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## Proper Vaccine Storage

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Federally approved animal vaccines are excellent products, which have gone through extensive testing to assure that they are safe and effective. However, it has been estimated that 60-80% of vaccines are mishandled or misused. Proper vaccine storage is essential to vaccines being as effective at the time of use as they were when manufactured.

The following items should help assure proper vaccine storage:

When vaccines are purchased from a local animal health supplier, carry a cooler and an ice pack to store the vaccines so that they will remain cool. Cover the icepack with newspaper. Vaccine could possibly freeze if it comes in direct contact with the ice pack. Keep vaccine in a cooler when transporting to the animal handling facility and while working cattle. If vaccine is purchased by mail order, open the box as soon as it arrives. The vaccine should still feel cool to the touch.

Read the label directions to determine proper storage temperature for that vaccine. Most will require storage between 36 and 46 degrees F. Most manufacturers will also warn that the vaccine should not be frozen. Refrigerate the vaccine as soon as possible. Read the expiration date for that product to make sure that the entire contents can be used before the expiration date. Discard expired vaccines.

Purchase vaccine in smaller dose bottles so that all product is used at one time and it is not necessary to store opened bottles of vaccines. Do not store modified live vaccines (previously mixed) for future use. Use open bottles of vaccine before opening new ones. Rotate stock so vaccines with earlier expiration dates will be used first.

Refrigerator management practices can go a long way in assuring vaccine quality. Don't put vaccines in the refrigerator door; they will not get cool enough. Don't put vaccines near the rear of the refrigerator since they may freeze. Don't pack vaccine bottles too closely together. This interferes with air circulation and vaccine cooling.

Check the temperature of the refrigerator to make sure that the inside temperature is between 36 and 46 degrees F. Check the refrigerator's door gasket. A good seal is needed to maintain the proper temperature. Check the freezer compartment. If the freezer needs defrosting, the

refrigerator will not cool properly. Also, keep the inside of the refrigerator clean.

Clean the tops of vaccine bottles (containing killed vaccines only) with cotton and alcohol before returning them to the refrigerator after use. Dirt on the bottle stopper may get into the vaccine causing more vaccine reactions.

Simple refrigerator maintenance and proper vaccine care should result in vaccines that can provide the best immunity possible when used.