

Preventing Diseases in Lambs

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The previous article started a series on sheep health management. In that article, background information on preventing disease in sheep was covered. Management practices such as; keeping a closed flock, timely vaccination, smart purchasing, and working with a veterinarian were discussed.

This article will cover diseases that commonly afflict lambs. Actually, most of these diseases also can affect adult sheep, they just occur more commonly in lambs. A brief overview of each disease will be given, with special emphasis on preventions.

Enterotoxemia:

This disease is often called overeating disease or pulpy kidney. It is a disease that is caused by bacteria. The bacterium are clostridial perfringens types C and D. Type C occurs in newborn lambs up to three to four days old. Type D can affect sheep of any age, but is most common in suckling or feedlot lambs.

Both strains of the bacterium are commonly found in soil and manure. Under normal circumstances, when animals ingest the bacterium, there is not a disease issue as it is often simply excreted. However, when lambs ingest a high quantity of milk, feed, pasture, or all three, the bacteria population can increase in numbers rapidly. Thus, the common name, "overeating" disease. Often, the type D strain more commonly affects single lambs rather than twins. These lambs receive more milk and are often stronger and more aggressive eaters. What actually kills the lambs is an endotoxin secreted by the bacteria.

The most common first symptom of enterotoxemia that most producers see is a dead lamb. If the lamb was a single, undocked, uncastrated and in all appearances seemed healthy and quite robust, it very well could be enterotoxemia. The period of time from symptoms to death is very short, not more than an hour or two. Having a postmortem done on dead lambs is always a sound management practice.

Prevention of overeating disease in sheep is rather simple, very economical, and effective. It is best done by vaccination. The best method of vaccination involves giving a 2cc subcutaneous injection of a toxoid vaccine that provides protection for the C and D strain, as well as tetanus (T). It is commonly referred to as C, D, and T. Originally, give the ewes a shot four to six weeks before lambing, a booster shot two to three weeks later, and then an annual booster two to four weeks before lambing. Lambs will then receive the antibodies to the C, D, and T strains when they drink colostrum from their mothers. Lambs are then commonly given a booster at eight weeks and about a month later.

Acidosis:

This is a very common problem in lambs consuming a high grain diet, usually when finishing for market. Acidosis can affect any age sheep, but most breeding animals do not receive high enough levels of grain for it to be of a practical problem (unless of course they obtain unwanted access to high levels of grains).

Acidosis is simply the over-consumption of highly fermentable starch or carbohydrates. Known also as grain overload. What happens when sheep over consume grain is that more lactic acid is produced through bacterial breakdown of the starch than bacteria can utilize or remove from the rumen. This excess lactic acid then decreases the pH (makes it more acidic) of the rumen. This results in an upset rumen, diarrhea, lowering of feed consumption, a fever, etc. Also, some of the excess lactic acid can be absorbed into the bloodstream, lowering the pH of the blood. This can cause foundering and even liver damage.

Lactic acidosis can be a serious health concern, and can cause death, in serious cases, and founder, and poor growth in less extreme cases. The best prevention of acidosis is to take the time to properly adjust lambs to high grain diets. It takes two to three weeks to move a lamb up from a primarily forage diet to a high grain diet. It actually is time needed for the microbial population to shift to utilize the lactic acid

being produced. Do not increase the amount of grain more than one-fourth pound per lamb per day when working the grain content of a diet up. Also, keep grains in a secure area so escaping sheep do not have access to overindulge on them.

If sheep do get acidosis, the best treatment is to try to neutralize the acid in the rumen. This is done with baking soda diluted with water and physically drenching the sheep or the free choice feeding of it (if they will eat it). Also, treating the sheep with an anti-inflammatory agent (banamine or aspirin) will help reduce fever and founder problems. Treating them with an antibiotic is also recommended.

Hypothermia/Starvation:

This is the leading cause of death in the United States of young neonatal lambs. It is often caused by cold weather, wet weather, and an inadequate intake of milk by the lamb. Inadequate intake of milk can be caused by a number of factors. These can include spoiled udders, too many lambs, poor nutrition in late gestation, lambs that lack an aggressive suckling instinct, and other reasons. Sometimes, when the weather is extremely cold or lambs are very wet, they simply cannot consume enough milk to stay alive. Hypothermia results and it is usually terminal.

Prevention of starvation/hypothermia consists of having ewes with adequate amounts of milk, providing appropriate shelter, or lambing at a favorable time of year. Culling ewes with udder problems or old ewes, separate feeding areas for ewes that are young, thin or gestating multiple feti can all help in providing adequate nutrition to the ewe. Adequate late gestation nutrition allows lambs to be born strong, and ewes to have adequate mammary tissue synthesis to produce high levels of colostrum and milk.

E.Coli Scours:

This can be a major problem with young (one to five days old) lambs during the lambing period. Left unchecked, E.Coli scours can be devastating to a flock, causing a very high mortality. Lambs die from dehydration, and it happens from 24 to 36 hours after the onset of scouring.

E. Coli scours are best prevented by good sanitation practices. Maintaining barns with good ventilation, dry, no drafts, and strict cleaning of lambing premises. Also, having ewes shorn so the manure tags are gone is helpful in preventing the diseases. Timely intake of colostrum is important in preventing the disease.

If E. Coli scours is a problem on a specific farm, then producers should work with a veterinarian to develop a potential vaccination and antibiotic treatment plan to complement a sanitation program.

Pneumonia:

One of the major health problems for sheep of all ages, but especially for lambs. There are a number of different types of pneumonia and agents that cause pneumonia. Also, environmental and weather conditions certainly play a role in sheep developing pneumonia.

Regardless of the specific type of pneumonia, there are often similarities in the causation of the disease. Usually there is some type of environmental condition that initially causes lung irritation. This can be dust, ammonia buildup, extreme weather changes (especially in humidity levels), etc. Then the lung tissue is susceptible to microbial attack and colonization. The resulting infection then causes pneumonia and the respective symptoms (labored breathing, fever). Pneumonia is often fatal. At best, an animal recovering from the disease can often have lung damage that will affect future health and productivity.

Lambs can be very susceptible to pneumonia. Especially when housed or shed lambled. The best way to prevent pneumonia is ventilation, fresh air, and sanitation. Remove as many of the environmental problems as practical, and the lungs will stay healthier.

If pneumonia is an ongoing problem in a flock, it is important to work with a veterinarian to develop a management strategy. Post mortem analysis of lambs can pinpoint the causative agents for pneumonia and then specific antibiotics can be selected to treat affected sheep.

Internal Parasites:

This is one of the biggest health problems in grazing lambs. Lambs are very susceptible to internal

parasite infestation. Actually, it is beyond the scope of this article to discuss this topic adequately. A future article will be written on this topic alone.