



# Preventive Herd Health Program

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*Each producer is urged to establish a specific Preventive Herd Health Program (PHHP) for his or her herd in conjunction with a veterinarian who may give realistic expectations for each vaccine. Each cow-calf operation is different, and, therefore, has unique considerations to achieve herd health. Factors unique to your operation include: nutrition; management styles; facilities; age and sex of the animals; intended use of the animals; location and disease history of ranch; disease history of animals; length of ownership; neighboring cattle; genetics; environmental changes and economic considerations.*

## **Breeding considerations**

- 65-day breeding season for cows.
- 65 percent of the females should be bred by the end of the first cycle.
- 45-day breeding season for replacement heifers.
- Heifer age and weight for puberty may vary among and between breeds.
- Breed heifers 3 weeks before the cows, possibly with the aid of an estrus synchronization program if reproductive status permits.
- Review expected progeny differences (EPD's) for selection of bulls as well as physical appearance.
- Correlate age of bulls and breeding area with number of cows to be serviced to shorten breeding season and to aid in uniformity of calf crop.
- Bulls breeding soundness examinations 30 days prior to breeding season.
- Artificial insemination (AI) with heat detection may prove beneficial.

## **Immune system management**

REMEMBER: It is imperative that animals be healthy and unstressed at time of immunization.

## **Neonatal period**

- Ingestion of colostrum within the first 6 hours after birth is necessary for maximum absorption. Colostrum at birth provides antibodies developed by the dam critical to the lifelong immune status of the animal. Neglecting this ingestion may lead to disease-stricken animals later in life.
- Lactogenic (colostral) immunity to the calf can be improved with the use of maternal vaccination procedures, but colostral antibody protection decreases as the calf ages.
- Dehorning and castration may be performed at this time.
- Tagging or tattoo in conjunction with cow's identification for records and pairing-up.

## **Branding time**

- (6 weeks of age or around this time)
- Castrate and dehorn if not done at birth.
  - Implant cattle not to be used for replacements.
  - Clostridial spp. given as bacterin/toxoid-7-way (avoid intramuscular injections, give subcutaneously in the neck).



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- IBR-PI3-BVD-BRSV given as a product recommended for suckling calves (a second injection will be given at weaning). This product may be used here if there are problems with “summer pneumonia” or if preweaning vaccinations cannot be given.
- Insecticides for fly control, application too early in the season will give poor results.

### **Preweaning**

This period is critical in your vaccination program due to increased pathogen exposure, elevated stress levels at weaning, and diminished colostrum (passive) protection.

- IBR-PI3-BVD-BRSV given as a product recommended for suckling calves (a second injection will be given at weaning).
- Clostridial spp. given as bacterin/toxoid-7-way (if injection is given at this time a second injection is not needed at weaning) (avoid intramuscular injections, give subcutaneously in the neck).

### **Weaning**

- IBR-PI3-BVD-BRSV given as a modified live virus (second injection if given at preweaning).
- Clostridial spp. given as bacterin/toxoid-7-way (this injection is not needed if doses have been given at branding and preweaning) (avoid intramuscular injections, give subcutaneously in the neck).
- Parasite and grub control.
- Implant all cattle not intended for reproduction.
- Certify calves to be sold as “preconditioned” where applicable.

### **4- to 12-month-old replacement heifers** (preferably 5 to 8 months of age)

- Brucellosis vaccination RB51 to all replacement heifers.
- Follow state and federal regulations.
- RB51 is approved for use in Kansas.

### **Pregnancy examination**

(90 days post exposure) at convenient time such as weaning.

- Cull open, old and unsound females.
- Parasite, lice and grub control (lice control may need to be repeated 21 days later or at precalving if necessary).
- Record age, breed, number, body condition score, and days pregnant.
- Some vaccinations can be given at this time including leptospirosis and vibriosis bacterins (if an oil-base product is used for vibriosis).
- Calf scours: The initial dose of E-coli + Clostridial perfringens type C and D given as a bacterin/toxoid, and Rota+Corona viruses given as a killed vaccine if a problem exists.

Note: It is recommended that scour vaccinations be given 6 and 3 weeks prior to calving, but due to convenience, administration of the primary dose at this time may be acceptable. Some E-coli products have been shown to improve colostrum immunity for up to one year. Scours can often be a result of environmental and management factors and cannot be corrected with vaccination alone.

### **Cow and replacement heifer vaccinations**

- 30 to 60 days prior to breeding
  - Vibriosis given as a bacterin (this is the preferred time of administration).
  - Leptospirosis given as a 5-way bacterin.
  - IBR-PI3-BVD given as a modified live virus.
- ### **3 weeks prior to calving**
- Calf scours: E-coli + Clostridial perfringens type C and D given as a bacterin/toxoid, and Rota+Corona viruses given as a killed vaccine if a problem exists.
  - Calves must receive enough colostrum from scour-vaccinated cows within the first 24 hours to be protected.
  - Lice control (if a problem in your herd).

### **Bulls**

(30 days prior to breeding)

- Vibriosis given as a bacterin.
- Leptospirosis given as a 5-way bacterin.
- IBR-PI3-BVD given as a modified live virus.

### **Nutritional considerations**

- Balance diet for energy and protein to maintain a body score desirable for that stage in production.
- Have forage analysis performed on all feedstuffs.
- In grass tetany problem areas, high magnesium salt should be provided 60 days before calving to the start of breeding.
- Balance diet for vitamins and minerals and test for deficiencies, such as selenium or copper.

## ***General management***

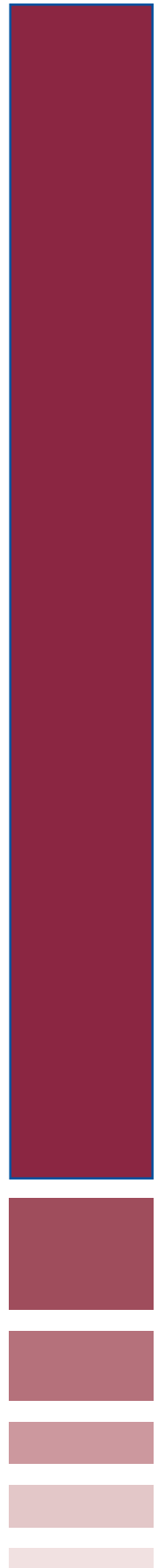
- All incoming animals should be vaccinated in coordination with the existing herd program and possibly put in a quarantine period to help identify diseased animals not yet showing their true disease state.
- Know the history of incoming breeding stock or test for bovine leukosis, Johne's and persistent BVD infection.
- Work cattle in a.m. hours when possible during the summer to reduce heat stress.
- Fly control and shade are strongly recommended.
- Use the neck area for intramuscular and subcutaneous injections.

- Use good sanitation and, remember, vaccines can be inactivated by heat (sunlight), and chemical contamination.
- Label syringes for use with the same vaccine each time.
- Change needles often (10 to 15 animals)

## ***Conclusion***

Veterinarians are a valuable resource to aid a ranch in record analysis and interpretation, nutrition, genetics and management decisions.

Use a consistent, annual vaccination program developed by your veterinarian, specific for your area and herd. More isn't always better and vaccination does not always mean your animals are protected, but boosting can increase the number of immunized animals.



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