

## H3 – The environment of the sow

### Aim:

A high milk yield requires a healthy sow. It must be able to easily get up and lie down and rest. It must be able to have a large feed and water intake, and the temperature must not be too high.

- 1. Adjustment of the crate:** The crate must always match the sow's size to allow the sow to get up, lie down and rest without difficulty.
  - **At transfer to the farrowing pen:** The sow must have plenty of room.
  - **The day before expected farrowing:** Adjust the crate inwards to minimise the risk of crushing the newborn piglets.
  - **Day 2-4 after farrowing:** Adjust the crate outwards to give sow and piglets enough room.

- 2. Temperature:** Sows manage best at 18-20°C. At farrowing, piglets require a lot of heat to prevent hypothermia.

### Recommended temperature strategy in farrowing facilities

Design and management	Pre-farrowing	Farrowing to day 4	Day 4 - 14	Day 14 to weaning
Sectioned - Diffuse ventilation - Partially slatted floor - Floor heat in creep	18-20 °C	20–22 °C	Reduce by approx. 0.3 °C a day	17-18 °C
Radiant ventilation	18-20 °C	20-22 °C <sup>1</sup>	18–20 °C <sup>1</sup>	18–20 °C <sup>1</sup>
Sectioned – fully slatted floor	18-20 °C	22–23 °C	20-22 °C	20 °C
Continuous (not sectioned) – all types of ventilation	19-20 °C	19–20 °C		

<sup>1</sup>) Depends on ventilation rate and outdoor temperatures and thereby the environment in the pen. The creep area must always be draught-free.

### 3. Nesting and rooting/enrichment material:

- Provide straw or other suitable nesting material from transfer
- Sows must have access to rooting and enrichment material after farrowing
- Sows have individual needs



### Facts

Sows are individual creatures. Look at each sow when you:

- Adjust the crate
- Provide nesting and rooting/enrichment material

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2.	<p>Before farrowing, ventilation is mainly based on the sows' need; during farrowing ventilation must also accommodate the needs of the piglets. Once farrowing is complete, ventilation is again based on the sows' need, as the piglets can move into the creep to stay warm.</p> <p>The sensor (temperature/humidity) must be placed close to the sows' activity area. If the sensor is located too close to the air intake, the temperature recorded will be lower than in the activity area, and the ventilation rate will then be lower than intended.</p> <p>Ventilation in the farrowing facility is controlled according to temperature and humidity in the room. Use a surface thermometer to check the temperature on the pen side.</p> <p>Lower the room temperature during lactation when the sow's heat production peaks due to the increasing feed intake and the increasing metabolism triggered by a high milk yield.</p> <p>If the temperature is too low, it will be difficult to reach a sufficient temperature in the creep and this will jeopardise the health of the sow and the udder.</p> <p>If the temperature is too high, the sow's feed intake – and thereby milk yield - will drop. The sow will spend energy on getting rid of surplus heat, and the piglets will not be motivated to use the creep, which will increase the risk of them being crushed by the sow. Ultimately, it will also increase the risk of shoulder ulcers as the sows play with the water leaving the floor wet.</p> <p><b>How to reduce the temperature in the sows' activity area:</b></p> <ul style="list-style-type: none"><li>• Increase the air speed in the activity area (without exposing the piglets to a draught).</li><li>• Cool the air with, for instance, high-pressure cooling.</li><li>• Supply air to the activity area.</li></ul>
3.	<p>1-2 days before expected farrowing, the sow starts nest building.</p> <p>Access to nesting material before farrowing shortens farrowing, and a short farrowing process reduces the number of stillborn and accelerates the sow's recovery.</p> <p>Legislation states that sows must have access to sufficient amounts of appropriate nesting material in the week leading up to farrowing.</p> <p>After farrowing, the sows must have access to rooting and enrichment material.</p>