

## **The “Downer Cow”**

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The one syndrome that seems to quickly get our attention is the “downer cow,” the cow that simply is unable to get up on her own. For some reason, we tend to see more of these more in the spring time – likely a combination of calving cows, muddy pastures, questionable winter nutrition, and growing grasses. Understanding the factors that cause cattle to become down is essential to preventing this situation from occurring in the future.

### ***Causes of Downer Cows***

There are many non-infectious and infectious reasons that can cause a cow to become unable to stand on her own. Some may be obvious, and some not-so-obvious.

The most common cause of a downer beef cow this time of the year is due to calving injuries. Pressure on the spinal cord and damage to pelvic muscles and nerves can occur during the birthing process, causing weakness or “calving paralysis.” Many of these cows will get up on their own after a short period of rest. Close attention should be paid to get these cattle up to prevent further damage to the dam and to allow the calf to nurse.

Other non-infectious causes of downer cows include other physical injuries and metabolic conditions. Metabolic conditions such as hypomagnesemia (low magnesium, or “grass tetany”) or hypocalcemia (low calcium, or “milk fever”) are causes of weakness in animals, often progressing until they are unable to stand. Hypomagnesemia can be caused by feeding poor quality hay or grazing succulent green grasses. Hypocalcemia is more often seen in freshly calved cows, such as dairy cattle, that have a sudden increase in milk production. Advanced neoplasia can also cause an animal to not be able to stand – tumors often settle in the spinal cord of older animals, causing rear-limb weakness or paralysis.

If left untreated, severe infections such as metritis and mastitis cause weakness and may leave an animal unable to stand. When an animal has an infection, its body’s resources are spent on trying to heal the affected system. Dehydration and weakness are common sequelae to illnesses, and can cause an animal to go down and not have the strength to get back up.

### ***Care of the Downed Animal***

Regardless of the cause, recovery of the downer cow necessitates an immediate plan of action. Downer cattle need food, water, and shelter from extreme elements. If the cow is unable to sit up in sternal recumbency, a bale of hay or other solid object should be propped behind her shoulder to keep her upright. This position will maximize her breathing capabilities and allow her to more easily use her front legs for leverage. The animal also needs to be kept upright to prevent regurgitation and aspiration of feed or rumen contents. Bloat, which can be quickly fatal, can also occur when an animal is on its side and unable to eructate (belch).

The affected animal should be periodically moved from side to side to prevent compartment syndrome, which occurs when the blood and lymphatic systems are not able to circulate, resulting in more severe muscle and nerve damage. Continuously laying on one side can also cause skin lesions and decubital (pressure point) ulcers. When used properly, hip lifters can help circulation in the limbs and allow for a good examination of the cow.

The surrounding area should be as dry as possible to provide good footing for when the animal tries to get up. The animal may need to be moved away from concrete or other slick areas. Animals should never be dragged across the ground for any long distance. Large animals can be safely moved using properly placed straps and ropes. Glides can also be made out of gates, wooden boards or scrap plastic/metal if the animal needs to be moved across any long distance.

A producer should seek veterinary advice when an animal is unable to get up and stand on its own. Veterinary treatment is indicated when the condition of the animal does not progress, or when cattle are weak or ill and do not respond to treatment. Proper care for a downer cow is essential from both a medical and welfare standpoint. If an animal has an obvious injury that it cannot recover from, such as a broken leg, it may need to be humanely euthanized to prevent further pain and suffering. Furthermore, animals that have been down for an extended period of time, are in severe pain, and have had no response to treatment may need to be euthanized.

### ***Preventing Problems***

Understanding factors that cause downer cows is essential to preventing them from occurring year around. Good management practices can prevent many problems in the cow-calf herd. Select the right bull for your herd and avoid breeding small or immature heifers. Attend to calving difficulties early and call for veterinary assistance in a timely manner. Provide proper nutrition to prevent metabolic conditions such as hypomagnesemia or hypocalcemia, especially during the winter when forage quality may not be ideal. Contact your herd veterinarian or livestock extension specialist to help you develop good health management practices to prevent conditions which can lead to downer animals.



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