

## MORTALITY IN THE HIGHLY FECUND LAMB

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Incorporating a fecundity gene into sheep breeds can increase lamb output. However, increased litter size is inherently linked to increased mortality rate. The effect of parturition on mortality was examined in 2809 lambs.

Total mortality rate was recorded as 15 % - 423 deaths. In each case, cause of death was established and coded. Time of death was also recorded. Separate records were kept of caesarian section, abortions and euthanasia.

There was a significant effect of birth weight on mortality (live, 4.0 kg v. dead, 3.6 kg, LSD 0.06,  $P < 0.001$ ).

The major cause of death was attributed to infection (5.42 % of lambs born), followed by trauma (3.96 % of lambs born). Premature birth or foetal development inadequacy was responsible for 2.17 % of deaths. 36 lambs died following caesarian section (1.28 %). The majority of the lambs died between 24 hours and 6 weeks after birth (58 %). 27.2 % of the lambs died during parturition. The Booroola gene was responsible for the deaths of 21.6% lambs by infection compared to 12.8 % of non-carriers. It also accounted for 15.3% of trauma related deaths compared to 8.5% in non-carriers.

This study shows that the fecundity gene lambs are more susceptible, probably through lowered birth weights.

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