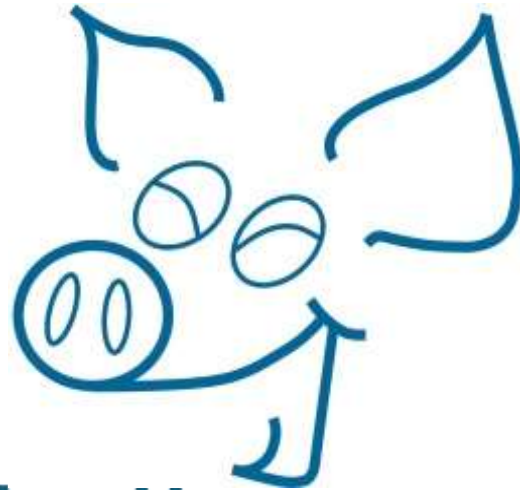


# Annual meeting Vet-Team

Årsmøde Vet-Team 12.11.19



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

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



- ▶ Why a problem during winter?
  - Bigger difference in temperatures during day and night → risk of draught
  - Less ventilation → less fresh air → bad quality of air with more ammonia + more CO<sub>2</sub>



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



- ▶ What are the biggest virus challenges during winter?
  - PCV2
  - Influenza
  - PRRS
  - Cytomegalovirus
  
- ▶ What can we do if we have virus challenges?
  - Vaccination
  - Biosecurity
  
- ▶ How can we make quality of air better?

# PCV2



- ▶ Porcine circo virus – type 2
- ▶ Typical symptoms after weaning (PMWS)
  - Bad pigs with long hair
  - Weight loss
  - Restricted growth
  - High mortality
  - Uneven pigs
    - Maybe symptoms in airways or diarrhea

# PCV2



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# PCV2



- ▶ All farms can have PCV2, no matter health status
- ▶ Treatment with antibiotics
  - No!
- ▶ If high prevalence of PCV2 + clinical symptoms or bad productivity → vaccination
- ▶ Biosecurity

# Influenza

- ▶ Acute or chronic
- ▶ Acute
  - Affects all animals within few days
  - Airway disease (sneeze, cough, panting)
  - Fever (41–41,5°C)
  - Don't want to eat
  - Don't want to move
  - Discharge from eyes and nose
- Pigs can transmit influenza for one week, and the individual pig is healthy after 3–6 days.
- Some pigs can transmit for longer time!





# Influenza



- ▶ Acute or chronic
- ▶ Chronic
  - Virus circulates in farm all year
  - Airway disease, especially in combination with stress (ex. differences in temperature, other diseases)

# Influenza



- ▶ Multiple types of influenza
  - 3 classical types (H1N1, H3N2, H1N2)
  - Pandemic influenza A (pH1N1)
  - Treatment
    - No antibiotics
    - Painkilling medicine
- ▶ Vaccination and biosecurity

# PRRS (Porcine Respiratory and Reproductive syndrome)



- ▶ Reproduction (sows)
  - No milk
  - Late abortions / early farrowings
  - More weak and stillborn pigs
  - More sows not pregnant
  - Higher mortality in piglets in farrowing unit

# PRRS (Porcine Respiratory and Reproductive syndrome)



- ▶ Respiration (airways)
  - Cough and sneeze
  - Discharge from nose
  - Immune suppressive
    - Maybe brain disease, leg infections, lung diseases
  - PRRS affects immune cells in lungs, so other diseases can become a problem.

# Cytomegalovirus (PCMV)



- Destruction of nose mucosa
- Infection in nose
  - Sneeze
  - Discharge from nose
  - Bad pigs
- Treatment
  - No
- Vaccination
  - No

# Treatment?



- ▶ Can we treat the animals with antibiotics?

No!





# Prevention



- ▶ What can we do instead of giving medicine?
- ▶ We can prevent transmission of disease



# Biosecurity



- ▶ Stop transmission of diseases between pigs
- ▶ Prevent disease from "running" around in stable
- ▶ Keep the infection pressure low

# Biosecurity



- ▶ The 10 golden rules (McREBEL)
  1. When cross-fostering at farrowing, move only if too many and minimize moving piglets from sow to sow



# Biosecurity



- ▶ The 10 golden rules (McREBEL)

2. No cross-fostering ("kuldudjævning) later than 48 hours

# Biosecurity



- ▶ The 10 golden rules (McREBEL)

3. Movement of pigs between litters/pens must be minimized

Or else sick pigs can infect young and healthy pigs

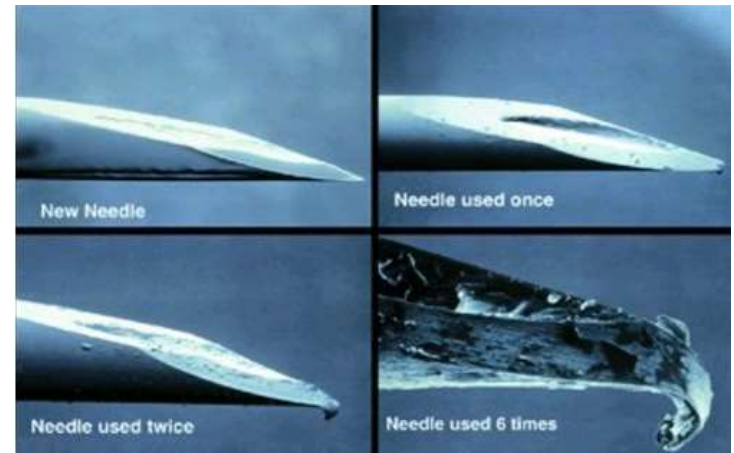
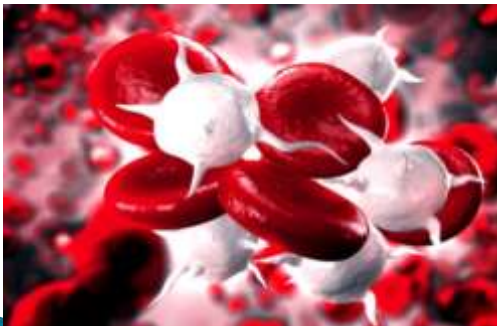
# Biosecurity



- ▶ The 10 golden rules (McREBEL)

4. Change needles between litters, change between every 5–10 pigs.

Change after sick pigs!





# Biosecurity



- ▶ The 10 golden rules (McREBEL)

5. No movement of sick piglets between litters / sections – kill them!

# Biosecurity



- ▶ The 10 golden rules (McREBEL)

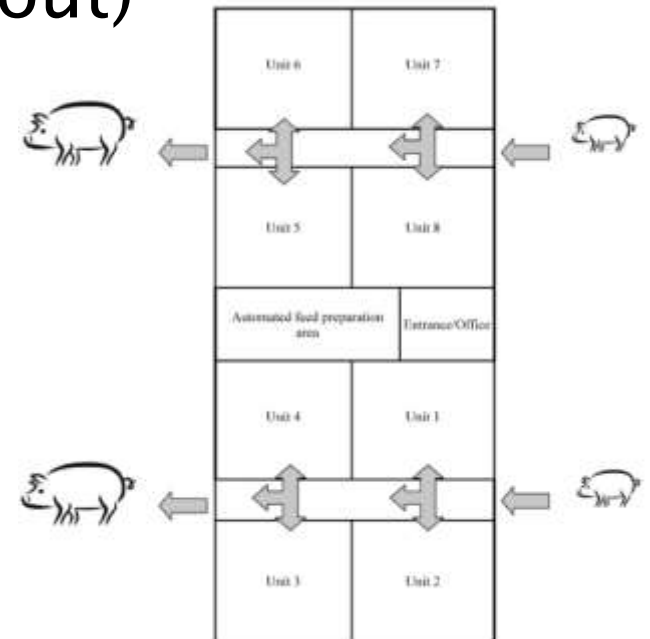
6. Wean all piglets from a week at the same time. Don't have weaned piglets in farrowing unit

# Biosecurity



- ▶ The 10 golden rules (McREBEL)

## 7. Strict sectioning (all in / all out)



# Biosecurity



- ▶ The 10 golden rules (McREBEL)

8. No contact between age groups

# Biosecurity



- ▶ The 10 golden rules (McREBEL)

9. No contact between piglets (weaned up to 6 months of age) and sows

# Biosecurity



- ▶ The 10 golden rules (McREBEL)

10. Always introduce incoming gilts via quarantine, also home produced gilts.



# Quality of air



The quality of air is important – especially during winter time

- Bigger difference in temperature during day and night → risk of draught

# Quality of air



The quality of air is important – especially during winter time

- Less ventilation → less fresh air → bad quality of air with more ammonia + more CO<sub>2</sub>
- Better quality of air
  - More ventilation
    - Bring more heat

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



- ▶ Quality of air
  - Lower outdoor temperature → ventilation↓
    - Put more heat in the stable, so ventilation goes up
  - Big differences in temperatures from day to night
    - Avoid draught
- ▶ Viral diseases can be reduced by vaccination and/or biosecurity
  - Prevent healthy pigs from getting sick