

NADIS Sheep Disease Focus – Hypothermia in Lambs



Approximately one million neonatal lamb deaths are attributed to hypothermia each year in the Britain. Lambs most commonly die from hypothermia during the first 72 hours of life. Very young wet lambs may become hypothermic due to a high rate of heat loss from exposure.

Older lambs become hypothermic due

to a combination of heat loss and starvation, sometimes secondary to infectious disease.

Practices which can reduce the incidence of hypothermia include; ensuring adequate nutrition of the pregnant ewe, avoiding birth stress/dystocia, ensuring that newborn lambs feed and the provision of shelter ([UK Vet Sheep Disease Focus – January 2001](#)).

Clinical signs

Rectal temperature 39 - 40 °C

- ✓ healthy lamb exhibiting normal suckling behaviour

Rectal temperature 37 - 39 °C

- ✓ moderately hypothermic lamb, weak
- ✓ still capable of following the dam and suckling

Rectal temperature < 37 °C

- ✓ severely hypothermic lamb
- ✓ initially ambulatory, weak and depressed
- ✓ may stand with an arched back, hollow flanks and lowered head, sometimes sheltering close to the ewe's udder, but is unable to suckle
- ✓ clinical signs rapidly progress to recumbency, coma and death

Treatment

Moderate hypothermia (37°C - 39°C)

1. dry thoroughly
2. ensure a colostrum or milk feed
3. return to ewe
4. supervise closely

Lambing buildings should be draught-free and all-round shelter should always be available in outdoor lambing fields.

Severely hypothermic (<37°C): under 5 hours-old

1. dry thoroughly
2. warm to > 37 °C
3. give a colostrum feed at a rate of 50 ml/kg
4. warm to 39 °C
5. return to the ewe
6. monitor closely and check dam for milk supply, disease or poor maternal behaviour

Variations of the Moredun-type lamb heater, which provide a thermostatically regulated all-round heat source are preferable to heat lamps for warming lambs. Lambs which are unable to suck from a teat should be fed via a stomach tube.

Severely hypothermic (<37°C): over 5 hours-old

1. inject intraperitoneal 20% glucose at a rate of 10 ml/kg
2. dry thoroughly
3. warm to > 37 °C
4. give a colostrum feed at a rate of 50 ml/kg
5. warm to 39 °C
6. return to the ewe
7. monitor closely check dam for milk supply, disease or poor maternal behaviour

Severely hypothermic lambs over 5 hours-old are hypoglycaemic. Warming results in increased cerebral metabolism, which rapidly leads to convulsions, coma and death if the hypoglycaemia is not first corrected by intraperitoneal administration of glucose. Oral administration of fluids to hypothermic lambs causes regurgitation and inhalation asphyxia or pneumonia.



A LAMB WARMING BOX IS AN ESSENTIAL
PIECE OF LAMBING KIT



INTRAPERITONEAL GLUCOSE INJECTION.
THE 1 INCH 19 GAUGE NEEDLE IS INSERTED
SLIGHTLY BELOW AND TO THE SIDE OF
THE NAVEL AND DIRECTED TOWARDS THE
TAIL HEAD

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