

# 1999-2000 STOCKER CALF PREVENTIVE HERD HEALTH PROGRAM

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service It is important for producers to establish a specific Preventive Herd Health Program (PHHP) in conjunction with a veterinarian. Each stocker operation is different, with unique considerations for achieving herd health. These include nutrition, management styles, facilities, age and sex of the animals, performance expectations, location, disease history of the operation, disease history of animals, length of ownership, neighboring cattle, genetics, environmental changes, and economics.

## **Expectations**

Guidelines on overall herd health are listed below. Not all will occur. When groups of calves do not meet expectations, it may be necessary to evaluate procedures.

- Lightweight calves of less than 500 pounds that are commingled at the sale barn, moved to a shipping facility or order buyer, held for a week, and shipped more than 500 miles are considered to be at great risk for developing respiratory disease (pneumonia).
- 30 percent or more of the calves will become ill at least once with pneumonia.
- Expect at least 1.5 percent mortality.
- 1.5 percent or more of the calves will develop chronic illness.
- At least 25 percent of them will be repulled for illness.
- 10 to 15 percent will need a second antibiotic treatment immediately following the first.

# Immune system management

For optimal immune system response, animals should be healthy and unstressed at time of immunization. Remember that most stocker cattle are stressed, and many are not healthy when vaccinated. So their response to vaccination is likely to be far less than ideal. Even though newborn and suckling calf health is beyond the control of the stocker calf operation, a short discussion is necessary as some operations begin to integrate. See Appendix 1.

### Receiving

Upon receiving stocker calves, administer the follow-ing:

**IBR-PI3-BVD-BRSV** as a modified live virus. Different products may be used, depending on the operation. For example, killed virus, a combination of killed and live virus, intranasal (TSV-2, Nasalgen) alone or in combination with other products could be used.

Metaphylaxis, which comes in two forms, injectable and water soluble, should be used with the advice and prescription of a licensed veterinarian. Micotil and Nuflor, both injectable, are approved for this purpose.

Water medications include tetracycline soluble powder, Terramycin (oxytetrecycline), Albon (sulfadimethoxine), and Sulmet (sulfamethazine).

Feed medications, such as Aureomycin (chlortetracycline), or Terramycin (oxytetracycline) may be used. Parasite and grub control products include:

- Avermectins, such as Ivomec, Eprinex, Dectomax, Cydectin. These are effective, nonstressful and control both internal parasites, lice and grubs.
- Drench wormers, such as Safeguard, Synanthic, Valbazen. Other injectables, Tramisol and Levasole, and pour-ons, such as Totalon, may also be used.
- Pour-ons for lice and grub control need to be used in conjunction with the products listed in the second bullet point above.

#### Revaccination

If necessary give IBR-PI3-BVD-BRSV as a modified live virus at 7-10 days.

### 28 days post arrival

Follow these steps within the first 28 days after calves arrive:

- Give Clostridial spp. as bacterin/toxoid-7-way. This injection is not needed if doses have been given at branding and preweaning. Avoid intramuscular injections, and give subcutaneous in the neck.
- 2. Implant.
- 3. Castrate and dehorn if this hasn't been done.
- 4. Some other vaccinations can be given at this time, including leptospirosis if endemic to the area.

#### Treatments

At first, observe calves at least twice a day. Continue to check them at least once a day. Watch for signs of illness that include clinical depression, weight loss, droopy ears, hanging head, nasal or ocular discharge and an increased respiration rate. If a calf shows clinical signs of illness, refer to written treatment protocols or consult with a veterinarian.

### Nutritional considerations

All cattle must have access to fresh, clean water. Be sure cattle find the waterers and are able to consume this essential nutrient. Shrink can be an indicator of dehydration and may vary from 3 percent to more than 9 percent. Dehydration will have a detrimental effect on the health of cattle.

Emphasize palatability of the ration and establishing intakes. Balance diet for energy, protein, macro and trace minerals to meet requirements based on a reduced intake. Have dry matter, crude protein, calcium and phosphorus analysis performed on all roughage feedstuffs.

#### General management

Vaccinate all incoming animals in coordination with the existing herd program. Do not commingle with other cattle.

Know as much of the history of incoming calves as possible, including all previous vaccinations. Pay particular attention to previous medications, such as those given at the sale barn or order buyer facility.

When possible, work cattle in the morning during the summer to reduce heat stress. Fly control and shade are strongly recommended.

Use the neck for intramuscular and subcutaneous injections. Practice good sanitation, and remember that vaccines can be inactivated by heat (sunlight) and chemical contamination. Label syringes for use with the same vaccine each time. Change needles often–every 10 to 15 animals.

#### Closing remarks

Veterinarians are a valuable resource aiding stocker operators in record analysis and interpretation, nutrition, health, and management decisions. For optimal herd health, producers should develop standard operating procedures for routine and nonroutine tasks.

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

# Appendix

## Neonatal period

- Ingestion of colostrum within the first six hours after birth is necessary for maximum absorption. Colostrum at birth provides antibodies and other immune factors developed by the dam and critical to the lifelong immune status of the animal. Neglecting this ingestion may lead to disease-stricken animals later in life.
- 2. 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.
- 3. Dehorning and castration may be performed at this time.

## Branding time

Branding is to be performed around six weeks of age.

- 1. Castrate and dehorn if not done at birth.
- 2. Implant cattle not to be used for replacements.
- 3. Clostridial spp. given as bacterin/toxoid-7-way. Avoid intramuscular injections. Give subcutaneous in the neck.
- 4. IBR-PI3-BVD-BRSV is recommended now for suckling calves, with a second injection given at weaning. This product may be used if there are problems with "summer pneumonia" or if preweaning vaccinations cannot be given.

## Preweaning

This period is critical in your vaccination program due to increased pathogen exposure, elevated stress levels at weaning, anddiminished colostral, orpassive, protection.1. IBR-PI3-BVD-BRSV isrecommended for sucklingcalves. A second injection

- calves. A second injection will be given at weaning.2. Clostridial spp. given as bacterin/toxoid-7-way.
- A second injection is not needed at weaning if the injection is given at this time. Avoid intramuscular injections; give subcutaneous in the neck.

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