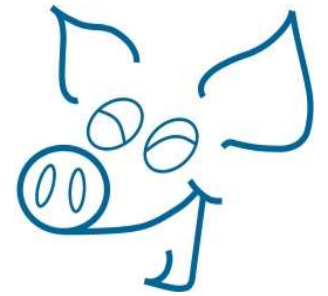


Vaccination

How and why
Sif Tjener Holmgaard

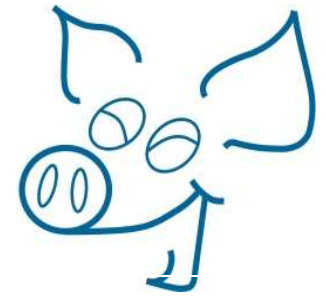
Årsmøde Vet-Team 12.11.19

Vaccination



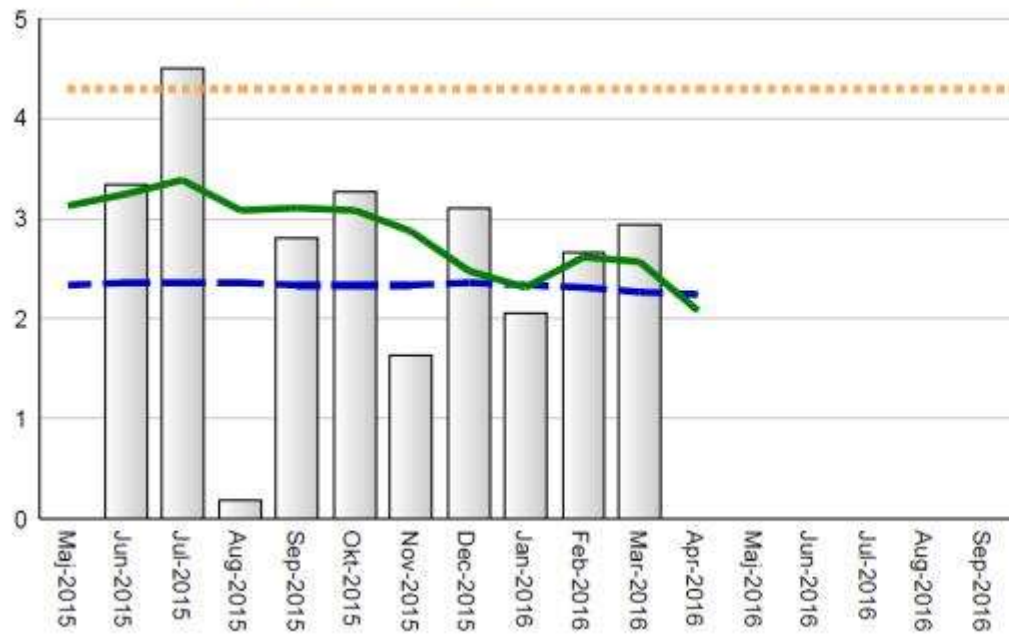
- ▶ Why do we vaccinate
- ▶ How do vaccines work
- ▶ What can we vaccinate against
- ▶ Why does the vaccine not work

Why do we vaccinate?



- ▶ **Prevention of disease !**

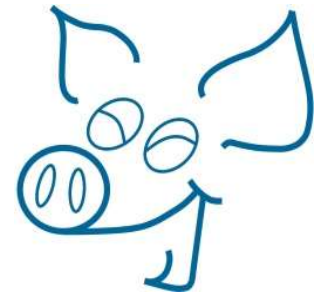
FVST's grænseværdi, løbende 9 måneder



Picture from fvst.dk

Årsmøde Vet-Team 12.11.19

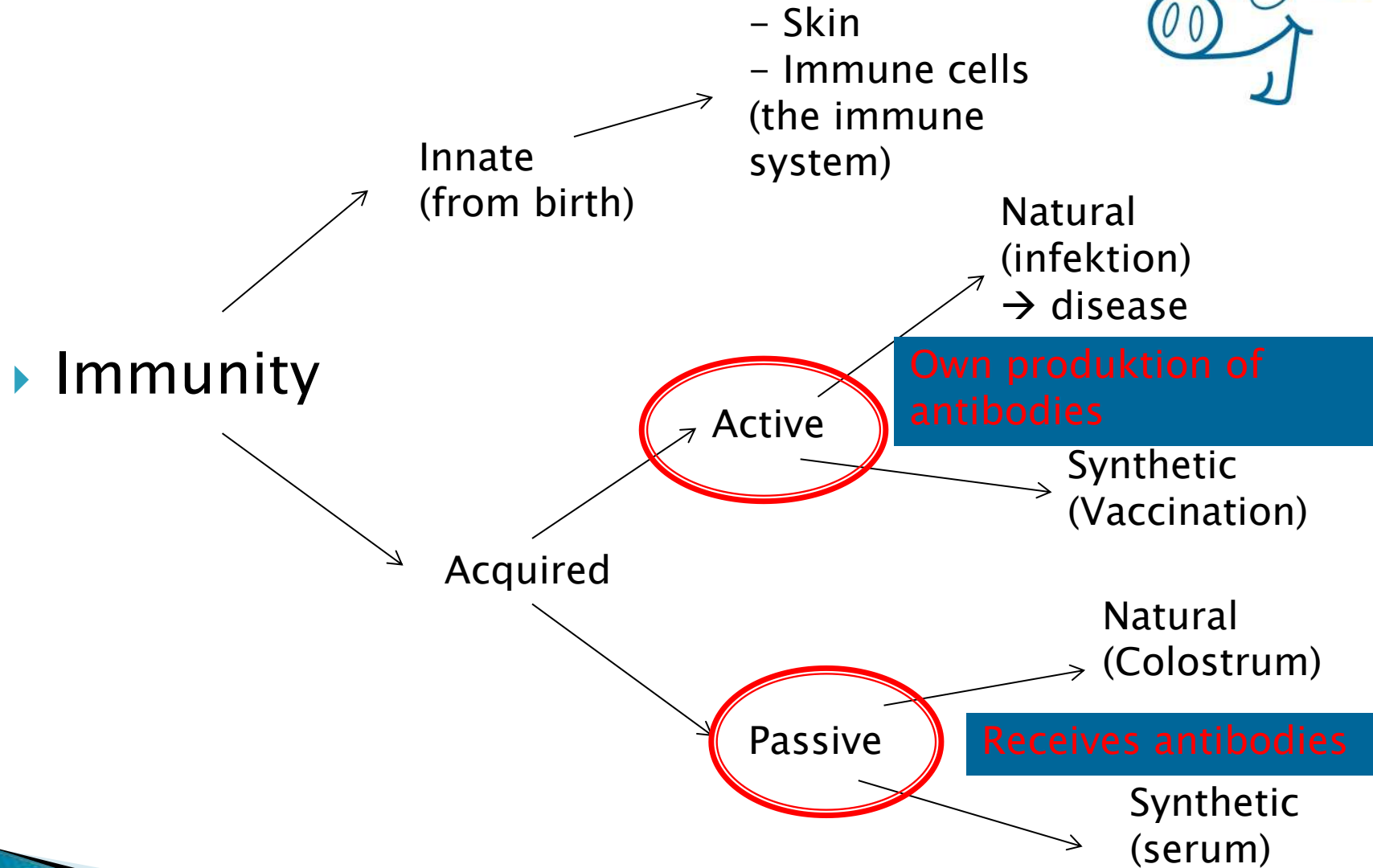
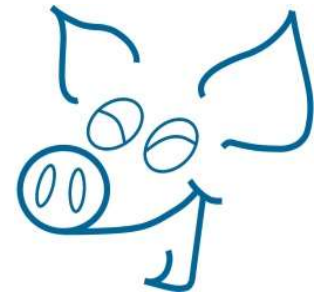
How do the vaccinations works



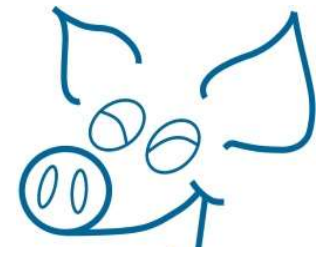
- ▶ The immunesystem get a picture of the real disease
 - The immunesystem start to produce antibodies against the antigens
- ▶ The immunity against the Disease depend of the patogen's ability to change



Immunity – protection

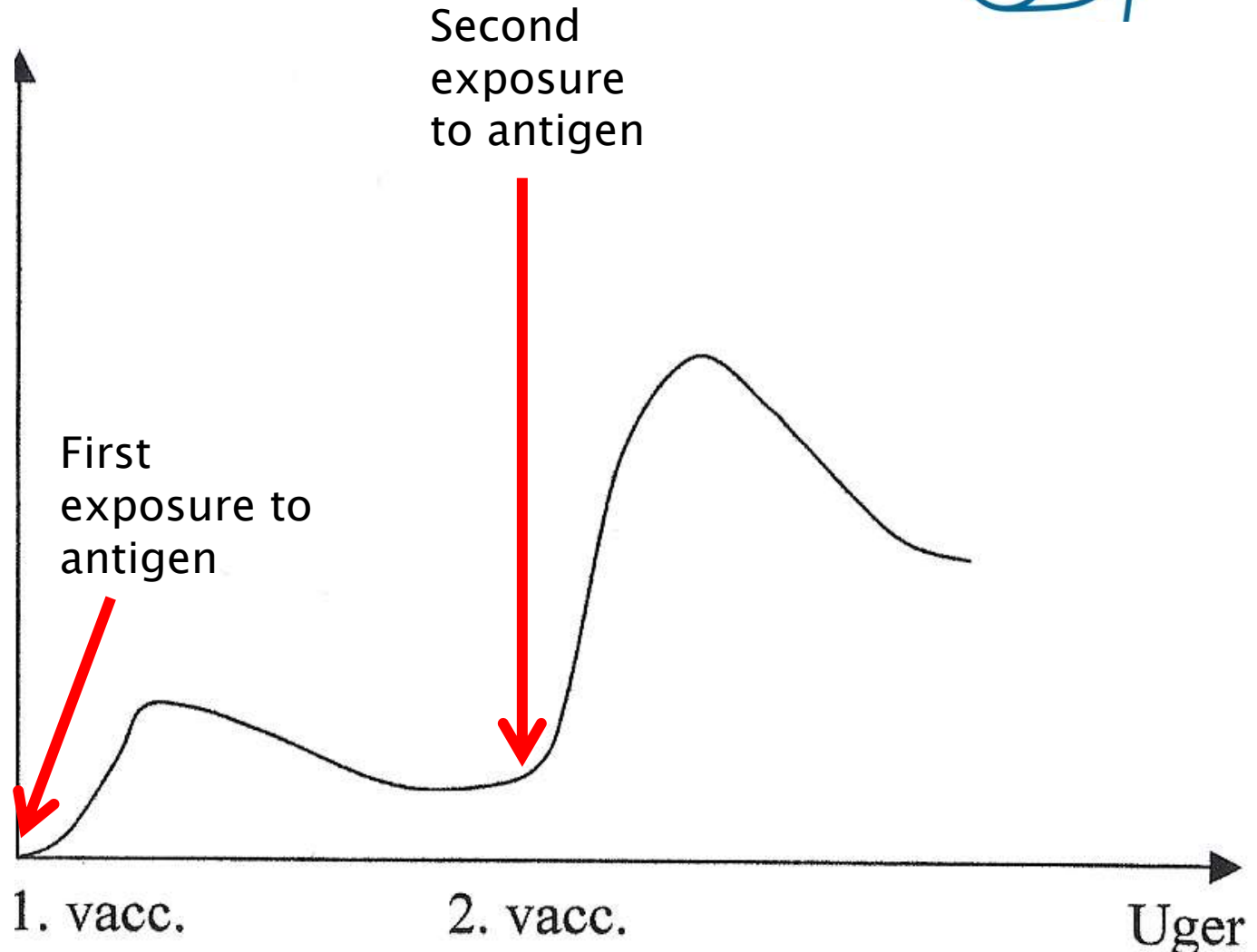


Vaccination = training of the immunsystem

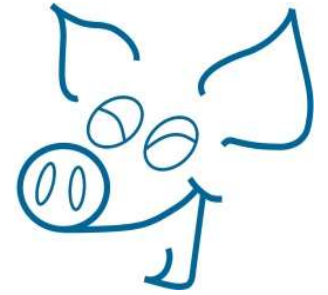


Level of antibodies

- The reason why we need to make basic vaccination
- Re-vaccination

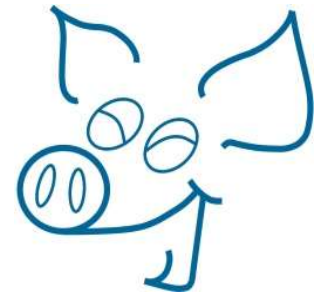


Vaccines



- ▶ Use a vaccination plan
 - Evaluate each year
- ▶ Different needs of each herd
- ▶ Handle vaccines with respect

Time of vaccination – Sows



- ▶ Protection of the sow (active immunity)
 - Vaccination before insemination
- ▶ Protection of piglets through colostrum (Passive immunity)
 - Vaccination 3 weeks before farrowing

Vaccines sows

▶ Bacteria

- Erysipelas ←
- Cl. Perfringes ←
- E.coli ←
- Atrophic Rhinitis
- Mycoplasma (Myc)
- Glasser's disease
- Pleuropneumonia (Ap)
- Leptospirose

▶ Virus

- Parvovirus ←
- Influenza
- PCV2
- PRRS
- Rotavirus



Many herds choose to vaccinated against these.

- They are widespread in danish pig herds
- An outbreak of them can have extremely high costs

Picture from Landbrugsavisen

Cl. Perfringens type C



- ▶ Prevention – Sows: Toxicol, Suiseng, Entericolix and porcilis ColiCols
- ▶ ~~Treatment – piglets: Serum (expensive)~~



E.coli



- ▶ Prevention – Sows: Toxicol, Suiseng, Entericolix and Porcilis ColiClos
- ▶ Treatment: Antibiotics (depend of laboratory answers)



Colostrum

Parvovirus in sows

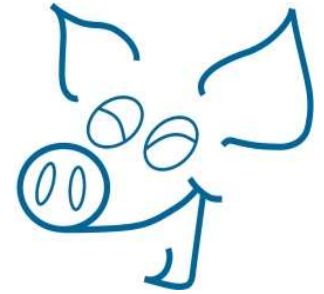


- ▶ Basic vaccination finished before 1st insemination
Vaccine against Parvovirus: Porcilis Parvo
Vaccine in combination: Parvoruvax, Eryseng parvo, Porcilis Ery Parvo Lepto
- ▶ No treatments



Pictures from SEGES.dk

Vaccines pigs



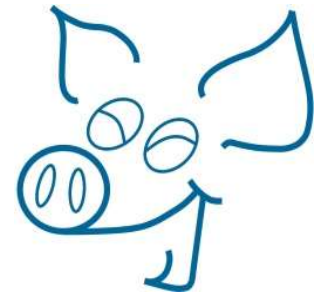
▶ Bacteria

- Pleuropneumonia (Ap) ←
- Mycoplasma (myc) ←
- Glasser´s disease
- Oedema disease
- Lawsonia ←
- E.coli

▶ Virus

- PCV2 ←
- Influenza ←
- PRRS

Time of vaccination

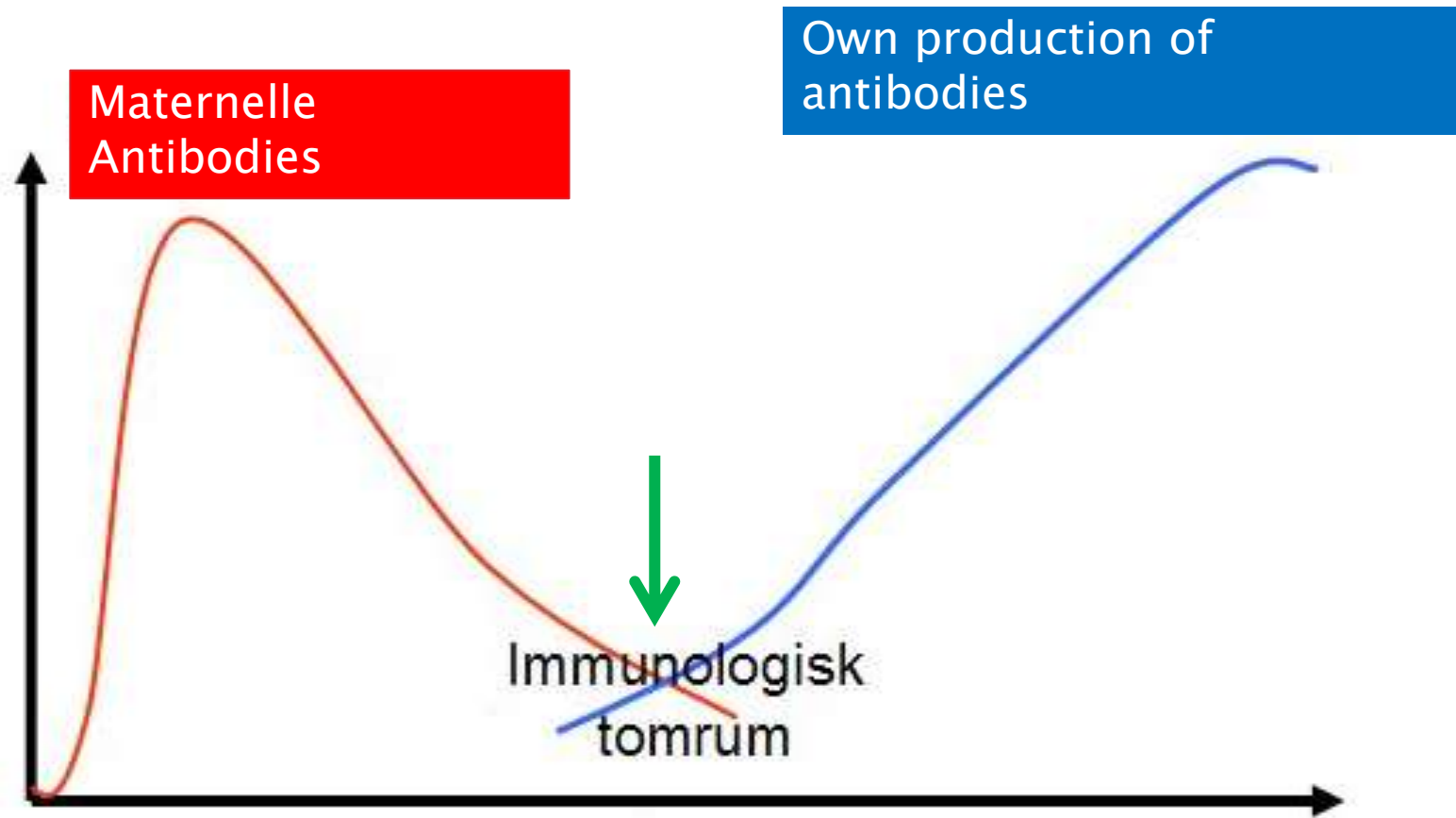
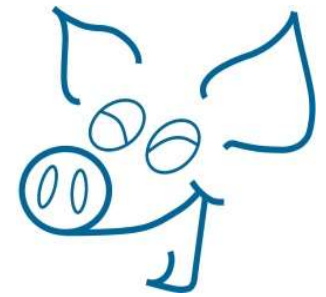


- ▶ Before / after weaning
 - Depends on
 - Infection pressure
 - Time of infektion
 - Other diseases in the herds
 - Maternelle antibodies

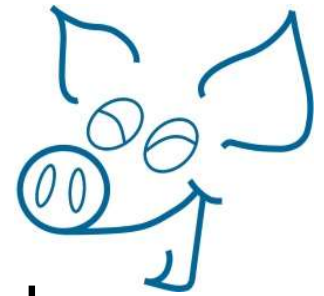
Remember!
it takes 3 weeks to
produce antibodies

Immunity fra colostrum

Maternelle antibodies



Mycoplasma Hyopneumoniae



- ▶ Symptoms: Cough, low growth and secondary infections.

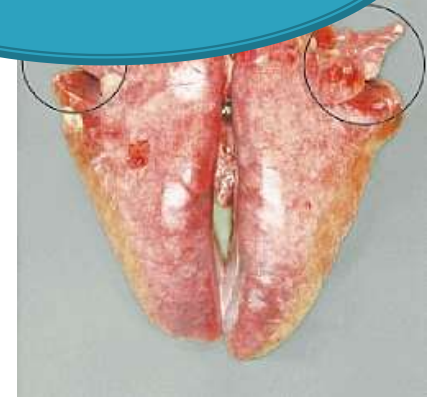
- ▶ Piglets

- Stellamune one: Castration time
- Suvaxyn M. Hyo mono: from 1 week old
- Ingelvac Mycoflex: from 3 weeks old
- Mhyogen: from 3 weeks old

- ▶ Gilts

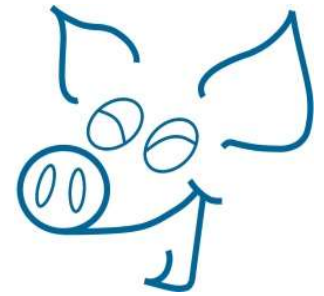
- Vaccinated in the quarantine / before introduction to the sow herd

Symptoms depend of infection pressure



Picture from seges

PCV2



- ▶ Symptoms: Low growth, Skinny pigs, high mortality
- ▶ Piglets:
 - Suvaxyn Circo: : from 3 weeks old
 - Circovac: from 3 weeks old
 - Ingelvac Circoflex: from 2 weeks old
 - Porcilis PCV: from 3 weeks old

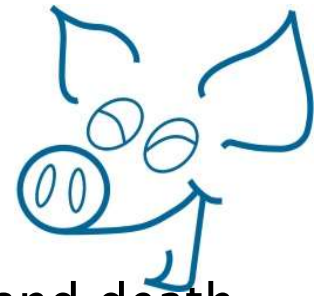


Combination of Myc And PCV2

- Suvaxyn Circo +MH RTU: from 3 weeks old
- Ingelvac mycoflex+Ingelvac circoflex: from 3 weeks old
- Porcilis PCV Mhyo: from 3 weeks old

Picture from seges

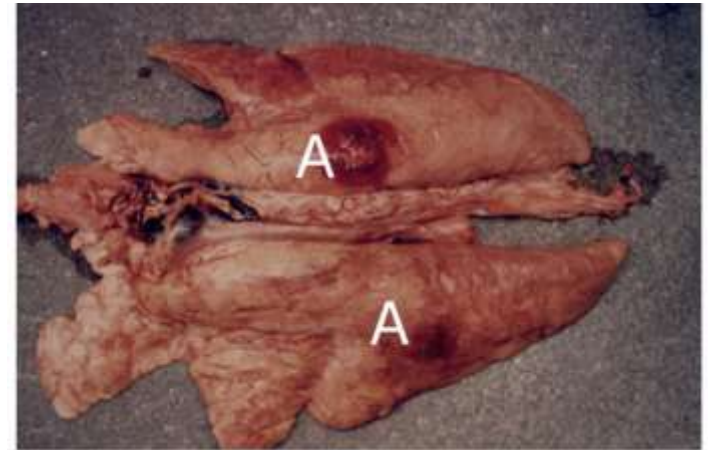
A. Pleuropneumonia (AP)



- ▶ Symptoms: Cough, fever, discolor of ears, depression and death
→ 15 serotypes

Prevention:

- ▶ Pigs:
 - ▶ AP2: Hyobac App2
 - ▶ AP6: Hyobac App6
 - ▶ AP2+Ap5+AP6: Hyobac Multi, Porcilis APP
- ▶ Difficult to find the right time to make the vaccination
 - ▶ Success criteria: Fewer deaths



Picture from seges

Influenza



▶ Symptoms:

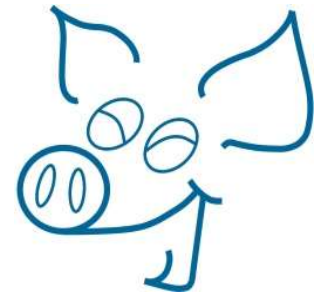
- Acute: High fever, no milk, no appetite, cough/sneezing, float from the nose, severe breathing
 - Takes about 1–2 weeks
- secondary diseases in the airways + low growth



Picture from
seges

11.19

Influenza



- ▶ Prevention
 - Respiporc FLU3
 - Respiporc FLUpan

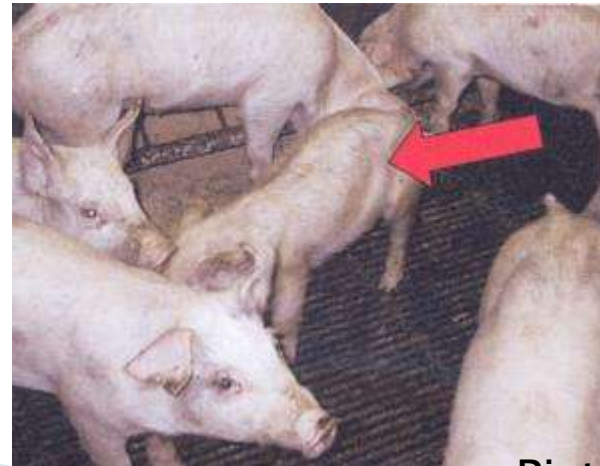
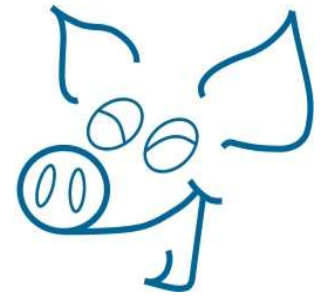
Depends of the type

- ▶ Vaccination strategy

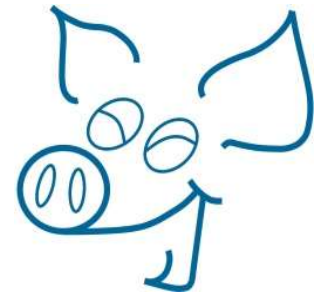
The effect depends on the level of homogeneity between the vaccinevirus and the wildvirus

Lawsonia

- ▶ Symptoms: diarrhea and skinny pigs
- ▶ Prevention:
 - Enterisol (from 3 weeks old) by water or drench in the mouth
 - Porcilis Lawsonia (from 3 weeks old) injektion
- ▶ Treatment: antibiotics



Example of vaccination plan



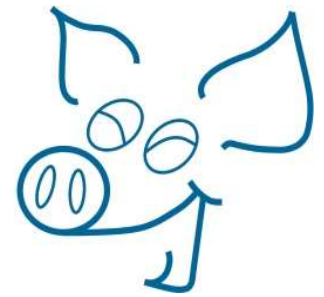
- ▶ Young females / polte:
 - 2x vaccination Eryseng Parvo

- ▶ Gilts:
 - 6 weeks before farrowing: Toxicol
 - 3 weeks before farrowing: Toxicol

- ▶ Sows
 - 3 weeks before farrowing Toxicol and Eryseng Parvo

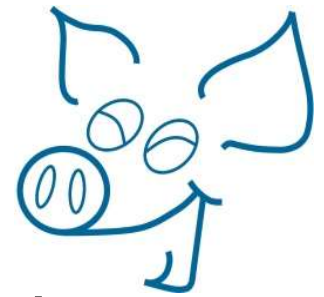
- ▶ Piglets
 - At weaning: Suvaxyn Circo +MH RTU: from 3 weeks old

Why does the vaccine not work?

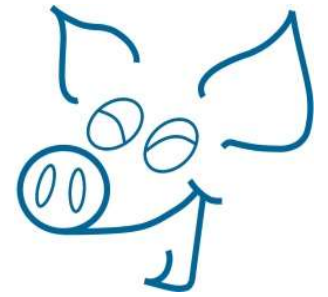


- ▶ The vaccine does not work
 - Incorrectly stored (the fridges does not work ect.)
 - CONTAMINATED
 - After expiry date (too old)
- ▶ Vaccinated at the wrong time
 - Influence of antibodies from colostrum
 - Time of infection
- ▶ The pig was ill when vaccinated
- ▶ Lack of re-vaccination
- ▶ Wrong injection technique

Why does the vaccine not work?



- ▶ Wrong type of vaccine / wrong diagnosis (laboratory test)
 - Vaccine confusion (vaccination plan will help you to remember the product names)
- ▶ Too low dosage
- ▶ Forgot to vaccinate



Thanks for your attention

Questions?