



# Vet Call

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## Cesarean sections

*The cesarean section (C-section) is a very valuable surgical procedure to decrease cow and calf death loss due to a difficult birth.*

### Multiple reasons

The use of C-sections to correct certain calving problems is common. Probably the most common indication for performing a C-section is immaturity of the dam. In the case of a small dam relative to calf size, C-sections will often result in the most positive, or least negative, outcome.

The alternative to many C-section deliveries is a difficult, forced extraction with a calf puller, which often results in the death of the calf and severe damage to the heifer.

Other indications for doing a C-section rather than an assisted vaginal delivery are a malposition that cannot be corrected either

in a timely manner or at all, or a fetal deformity that produces a monster calf.

### Form an offensive strategy

The best outcome following a C-section is a live calf and a dam that does not have any postcalving complications and that breeds back in a timely manner. The sooner one can identify the need for a C-section after a cow starts labor, the more likely a positive outcome will follow. If a cow has been in labor for a prolonged period of time, the likelihood of calf death, postcalving complications and delayed rebreeding are increased.

To decrease the likelihood of a dead calf or nonproductive dam due to a difficult birth, cattle should be observed frequently, and stage of delivery and time when observed should be recorded to provide a mechanism whereby a lack of progress can be identified. Because about half of difficult births occur in heifers, they should be given priority for observation.

### Time to assist

If a producer is experienced in assisting difficult births, a heifer or cow that is not progressing should be confined in a squeeze chute or tied with a halter. Cleanliness is important, and disposable plastic sleeves should be worn to examine the birth canal. The criterion used by veterinarians to decide what dystocia cases should be solved with a C-section vs. vaginal delivery will vary between practitioners.

I recommend that both producers and veterinarians seriously consider a C-section

if they either identify a problem that they know they cannot correct (monster calf, extremely large calf for the size of the dam, some malpresentations — particularly with a large calf) or if they try to assist the delivery and are not making any progress after 15 minutes of work.

Most veterinarians prefer that potential C-section cases be brought to the veterinary clinic where appropriate facilities, equipment and trained labor are available. When that is not possible, the animal should be confined to an area with good lighting, protection from the weather and, preferably, access to electricity and running water.

The surgery can be performed with the animal either standing or lying down. Veterinary preference, estimation of the degree of animal exhaustion and other factors enter into the decision of how the surgery will be accomplished. One or two assistants are helpful. The veterinarian or assistant will clip the hair from and clean the surgery site and will inject local anesthesia so that the cow will not feel the surgery but will remain awake.

The veterinarian will cut through the skin and muscle of the abdomen and then he or she will cut open the uterus and grab the calf by the legs and pull it through the surgical opening. Once a live calf is delivered, someone other than the veterinarian should be assigned to care for the calf while the veterinarian closes the surgery site. The cow may need intravenous (IV) fluids, antibiotics or special care after surgery to decrease the risk of a negative outcome.

After a successful C-section, the producer must decide whether to keep the cow in the herd. I advise producers to cull animals that had a C-section due to inadequate size of the dam or a genetic fetal deformity. I am less likely to recommend culling animals that had a C-section due to a malpositioned calf.

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### Indications for cesarean section delivery

- Immaturity of dam (large calf relative to dam size)
- Malpresentation that cannot be corrected
- Malposition that cannot be corrected in a timely manner
- Fetal deformity (genetic defect or monster calves)