

Value Added Calf (VAC)

Vaccination Management Program

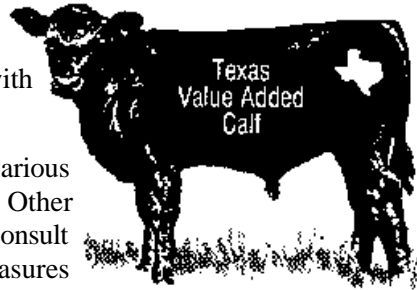
A properly designed vaccination program helps reduce medicine costs, lower death losses, and enhance production efficiency. Stocker/feeder producers are recognizing this value.

Feedback of adequate information to most commercial cow-calf producers on how their calves fit the needs of the beef industry has been difficult due to the loss of identity of the ranch of origin as calves move through various marketing channels. Most calves are healthy when they leave the ranch, but stress caused by weaning, transportation, changes in environment, etc. lowers the level of resistance at the same time exposure to disease challenge is increased. The purpose of a vaccination program is to raise the level of resistance to viruses and other pathogens before a disease challenge occurs.

It is critical that the proper vaccines be administered and that adequate time be allowed to develop immunity in an environment where stress is reduced for optimal response. The

following vaccination regimes to produce protection against the major viral pathogens are based upon results observed in the Texas A&M Ranch to Rail program. These regimes resulted in calves with more consistent, predictable, favorable health results.

These programs are designed to get the calves ready to enter the various marketing and production channels after they leave the ranch. Other problems that exist at the ranch level are unique to each operation. Consult with your local veterinarian to assess what other health assurance measures are indicated.



The four programs are:
 Value Added Calf-45 (VAC-45)
 Value Added Calf PreWean Plus (VAC-Prewean Plus)
 Value Added Calf-PreWean (VAC Prewean)
 Value Added Calf-PreCon (VAC PreCon)

Table A: Injectable vaccines that meet the criteria for post-weaning vaccinations.

*None are cleared for use in calves nursing pregnant cows.

Trade Name	Manufacturer
BoviShield 4	Pfizer
Express 5	Boehringer Ingelheim
Frontier 4 Plus	Intervet
IBR Plus 4-Way	Merial
Pyramid MLV 4	Fort Dodge
Titanium 5	Agri Labs

Table B: Intranasal Vaccines

Trade Name	Manufacturer
Nasalgen IP	Schering-Plough
TSV-2	Pfizer

Value Added Calf-45 (VAC-45)

This program is designed for producers who have the resources to be able to background calves for at least 45 days prior to shipment. This program has been shown to maximize the calf's preparedness to enter various marketing and production channels.

There are two vaccination options in this program. One is based upon a pre-weaning vaccination followed by re-vaccination at weaning. The other is based upon vaccination at weaning followed by re-vaccination 14-21 days later. The type of vaccines used depends upon whether or not the calves are nursing or weaned at vaccination. In both options, the cattle are backgrounded at least 45 days after weaning.

Pre-Weaning Option:

Administer CattleMaster 4 vaccine 4-6 weeks prior to weaning. When the calves are weaned, re-vaccinate with one of the Modified Live Virus (MLV) vaccines listed in Table A. Do not re-vaccinate with CattleMaster 4.

Weaning Option:

If the calves did not receive a pre-weaning vaccination, administer one of the MLV vaccines in Table A at weaning and booster it 14-21 days later.

Value Added Calf-PreWean Plus (VAC-PreWean Plus)

Some producers have the resources to be able to gather their calves prior to weaning, vaccinate them and place them back with the cows for a period of time prior to weaning. This allows time to develop immunity in an environment that is generally less stressful and where exposure to pathogens is minimal. Better immunity is generally established in older calves due to less maternal antibody interference and a more functional immune system.

VAC-PreWean Plus is based upon administration of CattleMaster 4 and one of the intranasal vaccines in Table B at 4-6 weeks prior to weaning with the calves being shipped at weaning.

Value Added Calf-PreWean (VAC-PreWean)

Some producers don't have the resources to be able to background calves or vaccinate their calves 4-6 weeks prior to weaning. VAC-PreWean is a vaccination management program designed to increase the level of resistance prior to weaning so that calves have more immunity as they enter various market channels. This program is based upon a pre-weaning vaccination at branding with the calves being shipped at weaning.

Vaccinate with CattleMaster 4 when the calves are worked at 2-4 months of age. Also, administer one of the intranasal vaccines shown in Table B.

Value Added Calf-PreCon (VAC-PreCon)

Producers that purchase weaned calves and background them on pasture or in a drylot situation are a major source of stocker/feeder cattle. VAC-PreCon is a vaccination management program designed to help ensure healthy stocker/feeders. This program is based upon cattle "put together" from various sources that are preconditioned or backgrounded for at least 45 days. VAC-PreCon is exactly like the VAC-45 Weaning Option except it denotes "put together" cattle versus calves of a common ranch origin.

Upon arrival, administer one of the intranasal vaccines listed in Table B and one of the injectable vaccines shown in Table A. Booster the injectable vaccine 14-21 days later.

In addition to the specific recommendations for each program, producers need to implement the following:

- f** Provide adequate nutrition (including minerals and trace minerals) to facilitate adequate growth and enhance the immune process.
- f** Vaccinate against the Clostridial organisms (Blackleg, etc.) when the calves are worked at 2-4 months of age and booster at weaning. Vaccinate calves in the VAC-PreCon option upon arrival if no known history of recent Clostridial vaccination.
- f** When possible, use vaccines and antibiotics with label clearance for subcutaneous injection to reduce muscle tissue injection site blemishes. Use the "tenting" technique and proper needle size and length.
- f** Include other vaccines and management practices that are unique to your operation or are of value to the purchaser of your cattle.
- f** If products must be given intramuscularly, use low dose products with evidence of minimal tissue irritation.
- f** Do not administer over 10cc. of product in a single site.
- f** Administer all shots in front of the shoulder.
- f** Only clean needles should enter the vaccine/medicine bottle.
- f** Change needles frequently (after 10-20 uses.)
- f** Use a disinfectant to clean needles between injections EXCEPT when administering modified live or chemically altered modified live vaccines. Inject only into clean areas and change needles more often when using modified live virus vaccines.
- f** Always read and follow label directions.

For further information, visit our web site at
<http://animalscience-extension.tamu.edu>
John W. McNeill • (979) 845-3579 • j-mcneill@tamu.edu

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