start discussing injection information. If you have any questions, make sure to reach out to your local veterinarian.