# H13 - The environment of the piglets

**Good environment shortly after farrowing**

**Environment towards the end of lactation**

**Check the environment in the creep area before 8:30. The environment is optimum if**

1. The piglets lie together, in one layer, and fill the creep area from the back.
2. It is dry.
3. It is draught-free.
4. There is room for all the piglets in the creep area.
5. The below temperature strategy is applied to optimise the environment of the piglets.

| Day | 0 - 4 | 4 - 14 | 14 - wea. |
|---|---|---|---|
| Temperature on the floor in creep, °C | 34 - 36 | 32 - 34 | 30 |
| Inlet temp. in floor heat, °C | 40 - 42 | Approx. 40 | 30 - 35 |
| Heat lamp (100 Watt-bulb) | + | Turn off day 3 - 5 | ÷ |

**The environment is too cold**

**The piglets do not need the heat lamp**

**The creep area is too cold if**

- The piglets huddle together. Check the floor heat and check whether the heat lamp was turned off too soon. Also check for draught/chimney effect if the heat lamp is placed in the roof of the creep area.

**The creep area is too hot if**

- The piglets do not lie under the heat lamp that is on.
  - **Day 0-5** It is too hot under the lamp - check the effect of the lamp (100 Watt) and the distance to the floor (50 cm).
  - **Day 5-** The piglets no longer need the lamp.
- The piglets do not lie from the back wall of the creep area or if they lie outside the creep area, check floor heat (reduce inlet temperature) and if necessary turn off the heat lamp.

| | Additional comments - The environment of the piglets |
|---|---|
| | Always assess the environment before 8:30 in the morning as the night time is a highly critical time. Sow and piglets have very different requirements to their environment. The sow's requirements must be met by the climate in the facility, and the piglets need to have their requirements fulfilled in the creep area. Switch on heat lamps in farrowing pens in which the sows are expected to farrow during the coming night.<br><br>Often, approx. one day passes after farrowing before the piglets adapt to the creep area. A high indoor temperature (approx. 22°) is therefore necessary the first day if you practise sectioned management. |
| **1.** | You need to intervene if the piglets do not lie in one layer from the back of the creep area. If the piglets have trouble staying warm early in the suckling period, increase the temperature in the creep area by covering part of the entrance of the creep area with a board. It is essential that the hole in the board is large enough for all the piglets to get in and out of the creep area without problems (min. 20 cm high and 15 cm wide). |
| **2.** | A wet floor in the creep area is highly critical for the piglets as a wet floor is 5 - 10°C colder than a dry floor. A wet floor in the creep area may be caused by:<br>• Inadequate drying of the floor before transfer of pigs.<br>• Diarrhoea among the piglets.<br>• The immediate environment is too warm.<br>• The sow is playing with the water. |
| **3.** | The covered creep area must be located in the warmest place in the pen. Pigs will feel a draught if cold air flows into the warm creep area. A draught typically arises from leakages in the creep area, especially around:<br>• The hole for the lamp, when the lamp has been removed and a roof is missing (chimney effect).<br>• Leaky joints between the back wall and the side wall or the roof of the creep area.<br>• Defect or no edge bent downwards.<br>Mess may occur if there are leakages in the creep area or if the back wall is cold. |
| **4.** | When piglets are four weeks old, they take up approx. three times as much room as they do when they are born. Towards the end of the suckling period, when the room temperature is below 20°C, it is therefore necessary that the temperature requirements of all the piglets be met in the creep area. |
| **5.** | The temperatures are guiding - always adjust on the basis of the behaviour of the piglets. Newborn piglets have a temperature requirement of 34-36°C; a temperature lower than this will lower the body temperature of the newborn piglets. Experience shows that after approx. two hours on a cold floor, piglets' body temperature drops, and the risk of disease increases significantly.<br>You can measure inlet and reflux temperatures with an infrared thermometer. The difference must not be more than 2-3 degrees. Inspect the circulating pump if the difference is greater. A greater difference can also be caused by cooling of the water at some point in the circulation. For instance, if there is a great loss of heat due to a wet floor. Heat may also be lost to the inspection alley from pens turning sideways. You will also be able to feel large differences in temperature by holding with one hand on the inlet pipe and the other hand on the reflux pipe.<br>In farrowing pens facing sideways, there is a greater heat loss in the creep area than in pens facing backwards. It may therefore be necessary to have a higher inlet temperature or use a bulb with a larger effect in the heat lamp. In pens with fully slatted floor with heat plates, the inlet temperature should be 37 - 38°C. The temperature strategy for a facility with fully slatted floor is shown in H3 - The environment of the sow.<br>In periods with large fluctuations in temperatures between day and night:<br>• Unchanged strategy, if you use diffuse ventilation and the creep area has a roof.<br>• You may need to increase the temperature in the facility by 1-3 degrees to avoid a draught in these periods if you use ventilation with air inlets. |