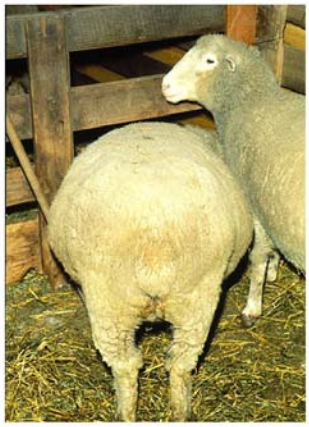
Pregnancy Toxemia in Small Ruminants

Pregnancy toxemia is a disease that occurs in pregnant ewes and does during the last 1-2 months of gestation. It is most commonly seen in ewes and does that are carrying twins or triplets but occasionally is seen in dams that are carrying a single fetus. Although the term "toxemia" implies that this disease is caused by a toxin in the bloodstream, this disease is not caused by a toxin. Rather, this disease occurs when the mother fails to ingest adequate amounts of dietary energy to meet the energy requirements of the rapidly growing fetuses. As a result, the mother develops dangerously low blood sugar and impaired liver function. If pregnancy toxemia goes unrecognized and untreated, the mother may lapse into a coma and die; less commonly, she may give birth prematurely to weak or stillborn babies.

A pregnant ewe carrying triplets.

Ewes and does with twins or triplets are at higher risk for pregnancy toxemia than are ewes and does carrying singles.



Because this disease is caused by a failure to ingest adequate amounts of dietary energy, it can develop as a complication of another illness during the last 1-2 months of gestation, particularly if that illness results in poor appetite. Diseases such as footrot, pneumonia, mastitis, and diarrhea can result in pregnancy toxemia as a complicating condition.

The signs of pregnancy toxemia in sheep and goats include:

- Weakness, dull attitude, and poor appetite
- Separation from the flock or herd
- Inability to rise
- Apparent blindness, staring off into space
- Coma and death

Treatment of pregnancy toxemia requires that any **predisposing illness**, such as pneumonia or footrot, be adequately treated to eliminate the detrimental effect of that illness on the pregnant mother's appetite. In addition, the ewe or doe should be offered a variety of feeds, including grain, high-quality hay, and fresh, clean water. Consult your veterinarian to discuss additional treatments, such as propylene glycol or intravenous glucose infusions. In severe cases, induction of delivery of the babies or emergency cesarean section may be warranted to save the life of the ewe or doe.

Prevention of Pregnancy Toxemia

- Feed ewes and does appropriately to avoid excessively fat or thin body condition during pregnancy
- Ultrasound exams at 40-60 days post-breeding can be used to identify ewes and does with twins or triplets, allowing you to feed these animals more energy during late gestation.

This also enables you to watch these animals more closely for signs of pregnancy toxemia, since they are at higher risk if they have twins or triplets.

- Beginning approximately 6 weeks prior to the anticipated birthing date, begin feeding 1/4 - 3/4 lb of corn or oats per ewe per day, divided into 2-3 feedings. Over 10-14 days, gradually increase the amount of grain fed until you reach 1 – 1.5 lbs per head per day (for smaller breeds) or 1.5 – 2.0 lbs per head per day (larger breeds); again, this daily allotment of grain should be divided into 2-3 feedings.
- Feed high-quality grass hay and/or alfalfa; avoid aged or excessively stemmy hays, as the nutrient content of such hays is often inadequate to meet the mother's needs
- Make sure adequate feeder space is available to enable the more timid and smaller ewes and does are able to eat
- Provide plenty of clean, fresh water at all times