

Virus challenges during winter – PCV2, influenza, PRRS and cytomegalovirus

Winter is coming, and therefore we have more challenges with airway diseases. During autumn and winter the temperatures goes up and down, and the difference in temperature between day and night is big. The ventilation cannot cope with this, and there will be a risk of draught. Another reason why we are getting more challenges during winter is the low temperatures. The low temperature makes the ventilation work less, which results in less fresh air and therefore bad quality of air with more ammonia and CO₂. We can feel the ammonia in our eyes and lungs when the quality of air is bad, and the lungs will be more susceptible of airway diseases.

The main viral challenges during winter are PCV2, influenza, PRRS and cytomegalovirus. Since these diseases are viral, we cannot treat the animals with antibiotics. PCV2 is mainly a challenge after weaning. The typical symptoms are skinny pigs with long hair, higher mortality and uneven pigs. All farms can have PCV2, no matter health status. We can measure the prevalence of PCV2, and if we see a high prevalence together with a bad productivity, we can vaccinate the pigs.

Influenza can cause problems in all age groups, and it can be both acute and chronic. The acute form affects all animals within a few days. The animals get a fever, they don't want to eat or move, and they get discharge from eyes and nose together with sneezing, coughing and panting. Normally the pigs are sick for 3-6 days, and after that they usually don't transmit influenza. But some pigs can transmit influenza for a longer time. The chronic form of influenza can circulate all year. It causes airway diseases, especially in combination with stress (for instance if there are big differences in temperature or other diseases). To check if influenza is in your farm we can take nasal swabs, and we can choose the right vaccine.

PRRS affects both the reproduction in sows and respiratory organs in slaughter pigs. In sows we typically see sows with late abortions or early farrowing, more weak and stillborn pigs. Some sows stop milking, and there will be a higher mortality of piglets in farrowing unit. Younger pigs get problems with cough and sneeze plus discharge from nose. PRRS affects immune cells in lungs, so other diseases can be a problem – for example infections in lungs, brain and leg.

Cytomegalovirus causes destruction of nasal mucosa. Typically we see bad pigs sneezing with nasal discharge. There is no vaccine against cytomegalovirus. None of these diseases can be treated with antibiotics. There are vaccines against some of them, but the most important thing to control the diseases is by stopping the transmission between the pigs.

We have ten golden rules (McREBEL) that can help us prevent transmission of these diseases:

1. When cross-fostering at farrowing, move only if too many and minimize moving piglets from sow to sow
2. No cross-fostering later than 48 hours
3. Movement of pigs between litters/pens must be minimized
4. Change needles between every litter, and change after medicating sick pigs.
5. Don't move sick piglets between litters / sections. Kill them instead!
6. Wean all piglets from a week at the same time. Don't have weaned piglets in the farrowing unit
7. Strict sectioning (all in / all out)
8. No contact between groups of different age
9. No contact between pigs (weaned up to 6 months of age) and sows
10. Always introduce incoming gilts via quarantine, also home produced gilts.

If we work after the ten golden rules, keep the quality of air good in the stable and reduce the risk of draught, we have a bigger chance of getting through the winter with less challenges.