

# Designing Preventive Health Management Programs for Cattle Producers

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The two flow sheets detail the recommendations for a beef cattle herd immunization program: the Calf to Feedlot Preventive Health Management Flow Sheet and the Heifers, Cows and Bulls Preventive Health Management Flow Sheet. While the emphasis of this NebGuide is on the procedures conducted on cattle at each cattle handling opportunity, it is very important to note the role a high quality nutritional program plays in building a total herd health program. Readers are encouraged to work with a qualified beef cattle nutritionist and their veterinarian when developing their herd health program.

## Health Management Decisions

Evaluating the economic efficiency of health management procedures can be difficult. Designing a program for a beef production unit requires an in-depth understanding of the unique circumstances that influence health and production. Misinterpreting the relationship of these circumstances causes unnecessary expenditures. For example closed herds (herds that do not bring in animals from outside sources without a stringent quarantine period) may get minimal benefit from a number of the vaccines offered because the animals are seldom exposed to disease causing agents and thus the vaccines are just not needed. In herds that are maintained relatively closed, it is important that new herd additions be quarantined and their health is re-evaluated before they are added to the herd. On the other extreme, open herds which have frequent movement of animals into herd may get minimal benefit from available vaccines. This is due to the high level of exposure to disease causing agents and the lag time between the developments of an adequate immune response following disease exposure. This includes many disease causing agents for which no vaccines are available. A primary consideration in these herds must include minimizing environmental, nutritional and animal handling stress. These added stresses can be important factors in animals mounting an adequate immune response. Regardless of the type herd maintained, producers should work closely with their veterinarian to evaluate the type of herd health management program needed and work toward constant improvement in the health status of the herd.

## Health Management Flow Sheets

The herd health management flow sheets (Figure 1 and 2) are intended as guidelines. It is still important to seek the expertise of a veterinarian. The immunization skeleton suggests immunologically sound procedures that in most cases will assure economic efficient, plus reduce health risk.

Throughout the Calf to Feedlot Flow Sheet (Figure 1) other procedures are included to meet the needs of rational health and production management. These provide the producer with a range of alternate marketing opportunities including retained ownership.

Both flow sheets prioritize health management procedures. Highly recommended procedures are marked with an "\*" and procedures of questionable value are marked with "?".

The Calf to Feedlot Flow Sheet includes the use of a modified live viral (MLV) and bacterial vaccine in calves at branding. There is no label warning about the use of modified live products in calves prior to bull turn out. There is some concern about MLV vaccines delaying conception one heat cycle if used

concurrently with bull turn out. Immunization of calves at this age will prime the immune system and may prevent a delayed immune response to vaccines given at weaning. Early vaccination will reduce health problems at weaning and improve the production potential for retained ownership.

The Calf to Feedlot Flow Sheet encourages early castration and the use of implants in calves between 45 and 90 days of age. Implanting will increase weaning weights approximately five percent. Heifers may be included in the implanting schedule but should not be re-implanted if they are intended for replacements. Bulls intended for breeding should never be implanted. Heifers intended for breeding should not be-implanted before 45 to 90 days of age.

### Conclusion

A sound health management program includes the proper selection and use of vaccines and a quality nutritional program. Evaluation of the production and economic efficiency of a beef production unit is a vital step in building a long term program. Following rationally sound and properly timed vaccination programs such as those outlined in the Calf to Feedlot Flow Sheet and the Heifers, Cows, and Bulls Flow Sheet is important. Vaccination programs should be incorporated with other herd management procedures when possible to optimize marketing management.

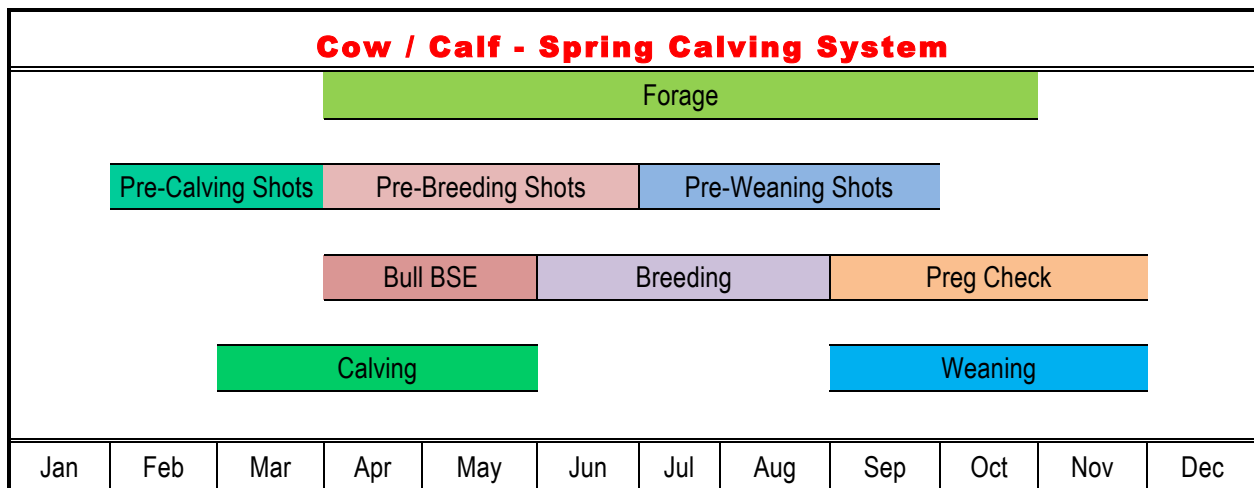


Figure 1.

## University of Nebraska Great Plains Veterinary Educational Center

# Calf to Mature (Replacements, Feedlot, Etc)

## Preventive Health Management Flow Sheet

### For Birth through Growing Phase.

(This flow sheet is an excellent starting point but visit with your veterinarian)

**NOTE:** The principle objective in this flow sheet is to get a priming **Modified Live Virus** vaccine prior to the feedlot!  
A number of other management activities have been included for you and your veterinarian's consideration.  
Items with an \* are very important and items with a ? have questionable value.

### **Calf at Birth:**

Dehorn\* Castrate\* Iodine Navel? ID tag\* If dystocia, milk dam & give calf colostrum\*

□

### **Calf Prior To Breeding Cow:**

**Vaccinate, dehorn and castrate all calves.\* Implant with a product designed for calves.**

Follow the implant manufacturer' directions. Never implant bull calves intended for breeding

**Vaccines to consider: 4 way MLV IBR, BVD, PI3, BRSV\*,**

**2way modern SQ Mannheimia-Pasteurella \***

**4/7way Clostridial modern tissue friendly SQ product \***

**5 way Lepto?**

BVD-PI test calves - sort off any BVD-PI positive calves, isolate the calves and their dams until calves are removed, absolutely do not keep any positive calves or cows and allow them to run with your herd.

□

### **Calf Pre-Weaning (2 to 4 wks):**

Preweaning vaccination may not be as important if calves were vaccinated at the pre-breeding opportunity or if calves will be backgrounded on premises. Weigh calves individually.

**Vaccines to consider: IBR, BVD, PI3, BRSV\* (select one safe for use around pregnant cows).**

**4/7 Clostridial 2 ml product (include tetanus if banding).**

**5 way Lepto?**

**2way modern SQ Mannheimia-Pasteurella\*.**

**Implant (important if calves will backgrounded on premises).**

□

### **Calf at Weaning:**

Weight all calves individually only if calves will be going through a chute.

□

### **Background on premise:**

No vaccine required if two MLV virus and PMH pre-weaning vaccines given or unless mixed with other non-vaccinated calves. No implant needed and can deworm in feed if implanted pre-weaning. Consider revaccinating with a modified live **IBR\*, BVD\*, PI3\*, BRSV\***

### **Feedlot:**

**MLV: IBR\*, BVD\*, PI3\*, BRSV\***  
(Clostridial?, Lepto?, H.somni?, Past H/M?  
vaccines of doubtful benefit at this time)

**High Quality Dewormer**

**Implant (back calculate from packer)**  
(if implanted at pre-weaning delay 1st  
implant 45-60 days, especially heifers)

□

**(Heifers only) ? Using Brucellosis 1-2 months post weaning will lower combined stresses.**

**Select Generic Products With Caution!**

Figure 2.

# Heifers, Cows & Bulls

## Preventive Health Management Flow Sheet For The Cow Herd When Replacements Are Promoted From Growing Program to the Herd. (Visit with your veterinarian before making final decisions about your herd.)

Note: Items with an \* are very important!!!  
Items with a ? are of questionable value.

### Heifers/Cows

#### Before entering the herd

BVD-PI test before entering herd  
(3 to 4 weeks pre-breeding)  
MLV: IBR\*, BVD\*, PI3, BRSV?  
Vibiro-oil\* 5 way Lepto?  
4/7/8 way Clostridium\*

#### Pre-breeding/Post-calving

(best 3 to 4 week pre-breeding)  
MLV: IBR, BVD, PI3? (every 3-5 years)  
Vibiro-oil booster\* 5-way Lepto?  
Deworm (fall calving) as needed.

#### Post-breeding

Preg exam\*  
Scour vaccine as needed  
(heifers need priming dose)  
Deworm (spring calving) as needed  
5 way Lepto booster?  
Grub control  
Lice control as needed

#### Moved to Calving Pastures

(3 to 7 weeks pre-calving)  
Scour vaccine booster  
4/7/8 way Clostridium?  
Vitamin A-D? (spring)  
(best to feed vit. fortified supplement)  
Lice control as needed.

**Cull** Check withdrawals\*

### Bulls

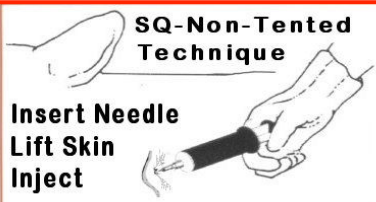
#### End of Growing Period

BVD-PI test before entering herd  
MLV: IBR\*, BVD\*, PI3?  
5 way Lepto?  
4/7/8 way Clostridium\*

#### Pre-breeding

(best 3 to 4 week pre-breeding)  
MLV: IBR, BVD, PI3? (3-5 years)  
Vibiro-oil, 5-way Lepto?  
4/7/8 way Clostridium\*  
Deworm? + Lice control as needed.  
Breeding Soundness Exam\*

Please give all injections SQ ahead of the shoulder slope (Fig 1), but if you must use the rear of the animal please follow the "Tail Depression Technique" (Fig 2) The tail depression site is not BQA approved.

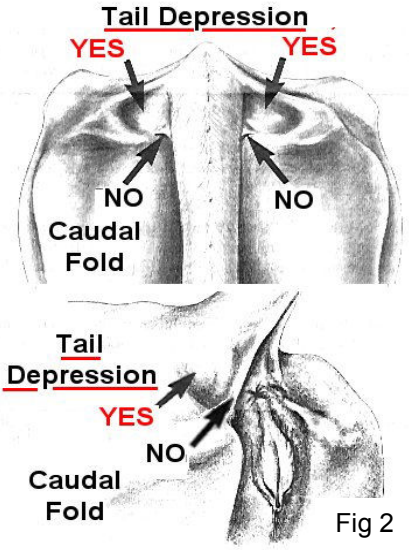


**SQ-Non-Tented Technique**

**Insert Needle**  
**Lift Skin**  
**Inject**

1/2" - 3/4" Needle  
"Tented-Technique"  
Sub-Q Products

Fig 1



**Tail Depression**

**YES** **YES**

**NO** **NO**

**Caudal Fold**

**Tail Depression**

**YES**

**NO**

**Caudal Fold**

Fig 2

**Select Generic Products With Caution!**