George Veterinary Group
High Street
Malmesbury
Wiltshire
SN16 9AU
01666 823355
E.mail – pigteam@georgevetgroup.co.uk

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# HERDS IN HIGH TEMPERATURES

## What does overheating do to a pig and its productivity?

Pigs will naturally have lowered reproductive performance during the summer months due to the long day length, but it is also true that excessive environmental temperatures can have negative effects on breeding performance as well as on the wellbeing and growth of the rearing herd.

In the breeding herd, high temperatures have been shown to decrease farrowing rate and total numbers born, and increase wean to first service interval, returns, and sow mortality. This also appears to vary according to parity, as you would expect having a much more pronounced effect on parity 1 animals. For the boars, high temperatures can mean decreased libido and altered sperm production.

In the rearing herd, heat stress and fluctuations in temperature can lead to outbreaks of disease and vice, will decrease feed intake and therefore affect feed conversion and growth, and can in extremis cause the death of a pig.

## What can we do about it?

**OUTDOORS**

- Create an area of shade (e.g. canvas extension from arcs).
- Provide wallows. Consider creep feeding piglets if litter desertion is a concern in group farrowing paddocks.
- Paint arcs white if they aren't shiny to reflect the sun or insulated
- Open tents to allow a breeze through the sides.
- Tip troughs and fully clean and disinfect them so that water is fresh.
- Beware of cold nights – consider bedding down at night, and shut down tents etc. before going home.
- Make sure water access is always good – consider moving troughs if digging/wallowing around them impedes access.

**INDOORS**

- Make sure slurry pits are cleared out under slats regularly to allow fresh air flow.
- Sprinklers: install or maintain current cooling systems (thermostats, fans, air inlets, drip coolers and sprinklers).
  - Avoid sprinkling a very fine mist as this will increase humidity levels.

TALKSHOP

- Consider the use of active cooling and ventilation systems if you are at the stage of building new sheds.
- Passive ventilation – open all available vents/flaps/portholes and clear out any blockages.
- If your pigs are on deep bedding, it may be helpful to remove a proportion so that it's not such a dense compost (which will naturally give off heat through fermentation), and to scatter fresh straw on top.
- Ensure buildings are well insulated.

**GENERAL**

- Provide a clean and plentiful water supply to all pigs, ideally ad lib.
  - Check flow rates, drinker spaces and location.
- Adjust the feeding programme: pigs will likely eat less so nutritional density of feed should be increased for lactating sows and growing pigs. Be aware that feeding curves may be altered, and keep a detailed record to allow for tailored feeding.
- Thermometers – I would encourage everybody to install thermometers in all sections of the farm to give you an idea of areas requiring attention.
- Semen storage and transport – semen is highly sensitive to heat, make sure your cabinets/transfer boxes function at high environmental temperatures.
- Keep stress at a minimum (moving, mixing etc.).
- Transport:
  - Open vents and slats on lorries.
  - Schedule for early or late to stay out of midday heat.
  - Pay attention to drop times to avoid hanging around at the slaughterhouse before unloading.
  - Load calmly and allow more time for fatigued pigs to load.
  - Load fewer pigs if possible to allow more air circulation.
  - Keep vehicles in constant motion if journey times allow.
  - Allow access to water right up until loading.
  - You can wet bedding and sprinkle pigs after loading to help cool them once moving.
- **Look after yourself and your staff – plenty of water, sun cream and hats!**


**KLEBSIELLA**

*Klebsiella pneumoniae* is a bacteria found naturally within the pig, as well as in soil and water sources, and therefore is seen to cause disease sporadically and often concurrently with other disease. It can cause a seasonal disease, reported from May-September, found more commonly in outdoor herds. It can manifest as septicaemia and sudden death in pre-weaned piglets, and coliform mastitis in sows. Hot weather can act as a trigger and this is something we have seen in the recent heatwave.

**Clinical findings:** Good, well-conditioned piglets will often be found dead or moribund, with a reported mortality rate of between 1 and 16%. Post mortem examination will reflect a septicaemia – non-specific findings ranging from 'nothing obvious' to fibrin in the abdomen and micro-haemorrhages in organs.

It is not yet understood exactly why outbreaks of Klebsiella disease occur and therefore specific advice is unavailable. However, as with other commensal pathogens (often around, don't often cause disease), general precautions can be taken in terms of controlling other diseases on farm and maintaining a comfortable environment for your herd (possibly utilising some of the advice given above!), paying particular attention to water hygiene and availability. And as with anything, if you are at all concerned about unusual disease or deaths in your herd, please don't hesitate to contact us in the first instance to discuss. Please let us know if you have concerns over unusual patterns of piglet mortality.

Alice Brough BVM&S MRCVS