



# Cattle Producer's Handbook

Animal Health Section

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## Diseases of Beef Cattle Associated with Post-calving and Breeding

*S. P. Cuneo, D.V.M., Department of Animal Sciences  
C. S. Card, D.V.M., Ph.D., Department of Veterinary Sciences  
E. J. Bicknell, D.V.M., Ph.D., Department of Veterinary Sciences  
The University of Arizona*

Once a cow has delivered her calf, the groundwork for the next year's calf crop must be laid. This publication will examine some of the more common problems that occur during the post-calving interval and at the time of breeding. Often these problems are subtle, and a producer may not realize there is a problem until the cows are examined for pregnancy or until the next calving season. Once a problem has progressed to this point, the individual animal is often culled from the herd or an entire calf crop can be significantly reduced.

### Problems Post-calving

#### Metritis (Uterine Infection)

Cows will normally have a discharge from their birth canal for 8 to 14 days post-calving. This discharge is often thick and reddish in color and has no odor. If the uterus has become infected from calving, the cow has developed a metritis.

**Causes**—Infection of the uterus by bacteria after calving. Often cows that have had a difficult birth, a retained placenta, or have calved in a dirty environment will become infected.

**Clinical Signs**—They include discharge from the birth canal that is thin, watery, red to gray in color, and has a foul smell. Other symptoms may include sickness, increased temperature, depression, off feed, diarrhea, and stop milking.

**Treatment**—Administer drugs to evacuate the uterus of infected contents. Usually oxytocin will only work in the first 48 hours after calving. Prostaglandins may be more effective in increasing uterine tone and opening the cervix to drain the uterus.

Antibiotics should be infused into the uterus. Systemic antibiotics are useful, especially oxytetracycline.

If the cow is sick, supportive treatment is necessary; fluids, steroids, glucose, and antihistamines. Cattle may develop tetanus or other clostridial infections from a metritis, so vaccination or use of tetanus anti-toxin may be indicated.

**After Effects**—These may include chronic uterine infection and a problem breeder.

#### Endometritis

This is chronic low-grade infection of the uterus. The cow very seldom shows any outward signs.

**Causes**—This condition often follows metritis or retained placenta, and often follows difficult calving, twins, abortions, or C-sections. Physical damage to the birth canal during calving or during breeding can also be a cause.

**Clinical Signs**—No signs are evident other than some flecks of pus in the mucus discharged during the heat periods. Affected cattle will cycle normally but will not conceive. Uterus may feel abnormal during rectal palpation.

**Treatment**—Evacuate the uterus using prostaglandins. Treat uterus with antibiotic flushes. It is best to treat the uterus during a heat to improve drainage. Often no treatment is done because the problem is not discovered until pregnancy examination, and the cow is culled for being open.

**Prevention**—Identify all cows with calving problems and watch for abnormal discharges. Consider having a pre-breeding examination done on cattle with potential problems so they can be treated before breeding starts or identified to be culled.

### Delayed Uterine Involution

This condition is often associated with difficult births, twins, abortions, C-sections, or retained placentas. Cattle that have had metritis or endometritis often have a sub-involved uterus.

**Clinical Signs**—None. It is found only by rectal palpation.

**Treatment**—Treatment is similar to endometritis.

### Pneumovagina (Windsucker)

In older cows the cervix and uterus extend forward over the brim of the pelvis. This pulls the vulva forward into the pelvis and allows air to be trapped in the birth canal. Tears or laceration from calving can also allow air to be trapped.

**Clinical Signs**—Air in the vagina after urination or defecation, or after the animal stands up are signs of pneumovagina. Urine is retained in the floor of the vagina. Fecal material may also be present. Because of contamination, this cow is often a problem breeder.

**Treatment**—Correct tears and lacerations with surgery, and treat the uterus for infection.

### Pyometra (Pus in the Uterus)

With pyometra the cow has developed a uterine infection, and the cervix has closed to prevent the accumulated pus from draining out. The uterus becomes enlarged, and the cow will not show heat cycles.

**Causes**—Pyometra can result from any contamination of the uterus; problem calving, retained placenta, or contamination during breeding. In some cases, cows are pregnant and the fetus dies and becomes macerated.

**Clinical Signs**—The cow fails to show heat, and fluid-filled uterus is found on rectal palpation. Discharged pus may be seen around the tail and vulva.

**Treatment**—Prostaglandins to drain the uterus, as well as antibiotic flushes and manual massage, are treatments.

## Problems at Breeding

### No Heat

Beef cattle will respond to environmental and nutritional stress by stopping normal heat cycle activity. Before the breeding season begins, observe the cow herd for signs of estrus activity. You should expect about 5 percent of the herd to be in heat on any given day. By watching for signs of estrus and getting a rough estimate of the percentage of cows showing heat, you have a fair idea of the level of estrous cycle activity in the herd. If you find that the level of activity is lower than expected, consider having a number of animals examined to determine if they are cycling or not.

The lack of cycling by individual cows may be the result of uterine problems, pregnancy, or stress. Rectal palpation can quickly determine the cause.

**Treatment**—In most cases, prostaglandins will bring a cow into heat if she is cycling normally already. If normal cyclic activity has stopped because of stress, that pre-existing condition must be resolved.

### Weak/Silent Heats

The condition often occurs 30 to 60 days postpartum. This is when the cow is having difficulty in establishing normal cyclic activity after calving.

Animals that are stressed will have a more difficult time in starting normal cyclic activity. Cattle that are at greatest risk are first-calf heifers that are being bred for the second calf and older cows with poor teeth or chronic health problems.

Marginal deficiencies in copper may cause weak heats. If a high percentage of cows show decreased heat activity, have several cows examined and check for serum copper levels. Short term (48 hours) removal of calves may help herds where the cows are showing weak or absent heats.

### Persistent Heat

In a small percentage of cattle, the follicle that brings the animal into heat does not rupture and release the egg. In these cases the animal will show heats constantly or every few days.

**Treatment**—Cattle with persistent heats should be examined rectally and, if a cystic ovary is found, they should be treated to induce ovulation. Cystic ovaries can also cause a lack of heat.

### Prolonged Time Between Heats

A prolonged period between heat cycles will occur in a small percentage of cattle. The primary cause is the early death of the fetus, rarely because of congenital problems. A beef producer must be alert to two common diseases that will cause early embryonic death and therefore prolonged intervals between heats. These diseases are trichomoniasis and vibriosis. Both are venereal diseases carried by the bull. The cow becomes infected during breeding. The resulting infection kills the embryo after 4 to 6 weeks, and the cow will then return to heat. These diseases are a particular problem in range operations because infected bulls may be introduced without the owner's knowledge.

If you observe an unusual number of cows returning to heat after 45 to 60 days of breeding, have several cows examined immediately.



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