

NADIS disease bulletins are written specifically for farmers, to increase awareness of prevalent conditions and promote disease prevention and control, in order to benefit animal health and welfare. Farmers are advised to discuss their individual farm circumstances with their veterinary surgeon.

Piglet Mortality in the Outdoor Herd

Because the nature of outdoor pig production does not allow close supervision of young piglets on the sow, in the way that can be done in farrowing crates indoors, it is often more difficult to identify the most significant causes of death in the newborn pig. Moreover, it is even difficult to know exactly the levels of death, the only figure available that is verifiable is the numbers weaned.

However, certain principles can be applied that provide the basis for reducing losses. When born, there is a dramatic drop in the temperature to which the piglet is exposed. Moreover, as it dries off, latent heat of vaporisation is extracted from the piglet with the result that body temperature falls. This hypothermia can only be offset:-

- a) by reducing the heat loss
- b) by the piglet burning energy to maintain body temperature

a) **Heat Loss.**

In the absence of active management techniques such as drying and use of infra red lamps, the outdoor born pig can only rely on warmth from mother and the warming and drying effects of the bed. Huddling together will also preserve heat.

Features of the bed which will affect heat loss include:-

- 1) Quantity of straw – there is a very fine art to bedding outdoor arcs. Too little and the piglets chill; too much and small piglets become entangled making them vulnerable to crushing by the sow.
- 2) Quality of the straw – short chopped barley straw that is clean, dry and fresh provides the best medium.
- 3) Dampness – the wetter the bed, the greater the heat loss. At wet times of the year, such as we are experiencing now, there is a balance to be found between providing a new bedded area that is clean on wet ground. Normally arcs should be moved to a new site for each farrowing with old beds either lifted and removed or burnt in situ. Some producers, in wet conditions, may prefer to add new bedding on top of the old but this should only be limited to one off situations. Lying boards may be used in extreme circumstances.
- 4) Frequency of bedding – allowing the sow a week to settle the bed prior to farrowing should be followed up with daily addition of clean straw; bare in mind that the sow may eat some of it.
- 5) Draughts – orientate arcs away from prevailing winds and always ensure there are no gaps around the base. Either pack straw at the base of the arc from the inside or earth up around the outside.

Energy Supply

In exactly the same way as would apply indoors, increasing sow feed levels between weeks 13 and 15 gestation will boost energy reserves in newborn piglets, giving them a greater chance to maintain body heat. Discuss with your veterinary surgeon or nutritional advisor the most appropriate strategy for your herd.

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Chilling is the underlying feature of a large number of piglet deaths, both indoors and out. Not only can pigs die directly due to hypothermia, but chilled pigs tend to be slow moving, making them vulnerable to crushing and will not receive sufficient colostrum, making them vulnerable to infection in the first few weeks of life.

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