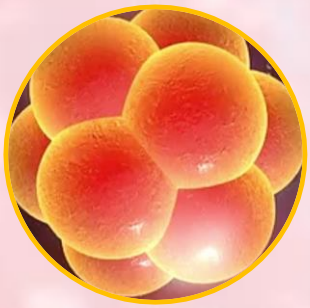
EMBRYO SURVIVAL

In sheep/goats, most pregnancy losses happen during the embryo stage (first 30 days of development), with the majority occurring before maternal recognition of pregnancy (~day 13). Losses usually range from 20 to 40 percent, with younger females experiencing more loss than mature ewes/does. For the sheep/goat producer, increased embryonic mortality results in delayed lambing/kidding, reduced litter sizes, and potentially open females (if all embryos die).



Embryo survival can be affected by many factors including genetics, age and parity, temperature, nutrition, hormonal environment, and rate and site of ovulation.

That high temperatures can lead to the death of embryos is well documented. The timing of heat stress seems to be more important that its duration. The first three days after conception are the most important.

There are genetic aspects to embryo survival. Differences exist between breeds (and lines). Sire can significantly impact embryo survival. The heritability of embryo survival is low, only about 5 percent. Selection is difficult for various reasons

The anthelmintic albendazole (Valbazen®) can cause embryo loss in ewes/does and should not be given during the first 45 days of pregnancy.

Under and overfeeding can both impact embryonic development in sheep/goats. Ewes/does of normal weight and condition usually experience the fewest losses.

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For more information, go to www.sheep101.info/201/ or www.sheepandgoat.com.