

# HANDLING NON-AMBULATORY COWS

## STANDARD OPERATING PROCEDURE (SOP)

### TEMPLATE AND GUIDELINES



**GUIDING PRINCIPLE:** Offering timely treatment of non-ambulatory cows is critical to successful treatment. When a cow cannot recover, giving the gift of timely and proper euthanasia is a responsibility and a critical part of offering compassionate care.

### SOP TEMPLATE

Following the Dairy Care 365 “Handling Non-Ambulatory Cow” module guidelines (pages 4-6), use this template and work with your veterinarian to develop a customized SOP for your dairy. Communicate the SOP details to appropriate employees and have available for easy reference. Review and update the SOP at least annually.

Dairy name: \_\_\_\_\_

Address: \_\_\_\_\_

Owner / Manager: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Veterinarian: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

### NON-AMBULATORY COW DISCOVERY (See Guidelines sections 1 and 5.)

- Protocol to ensure that down cows are rapidly discovered
- Protocol for what to do when a down cow is discovered, including:
  - a. Designated person responsible for down cow care for each shift
  - b. What to do when a down cow is discovered
  - c. Where down cows are to be transported

**NON-AMBULATORY COW TRANSPORT** (See Guidelines sections 2 and 5.)

- Protocol for transporting down cows to the designated pen

**NON-AMBULATORY COW CARE** (See Guidelines sections 3 and 5.)

- Protocol for diagnosis (i.e. why is this cow down?)
- Protocol for treatments specific to each diagnosis
- Protocol for supportive care

**EUTHANASIA DECISION-MAKING** (See Guidelines section 4.)

- Protocol for making the decision to euthanize a down cow, including:
  - a. Frequency of re-evaluation of each cow's prognosis
  - b. Criteria for making the decision

**ADDITIONAL NOTES**

Owner / Manager signature: \_\_\_\_\_ Date: \_\_\_\_\_

Veterinarian signature: \_\_\_\_\_ Date: \_\_\_\_\_

Date SOP created: \_\_\_\_\_ Date SOP last revised: \_\_\_\_\_

### 1 NON-AMBULATORY COW DISCOVERY

- Recognize that a down cow is an emergency; early intervention (within less than six hours) is critical for effective treatment.
- Designate a person to oversee down cow identification on every shift.

### 2 NON-AMBULATORY COW TRANSPORT

- Assess the cow's prognosis prior to transport to determine if movement and treatment or euthanasia is most humane for the cow.
- Secure at least 3 people to safely move a down cow.
  - a. If there are not 3 people available overnight, have a plan to care for the cow until 3 people are available.
- **DOs** of non-ambulatory cow transport:
  - a. Use a loader bucket wide enough to accommodate the length of the cow — usually 6-8 feet — and deep enough to cup the body of the cow safely.
  - b. Tie the cow's head back to her hind leg.
  - c. Approach the cow with the loader bucket tilted slightly down and touching the floor.
  - d. Remember that edges of loader buckets can be sharp. Take care to prevent injuries.
  - e. Roll the cow onto the loader bucket or sled. This is better done with ropes than by hand.
  - f. Keep yourself and others an adequate distance from the cow to avoid being kicked — this is another reason to use ropes.
  - g. Remember that it is difficult for a person operating a loader to see behind it. Stay clear of the area behind the loader.
  - h. When she is on deep bedding, encourage her to rise.
- **DON'Ts** of non-ambulatory cow transport:
  - a. Encourage the cow to rise while still on concrete or any slick surface.
  - b. Try to scoop the cow into the bucket with the loader.
  - c. Use the loader to reposition the cow.
  - d. Pinch any part of the cow between the loader bucket and the ground.
  - e. Drag a cow.
  - f. Use hip lifts to transport a cow.
  - g. Cause further damage to the cow during transport. To prevent this, load the cow so that no part of it is in contact with the side of the bucket.
  - h. Stand beneath a raised loader bucket.
  - i. Operate a loader on a steep side slope.

### 3 NON-AMBULATORY COW CARE

- Provide deep bedding.
  - a. The amount of cushion provided by the bedding is one of the most important factors determining the likelihood of a positive outcome.
- Take the time to properly diagnosis the down cow.
  - a. Be thorough in your head to tail evaluation.
  - b. When needed, involve your veterinarian in the diagnosis and treatment of a down cow.
  - c. Know how to treat the most common reasons for cows to be down per your farm's protocol:
    - **Metabolic**
      - >95% = Milk fever / low blood calcium
      - <5% = Low blood potassium, phosphorus or magnesium
    - **Musculoskeletal**
      - Nerve damage
      - Injury / trauma — from other cows, freestall dividers and “splitting out”
      - Hip dislocation
      - Muscle / tissue damage as a result of having been down
    - **Mastitis (toxic)**
    - **Metritis (toxic)**
- Give all cows supportive care.
  - a. Provide deep bedding prior to seeing if they can stand.
    - If needed, use hip lifts to help stand.
      - Limit and designate those personnel authorized to use hip lifts.
      - Make sure that the hip lifts are well padded.
      - Replace or add to old or worn padding.
      - Tighten hip lifts appropriately. They shouldn't be too loose or too tight.
      - Use hip lifts only to briefly assist the cow to try to stand or to assess its ability to stand.
      - Only leave on for a few minutes.
      - Only use on good bedding.
      - Don't use for transport unless authorized by a veterinarian to use to remove cows from freestalls.
  - b. Work with your veterinarian to understand when to use cattle prod.
    - Apply only short bursts of encouragement. Once or twice should be enough to know if the cow can be motivated to stand.
    - Never apply to sensitive areas like the nose or vulva.
    - Never use on slick flooring surfaces.
    - Limit use, restrict to certain personnel and store securely.

c. Adjust laterally recumbent cows to a sternal position; use bales of hay to prop her upright if necessary.

- Sternal recumbency = lying upright on chest with legs beneath the animal
  - A cow that is unable or unwilling to remain in sternal recumbency for more than 24 hours is a candidate for euthanasia.
- Lateral recumbency = lying flat on side with all four legs out to one side
  - A cow is at risk of bloat if she is in lateral recumbency.



d. Roll the cow from one side to the other side frequently (ideally every 2-4 hours).

If per protocol, administer anti-inflammatory therapy.

e. If per protocol, administer pain management / therapy.

f. If per protocol, administer fluid therapy (oral or intravenous), if necessary.

g. Provide clean water that the cow can reach in a low profile vessel that cannot be easily tipped over and is easily accessed.

h. Provide fresh hay / TMR that the cow can reach.

i. Provide shade, if outside in the summer.

## 4 EUTHANASIA DECISION-MAKING

- Frequently re-evaluate the cow's prognosis.
- Respect the time limit after which a cow, that cannot rise, will be humanely euthanized.
- Evaluate and act on the below euthanasia indications.
  - a. Cows with fractures or other conditions from which they cannot recover
  - b. Cows that are down (and have been unable to stand on their own for at least a few minutes) for more than 24 hours
  - c. Cows that are not eating or drinking for more than 24 hours
  - d. Cows that are unable or unwilling to remain in sternal recumbency on their own
  - e. Cows experiencing pain that cannot be effectively relieved

## 5 RECORD KEEPING

- Time of discovery / Location (e.g. pen number)
- Time of arrival in hospital pen
- Treatments
- Length of time in hospital pen
- Outcome

**FOR MORE INFORMATION ABOUT DAIRY CARE 365, CONTACT YOUR MERCK ANIMAL HEALTH REPRESENTATIVE OR EMAIL [DAIRYCARE365@MERCK.COM](mailto:DAIRYCARE365@MERCK.COM).**