



# Cattle Producer's Handbook

Animal Health Section

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## Prevention of Baby Calf Diseases

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Infectious organisms that affect intestines, lungs, or perhaps all systems at once, constitute some, not all, of the causes of “disease.” For example, some nutritional deficiency diseases are related to improper feeding of the dam, and underfeeding of the calf, and also deficiencies of the defense mechanisms. The term “baby” calf, as used here, refers to the very critical age period — the first week or two of life — after which a well-started calf, on a well-managed, healthy cow, usually flourishes.

Prevention of disease is, of course, preferred to treatment. One key to prevention, according to some, is to keep things simple or as natural as possible. But in nature or the wild, disease of the newborn often causes rates of loss that would be unprofitable for livestock producers. And while it might be wise to keep things natural or simple, the fact is, the situation has been made unnatural by putting up fences, crowding the animals, fixing the calving season, and giving the cattle no choice as to feed. Is there a way to prevent that occasional wreck? Or, if excessive problems occur, how can losses be minimized? Part of the answer is for producers to keep thinking, keep abreast of new developments, and continue to learn from other knowledgeable people and from the mistakes of others.

The following should be read with the realization that there is a lot of new information concerning calf problems and some increase in understanding, but the problems haven't been mastered. Many problems can now be avoided, however, and some of our troubles can be managed well enough to minimize losses.

As part of a preventative medicine program, a representative number of cattle should be sampled for blood selenium and zinc and serum copper. Appropriate micronutrient supplementation will prevent or reduce the severity of diarrhea outbreaks.

When in the midst of a disease problem, good investigative efforts, usually by a team, are aimed at determining exactly what factors accounted for the problem. The team might include a practicing veterinarian (and his/her professional contacts in many disciplines), county extension agents, nutritionists, epidemiologists, and producers.

The whole story might be difficult to discover, but often enough, the discovery of important contributory weaknesses in management, health programs, and nutrition, etc., can lead to remedial measures that will stop the disease processes. Early intervention is important so that proper samples can be taken while the cause is still detectable, and remedial measures can be instituted at a time before the situation gets out of hand.

A word of caution is in order. Subpar husbandry of the cattle, whether willfully or by mistake, usually cannot be overcome by anything that comes through a needle, a tube, or a balling gun! The damage can be minimized on an emergency basis in some cases, but a full investigation should point to needed changes that lead to total prevention.

### Prevention of Neonatal Calf Diseases

Three factors are extremely important in determining whether a calf remains healthy, survives a disease, or dies. Managers must recognize all these factors.

1. The amount of immunity the calf receives from the dam via colostrum.
2. Kind and amount (dose) of infectious disease agents in the calf's environment.
3. Stress, which is a factor (or factors) that facilitates or encourages the establishment and destructive effects of disease.