

The first 15 minutes: Why they matter to a newborn calf

The things human caretakers do — and don't do — can have a lasting impact on the survival and health of newborn calves. Events in the first 15 minutes after birth can make a lifetime of difference a newborn calf.

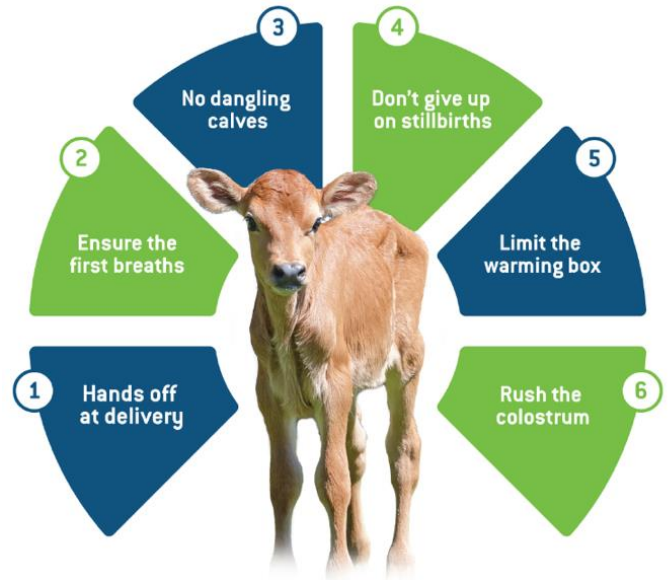
Here are six calving do's to help newborn calves get their best possible start:

1. Hands off at calf birth

During calf birth, when we see two hooves emerging, our natural inclination is to grab ahold and help the cow out. But some important physical and biological events are happening during calf birth, and normally they take time.

As an example, you may notice when cows deliver naturally, they pause for a few moments after the calf's ribcage passes and the calf takes its first breaths of air. At this time, the placenta transfers its blood supply to the calf. This blood transfer contains about 1 pint of blood and is crucial for timely placenta expulsion and a thrifty calf.

As long as the cow is progressing normally and the calf is in the correct position, with no signs of stress from the cow or calf, the best strategy is to monitor the process, but let her and Mother Nature do the work.



2. Ensure those first breaths

If you are concerned the newborn calf is not breathing or thriving like it should, you can intervene when the newborn calf is out to help it take those critical first gasps of air.

Suggested methods are poking a clean piece of straw in the nostrils or pouring cold water on the calf's forehead. Also, help the newborn calf sit up on its sternum by tucking the front legs under the body. This sternal recumbency position helps ensure airways are open and makes it easier for newborn calves to breathe.

Monitor the calf's breathing and overall thriftiness during this time. Irregular breathing patterns and a slight gurgling sound from the calf is normal and can be expected.

3. No dangling newborn calves

There is a school of thought that every newborn calf should be lifted upside down to help clear fluid from its lungs. Research has shown this practice does indeed expel fluids, but they are contents of the stomach — not the lungs.

The result of turning the newborn calf upside down is harmful because the unnatural body position stresses the calf and causes the internal organs to press against and crush the diaphragm, making it more difficult for the calf to breathe.

4. Don't give up on stillbirths

Some calves may be born not breathing but may still have a heartbeat.

Go the extra mile by feeling for a heartbeat under the left leg on the rib cage. If you feel even a slight heartbeat, vigorously rub the newborn calf's chest and use the straw-poke and ice water techniques to stimulate them. You may be surprised by how many of them "wake up" and perform just fine.

5. Limit the warming box

Warming boxes are used with the best of intentions. In instances of very cold weather they are necessary, but can actually harm calves in the long run if used for too long or not cleaned regularly. If not cleaned regularly, warming boxes can serve as reservoirs of harmful bacteria, which can be easily absorbed by newborn calves.

Plus, spending too long (48 or more hours) in an ultra-warm environment can deplete calves' internal stores of brown fat, leaving them less capable of making thermal adjustments when they are transitioned to a normal environment.

A better approach is to use the clean warming box sparingly until the newborn calf's hair coat is dry (up to 24 hours) before placing it in a dry, well-ventilated and well-bedded environment. Consider using calf jackets and extra straw bedding in frigid conditions (less than 30 degrees Fahrenheit).

6. A rush order of colostrum for calves, please

Newborn calves can absorb critical antibodies and other immune factors from their dams only through colostrum and their ability to do so drops rapidly after 24 hours.

How much colostrum does a newborn calf need? As soon as the calf is breathing and sitting upright, your next most important task is delivering 3-4 quarts (10 percent of the calf's bodyweight¹) of high-quality, biosecure colostrum within the first 2 hours of life. Use a Brix refractometer reading of 22 or higher to determine high-quality maternal colostrum.

This process can be expedited by using previously harvested pasteurized colostrum from other dams in the herd or feeding a high-quality [calf colostrum replacer](#) with 150 grams IgG (globulin protein) per dose.

To prevent delivering a large load of harmful bacteria with beneficial colostrum, consider keeping a separate stash of sanitized bottles, nipples and esophageal feeders for colostrum feeding *only*.

Consult your veterinarian, nutritionist or calf colostrum replacer supplier to learn more about timely and effective colostrum delivery. Learn more about [calf colostrum replacer](#) and [whole milk products](#).

¹ Dairy Calf and Heifer Association Gold Standards. 2016.