



A Planning Calendar for Beef Cattle Herd Health

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Developing a sound and practical commercial beef cow-calf herd health program requires more than just obtaining a recipe from a cookbook, because production objectives may vary considerably between individual producers. Producers with knowledge about the production cycle on their premise should be working with veterinarians who have expertise about disease development and physiology biology. Herd health programs must be customized to meet the needs of individual producers. Herd health program choices are impacted by:

- geographic locations
- climate/weather variations
- housing and available facilities
- density at different points in production cycle
- resource availability
- individual animal differences
- nutritional status
- exposure to non-herd cattle in shared grazing or across fence line
- human population demographics
- abilities of care takers

Every farmer or rancher should develop a good working relationship with his/her local veterinarian in developing the herd health program. This discussion should include proper animal drug usage and adherence to food safety principles. Successful herd health programs should be evaluated on a regular basis for changes in herd management and to incorporate new information. Beef quality assurance is of particular importance, and the producer must be a part of the veterinarian-client-patient relationship to ensure violative drug residues and damaging injection site lesions do not occur.

Herd health programs have often focused on infectious disease treatment, prevention, and parasite control. However, in modern production animal agriculture, the focus is on optimizing herd health and animal well-being, efficient production, and maximizing net return to the business unit. Working closely with your veterinarian will allow identification of individual herd needs and development of customized health programs to address these variables and challenges.

There are several constraints that must be recognized before this program can be used:

1. The calving interval must be 12 months.

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2. Calves should be weaned at five to nine months.
3. A definite breeding period must occur (90 days or less). Bulls must be put with the cows and removed from the breeding pastures on schedule. If A.I. is being used, proper facilities and heat-checking methods must be utilized.
4. Confirmation of pregnancy (pregnancy check) should be performed after appropriate interval following A.I. or removal of breeding bulls.
5. Nutrition must be monitored and maintained to meet specific requirements at specific times of the year.
6. Records must be kept that at least contain breeding, calving, weaning, and disease control procedures. Individual cow records and disease incidence records are also important.
7. Beef quality assurance is of particular importance and the producer must be a part of the veterinarian-client-patient relationship to ensure violative drug residues and damaging injection site lesions do not occur.
8. The veterinarian must be able to regularly evaluate the program and assess its impact upon the overall production and income of the cattle unit. Your veterinarian should be consulted for diagnostic procedures and should advise on vaccination and treatment programs. Your veterinarian should be aware of the nutritional requirements of reproduction and recommend the assistance of nutritional consultants for least cost rations. If these programs fail to increase production or decrease loss, they should be eliminated. The veterinarian should be willing to train the rancher or herdsman to properly perform procedures that do not require the services of a veterinarian. This should include the proper use of vaccines, parasite control products, therapeutic products, and most importantly, **proper cleaning and disinfecting practices**. The veterinarian should also instruct the producer on routine emergency procedures and when to call for professional help.

The calendar has been developed as a template to follow when initially developing herd health programs for commercial beef cow-calf operations. Additionally, this calendar, even though not all inclusive, has been designed as simply as possible to minimize or eliminate many of the confusing issues related to these types of programs. Refer frequently to the calendar for a more thorough understanding of the points stressed in this Fact Sheet.

Planning Calendar for Beef Cow Calf Operation

<i>Time</i>	<i>Basic program recommendations</i>	<i>Other considerations to discuss with your veterinarian</i>
60 days pre-calving all females	If management is adequate, should not need any vaccinations Evaluate BCS	Scours vaccinations
Pre-calving	Evaluate facilities and environment Equipment: sterile, proper function Review protocol for monitoring and when to assist delivery Monitor herd for nutrition and separate by age and BCS to manage feed intake appropriately	Quality frozen colostrum Colostrum substitutes Colostrum supplements Ensure Record system data is current
Calf born	Individually identify Record birth Assure adequate Colostrum	Dip navels, weigh calves Castrate Dehorn (complete)
Breeding Bulls	Viral respiratory diseases (IBRV, BVDV) Leptospirosis Parasite control program (location and season dependent) ^b Breeding soundness examination	PI ₃ V, BRSV Vibriosis
Start breeding Heifers	Start breeding heifers 30 days or more before cows	
Start breeding adult cows		
Remove Bulls	45-90 days after introduction depending on goals	
Branding time-calves 2 to 4 months	Individually identify (if not already performed); brand, ear tag Castrate Dehorn (complete) Clostridial: 7- or 8-way (location dependent) Parasite control program (location and season dependent) ^b	Brucellosis (bangs) - heifers - (marketing decision) (follow age restrictions) Viral respiratory diseases Leptospirosis Pinkeye Tetanus

<p>Weaning 5 to 9 months</p>	<p>Clostridial: 7- or 8-way (location dependent) 4-way or 5-way viral respiratory diseases (IBRV, BVDV, PI₃V, BRSV) Leptospirosis Weigh Calves and evaluate BCS and growth BCS and Pregnancy test cows and evaluate culling criteria</p>	<p>Brucellosis (bangs) - heifers - (marketing decision) (follow age restrictions) Prewaning/weaning vaccination program Parasite control program Weaning/post - weaning vaccination (location and season dependent)^b program Pinkeye</p>
<p>Replacement heifers 13 to 16 months</p>	<p>4-or 5-way viral respiratory diseases (IBRV, BVDV, PI₃V, BRSV) Leptospirosis Clostridial: 7- or 8-way (location dependent) Parasite control program (location and season dependent)^b Monitor growth: Rule of Thumb-heifers should weigh 65 percent of mature weight at start of breeding season</p>	<p>Make sure individually identified Vibriosis</p>
<p>Process adult cow herd</p>	<p>Viral respiratory diseases (IBRV, BVDV) Parasite control program (location and season dependent)^b Leptospirosis Evaluate individual animals: udder, eyes, disposition, feet, joints, legs, soundness Pregnancy check and evaluate culling criteria Evaluate BCS</p>	<p>PI₃V, BRSV Anaplasmosis control Vibriosis</p>

a These are general guidelines and recommendations. Individual herd programs may vary considerably. Consult your veterinarian for specific recommendations.

b Follow all label directions and your veterinarian's recommendations.

The calendar is divided into columns. It is organized so farmers, ranchers and caregivers can apply the information and guidelines to their own individual situations. Producers can utilize this table as a checklist to prepare for the events in their individualized production cycle.

1. The left-hand column identifies times in the production cycle when beef cattle are most commonly handled and processed and decisions regarding health and business should be implemented. It is reasoned that recommendations designed around these times are more readily accepted by the producer and have the best potential for optimizing health of the entire herd.
2. The center column presents basic or minimal guidelines for most commercial beef cow-calf herds.
3. The right-hand column provides information that certain herds may need to address to optimize health and production. For the specific considerations outlined in this column, it is strongly recommended to consult your veterinarian.

Again, it is stressed that these are general guidelines and recommendations. Programs should be customized to meet the needs and objectives of every herd.

It is beyond the scope of this Fact Sheet to discuss details of goal setting; however, the health and viability of any business including commercial beef cow-calf operations must define long- and short-term goals. To determine if goals are being attained, pertinent information must be recorded. Accurate records can be used for measuring goals and measuring financial and production parameters of the business. Data collected must be reviewed and used to make informed business decisions. In other words, do not collect information just to be collecting information. Record systems for commercial beef cow-calf operations can be as simple as a pocket calendar or as technical as a software computer program. Regardless of the system chosen, it is imperative that information is recorded and the system in place prior to calving. For more information about keeping records, refer to Extension Fact Sheets CR-3279 and AGE-222.

Special Procedures

Some aspects of preventative medicine do not fit into a reproductive calendar but are governed by season or climate. Some of these are internal and external parasite control and anaplasmosis control.

A. Deworming programs

1. Due to differences in types of grasses, rainfall, and level of internal parasite infections within herds, it is recommended that you seek your local veterinarian's advice on specific deworming programs for your herd.
Remember, new products become available and some older products are removed from distribution. Check with your veterinarian about the most appropriate product for your herd.

2. Advantages of deworming:
 - a. Less feed to maintain cows.
 - b. Better body condition, therefore, improved milk, production, and breeding efficiency.
 - c. Improved weaning weights in calves. Oklahoma and Nebraska ranch trials showed an average weaning weight increase of 25 pounds in calves from dewormed cows when compared to controls.

B. External parasite control programs

1. Treat for grubs after heel fly season. Carefully follow directions. Some topical/pour-on products may be toxic to Brahman breeds.
2. Treat for lice in winter. Most products require two treatments. Certain lice species suck a considerable amount of blood from cattle and damage the hair coat, thereby causing them to lose body heat and increase wintering costs.
3. Insecticide fly tags should be applied when the fly population reaches 50 or more per side. Tags may markedly decrease the amount of horn flies, reduce face flies to some extent and certain products help to reduce the tick population.

Always follow label directions regarding the number of tags per animal. Some research has suggested that products that use two tags per animal provide better face fly control. The manufacturer recommends removing tags when product quits working. Flies commonly develop resistance to fly tags. Contact your veterinarian or extension entomologist for advice on the best tag to use. Wear protective gloves and wash hands thoroughly with soap and water after tagging or when taking a break.

C. Anaplasmosis control

1. The equation for any anaplasmosis problem is a simple one:
$$\text{No control measures} + \text{carrier cattle} + \text{horseflies and ticks (or blood transfer)} + \text{susceptible animals} = \text{OUTBREAKS.}$$
2. In southeast Oklahoma, a control program is a must!
3. Carrier animals are considered carriers for life.
4. Control programs for anaplasmosis (to be used during the vector season plus one month).
Common control methods utilize chlortetracycline orally during the vector season plus one month. In certain locations, this control method must be practiced all year long. In some instances, a conditionally licensed anaplasmosis vaccine is used for control purposes. Work with your veterinarian on the best program for your individual herd.
5. Anaplasmosis can also be spread from cow to cow with tagging equipment, dehorning and castrating equipment, and using the same needle repeatedly during vaccination procedures, etc. So, practice good techniques when working cattle.

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