

CALVING EASE

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Less Mortality in the first 24 Hours

- Most calves that die within the first 24 hours are alive at birth.
- The most important way to improve survival at 24 hours is to achieve unassisted vaginal birth.
- Start with observing calving at a distance and do nothing.
- For calving cows that are moved during second stage labor, allow time for labor to resume before providing assistance.
- After delivery observe closely for normal behaviors.
- For calves observed to be breathing irregularly, take action promptly to revive the calf and stimulate regular breathing.

Take time, don't rush to provide assistance

Dr. Sheila McGuirk, University of Wisconsin School of Veterinary Medicine, in her presentation at the Dairy Calf and Heifer Association meetings in April, 2013, noted that seventy-five percent of dead-on-delivery calves are alive at the beginning of the birth process. She emphasized the importance of “hands-off” observation of calving cows. We might paraphrase her advice by reversing the popular saying about taking action:

Don't just do something,
Stand there.

Many times we need to take her advice to “walk away” and give the dam time to dilate and push the calf into the birth canal. Especially noteworthy was her observation that when calving cows are moved from free-stall housing into calving pens we must allow time for labor to resume. Her guidelines are:

- First lactation dams – allow a minimum of 30 to 40 minutes.
- Second and later lactation dams – allow a minimum of 10 to 20 minutes.

During her presentation Dr. McGuirk noted special issues common to larger farms where there can be issues at shift-change times. Often the departing shift is reluctant to leave a dam in labor for the arriving shift to deliver. This may mean more assisted deliveries than are necessary. This is why obstetric training and re-training for all shifts and workers that fill in for holidays, weekends and vacations is important. This should a time to build relationships for effective communication between shifts.

Observe for normal calf behaviors

- Head righting – should begin within minutes
- Sitting up on her belly (sternal) – within 5 minutes
- Making standing attempts – within 15 minutes
- Shivering – within 30 minutes
- Standing – within 1 hour
- Suckling – within 2 hours of delivery

These behaviors are part of a calf's normal adaptation to life outside the uterus.

Simple techniques to stimulate regular breathing

Sometimes calves do not show normal calf behaviors during the suggested times shown above. They may have flaccid muscles. They may not be responsive to stimulation. Their breathing may not be regular. Which simple techniques can be used?

Dr. McGuirk recommends placing the calf on a low platform, cart or table. Then try these:

- Place the calf's head over the edge of the raised platform to 10 to 15 seconds to get postural fluid drainage from the mouth and nose.
- Place the calf in a sitting position if possible [on her belly]. Take a clean, dry towel and rub the topline of the calf from the tail to the poll.
- Use the towel to stimulate the ears, eyelids and nose of the calf.
- Ice water can be poured onto the head or into the ear of the calf to stimulate breathing.
- Compress and then shake the trachea (windpipe) high up in the neck to stimulate a cough reflex.
- Place pinpoint pressure right in the center of the muzzle between the nostrils or place finger pressure across the nasal septum where the nose tongs would be placed to further stimulate breathing.

How urgent is it to take these measures to “jump start” a non-responsive calf? Dr. McGuirk notes that without appropriate movement and reflex activity the newborn calf's body temperature declines from an elevated level at birth to 101-102° within an hour. It will continue to decline if the calf is not active and shivering. Death due to hypothermia can occur with 1 to 2 hours, especially when the environmental temperature is below 58° (14°C), the low end of a calf's thermal neutral zone.

Reference: McGuirk, Sheila “Gold Standards in Practice: The First 60 Days.” Proceedings of the Dairy Calf and Heifer Association, April 4-5, 2013, Lancaster, PA, pp. 19-23.

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