

PRE-PARTUM PREPARATION OF DAIRY CATTLE

1. PURPOSE

Preparation for parturition starts 3-4 weeks prior to calving. Providing a balanced ration specific for dry cows will help reduce the risk of metabolic disorders pre and post calving. Adequate body condition is also important as it impacts stamina during delivery, colostrum quality, calf vigor, and subsequent rebreeding.

2. RESPONSIBILITY

- 2.1 Trained and qualified personnel
- 2.2 Herd manager
- 2.3 Herd Veterinarian

3. MATERIALS

- 3.1 Selenium (MuSe®)
- 3.2 6cc syringes
- 3.3 5cc syringes
- 3.4 16G x 1 ½ " needles
- 3.5 18g x 1 ½ " needles
- 3.6 Topvac® vaccine (E.coli & S.aureus)
- 3.7 Monensin (Kexxtone ®) Bolus and applicator
- 3.8 Dairy log book
- 3.9 DSA Laitier (Dossier Santé Animal)
- 3.10 Chains and handles
- 3.11 Pail with disinfectant (Endure®) and warm water
- 3.12 Lubricating gel
- 3.13 Insemination gloves
- 3.14 Latex or Nitrile gloves
- 3.15 Paper towel
- 3.16 Calf puller

4. PROCEDURE

- 4.1 Place a Close Up Dry (CUD) card in the name holder 3-4 weeks pre-partum (3weeks=cow/ 4 weeks=heifer) to ensure the proper feed is given to the animal.
 - 4.1.1 A CUD ration balance by the herd nutritionist is fed to cows (3 weeks) and heifers (4 weeks) prior to calving.
 - 4.1.2 Cows are fed dry First Cut Hay only when their ration has been completely consumed.
- 4.2 Administer CUD Treatments within 3 weeks pre-partum.
 - 4.2.1 Check Dossier Santé Animal (DSA) or Close Up Dry (CUD) treatment sheets to ensure there are at least 35 days between the 1st and 2nd dose of Topvac and at least 60 days between the 2nd and 3rd doses. Note: the cow must be healthy before vaccinating. Cows get their first dose at dry off and heifers 2 months pre-partum.
 - 4.2.2 Restrain cow/heifer with halter.
 - 4.2.3 Don gloves.

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- 4.2.4 Using 20G x 1 ½" needle, administer 2cc Topvac intramuscularly in the neck. Injection site must be alternated. Refer to [DC-701 Substance Administration in Dairy Cattle](#).
- 4.2.5 Using 16G x 1 ½" needle, administer MuSe intramuscularly in the neck (6cc for cows/5cc for heifers and small breeds).
- 4.2.6 Record Monensin capsule identification number (located along the capsule body) in the Treatment Logbook and the CUD Treatment Sheets. Refer to 4.2.7 for applicator insertion instructions.
- 4.2.7 Insert the bolus into the applicator as per package instructions:
- 4.2.7.1 Fold wings down along capsule body and place the capsule in the head of the Kexxtone capsule administration tool, orifice end first (fig. 1).

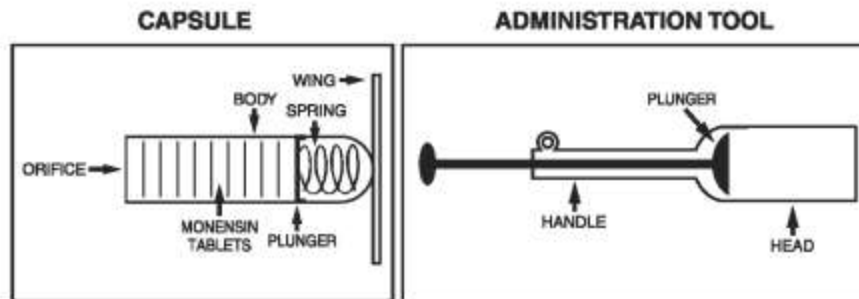


Figure 1: Loading Bolus applicator

- 4.2.8 Administer the bolus orally as per SOP [DC-701: Substance Administration](#).
- 4.2.9 Record all treatments in the dairy logbook and on the Heifer or Dry cow vaccination schedule in the blue binder
- 4.3 Closely monitor the animal around the pre-determined due date for signs of calving:

Signs of calving
Swollen and/or leaking udders
Loose and relaxed vulva
Disappearing pelvic ligament (tailhead will appear to stick up more than usual)
Tail raised for abnormal length of time (looks like she will defecate)
Heavy mucous discharge
Amniotic sac is visible
Restlessness
Decreased appetite
Discomfort

- 4.4 If the cow/heifer does not look well at any point prior to calving (e.g., inappetence, restlessness, difficulty standing or rising), notify the dairy manager or technician. The vet may need to examine the animal for metabolic disorders, abnormal fetal presentation, or uterine torsions.
- 4.5 If the animal is close to parturition, move her to a clean box stall:
 - 4.5.1 Sprinkle some grit on the floor leading to the box stall to prevent slipping.
 - 4.5.2 Using a halter, slowly move the cow/ heifer to into the box stall.
 - 4.5.3 Ensure the animal is completely within the box stall.
 - 4.5.4 Close the stall door then remove the halter and allow the animal to settle.
 - 4.5.5 Transfer the feed she had in front of her to a white plastic feed bin. Place it in the corner next to the water bowl, leaving her as much space as possible.
 - 4.5.6 Transfer her identification card from her tie stall to the appropriate box stall.
- 4.6 Check on the animal frequently during the day. Ensure she is monitored last before leaving at the end of the day.
- 4.7 If the water bag has broken:
 - 4.7.1 Record the time.
 - 4.7.2 Do not leave the animal to calve alone. Call for a replacement if you are unable to stay.

*** IMPORTANT**

**Frequent observations are a must because timing is vital to provide proper assistance
Observe the animals closely, especially first-calf heifers, as they likely will require the most assistance.**

- 4.8 Prepare all the materials you may need if calving assistance is required:
 - 4.8.1 Place pulling chains and handles in a pail of warm water and Endure.
 - 4.8.2 Place lubricating gel, gloves and insemination gloves in plastic caddy.
 - 4.8.3 Leave materials near the box stall.
- 4.9 Refer to SOP [DC-407: Calving Cows](#) for steps on parturition and delivery.

Document Status and Revision History

DATE	STATUS
08-Sept-2020	Version 01: MacDonald Campus FACC approved
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