BCRC
BEEF CATTLE RESEARCH COUNCIL



Calf Health Decision Tool

The Calf Health Decision Tool

This resource is not intended to replace a comprehensive health and management plan created through consultations between veterinarians and their clients. Rather, this tool may be used as a supplementary resource to help encourage conversations between veterinarians and beef producers about strategies for calf health and disease prevention on a cow-calf operation. Each question should be discussed, and the recorded responses should reflect the opinions of both the veterinarian and the producer.

The tool explores disease control and management strategies used to prevent treatment of disease and minimize death losses in pre-weaned beef calves through discussion of these areas:

- General farm information
- Environment
- Calving management
- Nutritional management
- Biosecurity
- Vaccination

DEFINITIONS

For the purposes of this tool, we consider the following definitions:

Neonatal Calf Diarrhea (NCD): Often referred to as "scours," this syndrome primarily affects newborn calves during the first month of life. Clinical signs include diarrhea, dehydration and lack of appetite.

Outbreak: A situation in which at least 5% of a group of calves are treated for the same disease and/or a similar set of clinical symptoms within a single season. Example: If, during one spring calving season, 5 out of 100 calves (5%) are treated for NCD, this would be considered an outbreak.

Bovine Respiratory Disease (BRD): Often referred to as "pneumonia," this respiratory syndrome usually includes difficulty breathing, as well as coughing and eye or nasal discharge. Early signs may include depression and changes in feeding habits.

Mortality: Often referred to as "death loss."

Veterinary Practice Logo/Name:

Attending Veterinarian:

Farm/Producer:

Date of Assessment:

General Farm Information

1 Within the last three calving seasons, was there at least one neonatal calf diarrhea (NCD), bovine respiratory disease (BRD) or mortality outbreak in your pre-weaned beef calves? (*check all that apply*)

- ☐ Yes, NCD outbreak
- ☐ Yes, BRD outbreak
- ☐ Yes, mortality outbreak
- ☐ No outbreaks *(skip questions 1.1 and 2.2)*
- Other *(describe)*

1.1 What factors or symptoms were used to determine if treatment was required?

Explain:

1.2 List any medications or treatments used.

Explain:

2 Within your herd, what is the number of animals in each production group? *(write a number for each, even if that number is "0")*

- Pre-weaned calves
- Replacement heifers
- Breeding cows
- Breeding bulls
- Other *(describe)*

Environment

1 Is your calving season longer than 80 days? *(check only one box)*

- ☐ Yes
- ☐ No

2 Does your calving season begin before March 10? *(check only one box)*

- ☐ Yes
- ☐ No *(skip questions 2.1 and 2.2)*

2.1 Is shortening the breeding season feasible?

- ☐ Yes
- ☐ No
- ☐ Producer is willing to consider

2.2 Is calving later in the spring feasible?

- ☐ Yes
- ☐ No
- ☐ Producer is willing to consider

3 Does most of your herd calve in a barn or dry lot? *(check only one box)*

☐ Yes ☐ No

4 Do you winter feed and calve in the same area? *(check only one box)*

☐ Yes ☐ No

5 Do you calve heifers and cows at the same time? *(check only one box)*

☐ Yes ☐ No

6 Do you calve heifers and cows in the same area? *(check only one box)*

☐ Yes ☐ No

7 If you selected at least one "yes" for questions 3-6, consider the following. *(if not, skip this question)*

	Already in use	Not feasible	Producer is willing to consider
Overwinter in different area than calving	☐	☐	☐
Calve heifers and cows at a different time	☐	☐	☐
Calve heifers and cows in a different area	☐	☐	☐
Separate newborn calves by age (e.g., sandhills or foothills calving systems)	☐	☐	☐
Use a larger calving area to decrease stocking density	☐	☐	☐
Other *(describe):*	☐	☐	☐

8 Do you provide shelters, windbreaks or creep areas for calves? *(check only one box)*

☐ Yes ☐ No *(skip question 8.1)*

8.1 If yes, would you consider the following practices?

	Already in use	Not feasible	Producer is willing to consider
Provide fresh bedding weekly	☐	☐	☐
Provide fresh bedding monthly	☐	☐	☐
Ensure adequate space (enough room for all animals to lie down at the same time, move comfortably, access feed and water without competition and express normal behaviours)	☐	☐	☐
Separate newborn calves by age	☐	☐	☐
Other *(describe)*:	☐	☐	☐

Calving Management

1 Do more than 5% of calves require assistance at calving? *(check only one box)*

☐ Yes ☐ No

2 Do more than 1% of calvings require you to supplement with colostrum? *(check only one box)*

☐ Yes ☐ No

3 Are you routinely checking if calves have nursed from the cow within the first four hours after birth? *(check only one box)*

☐ Yes ☐ No

4 Are you routinely providing colostrum to twins or calves assisted at calving?
(check only one box)

☐ Yes ☐ No

5 If "yes" for questions 1 and 2 or "no" for questions 3 and 4, are the following practices feasible?
(if not applicable, skip this question)

	Already in use	Not feasible	Producer is willing to consider
Use management strategies to reduce assisted calvings (e.g., calving ease bulls, adjust heifer nutrition)	☐	☐	☐
Check if calves have nursed (e.g., examine cows for udder fullness)	☐	☐	☐
Routinely assist with colostrum consumption in all calves assisted at calving or born as a twin	☐	☐	☐
Assist with colostrum consumption for calves that have not nursed within four hours of birth (e.g., cow in chute, bottle or tube feed)	☐	☐	☐
Other *(describe)*:	☐	☐	☐

6 Are you routinely using dairy colostrum when supplementing with colostrum?

☐ Yes ☐ No *(skip question 6.1)*

6.1 If "yes", have you considered using a high-quality source of colostrum (with at least 100g of IgG) instead? *(if "no," skip this question)*

	Already in use	Not feasible	Producer is willing to consider
Colostrum from cow or own herd	☐	☐	☐
Colostrum replacement product ideally with at least 100g IgG (e.g., Calf's Choice Total)	☐	☐	☐
Other *(describe)*:	☐	☐	☐

NUTRITIONAL MANAGEMENT

1 Do you feed or inject mineral supplementation to cows (e.g., mixing into feed)? *(check only one box)*

☐ Yes *(skip question 1.1)* ☐ No

1.1 If "no," are the following practices feasible? (if "yes," skip this question)

	Not feasible	Producer is willing to consider
Feed free-choice minerals	☐	☐
Force-feed minerals (e.g., mix in feed)	☐	☐
Inject minerals	☐	☐
Other *(please specify):*	☐	☐

2 Do you feed or inject mineral supplementation to calves (e.g., mixing into feed)? *(check only one box)*

☐ Yes *(skip question 2.1)* ☐ No

2.1 If "no," are the following practices feasible? (if "yes," skip this question)

	Not feasible	Producer is willing to consider
Feed free-choice minerals	☐	☐
Force-feed minerals (e.g., mix in creep feed)	☐	☐
Inject minerals	☐	☐
Other *(please specify):*	☐	☐

Farm Biosecurity

1 Do you purchase any foster calves? *(check only one box)*

☐ Yes ☐ No

2 Do you purchase any dairy cows (i.e., nurse cows)? *(check only one box)*

☐ Yes ☐ No

3 Do you purchase your replacement heifers? *(check only one box)*

☐ Yes ☐ No

4 Did you purchase more than 10 bulls during the last three seasons? *(check only one box)*

☐ Yes ☐ No

5 Do you co-own or lease bulls? *(check only one box)*

☐ Yes ☐ No

6 Do you use a community pasture or share communal grazing? *(check only one box)*

☐ Yes ☐ No

7 If "yes" for any of questions 1-5, please consider the following. *(if "no," skip this question)*

	Already in use	Not feasible	Producer is willing to consider
Ask about the disease history of an animal or its herd prior to purchase	☐	☐	☐
Vaccinate new cattle prior to introducing them into the herd	☐	☐	☐

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	Already in use	Not feasible	Producer is willing to consider
Repeat purchasing from trusted sources			
Isolate new cattle for a period of time prior to introducing them into the herd			
Limit the gathering and bunching of the herd			
Limit the number of purchased animals			
Other *(describe):*			

Vaccination

1 Do you annually vaccinate your cows against clostridial diseases (commonly found in an 8-way or 7-way vaccine product)?

Diseases: Blackleg, malignant edema, redwater disease, black disease, tetanus, botulism, enterotoxemia.
Vaccinations: Bovilis Covexin®, Bovilis Tasvax®, Bovilis Vision®, Ceva Coglavax®

- Yes *(skip question 1.1)*
- No

1.1 If "no," is administering clostridial vaccines to pregnant dams feasible? (if "yes," skip this question)

- Not feasible
- Producer is willing to consider

2 Do you annually vaccinate your pregnant dams against scours?

(check only one box)

- Yes *(skip question 2.1)*
- No

2.1 If "no," is administering scours vaccines to pregnant dams feasible? (if "yes," skip this question)

- Not feasible
- Producer is willing to consider

3 Do you annually vaccinate your dams prior to breeding or during pregnancy to prevent reproductive failure and protect your calves from BRD (commonly found in a 5-way vaccine product)?

☐ Yes *(skip question 3.1)* ☐ No

3.1 If "no," is administering reproductive/BRD vaccines feasible? *(if "yes," skip this question)*

☐ Not feasible ☐ Producer is willing to consider

4 Are any of the following practices feasible in your herd?

	Already in use	Not feasible	Producer is willing to consider
Vaccinate calves against Clostridium	☐	☐	☐
Vaccinate pregnant cows against scours in calves	☐	☐	☐
Strategic vaccination against BRD	☐	☐	☐
Other *(please specify)*:	☐	☐	☐

Veterinary Suggestions or Comments: