

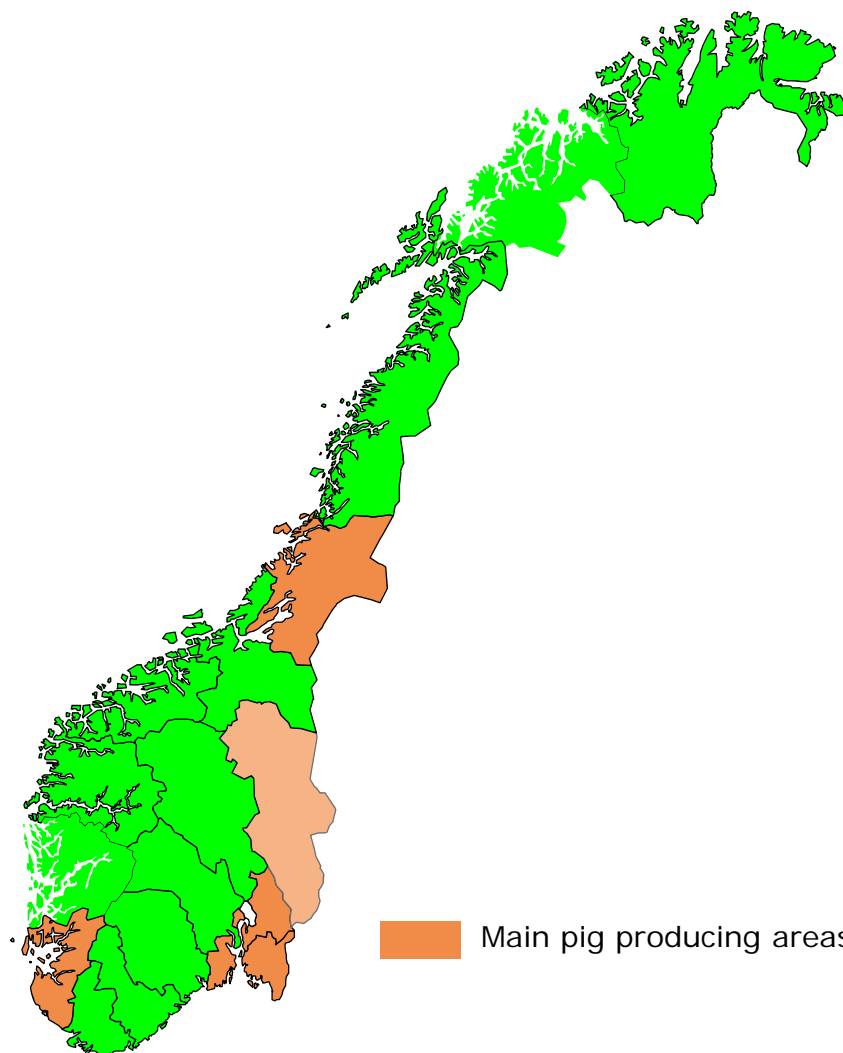
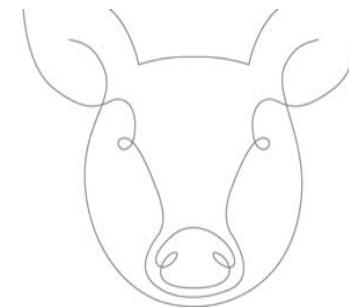
Farm management to reduce diseases and use of antibiotics

Anne Jørgensen, Norwegian Pig Health Service,
Animalia, Norway



I will talk about

- Biosecurity, in and out of the farm
- Internal biosecurity
- Some daily work tasks
- Vaccination
- Use of antibiotics
- Stress
- Education of staff



Main pig producing areas

Health status i norwegian pigs

- In 2000 legislation for loose pregnant sows and loose sows in farrowing crates
- Opportunity to start with farrowing batches
 - eradicated mange 2004
 - mykoplasma hyopneumoniae free from 2009
- B. hyodysenteriae smaller outbreaks
- No PRRS, not yet ! Hope never
- H1N1/09pandemic influenza.

Biosecurity - easy to say - difficult to do

Start here: External biosecurity

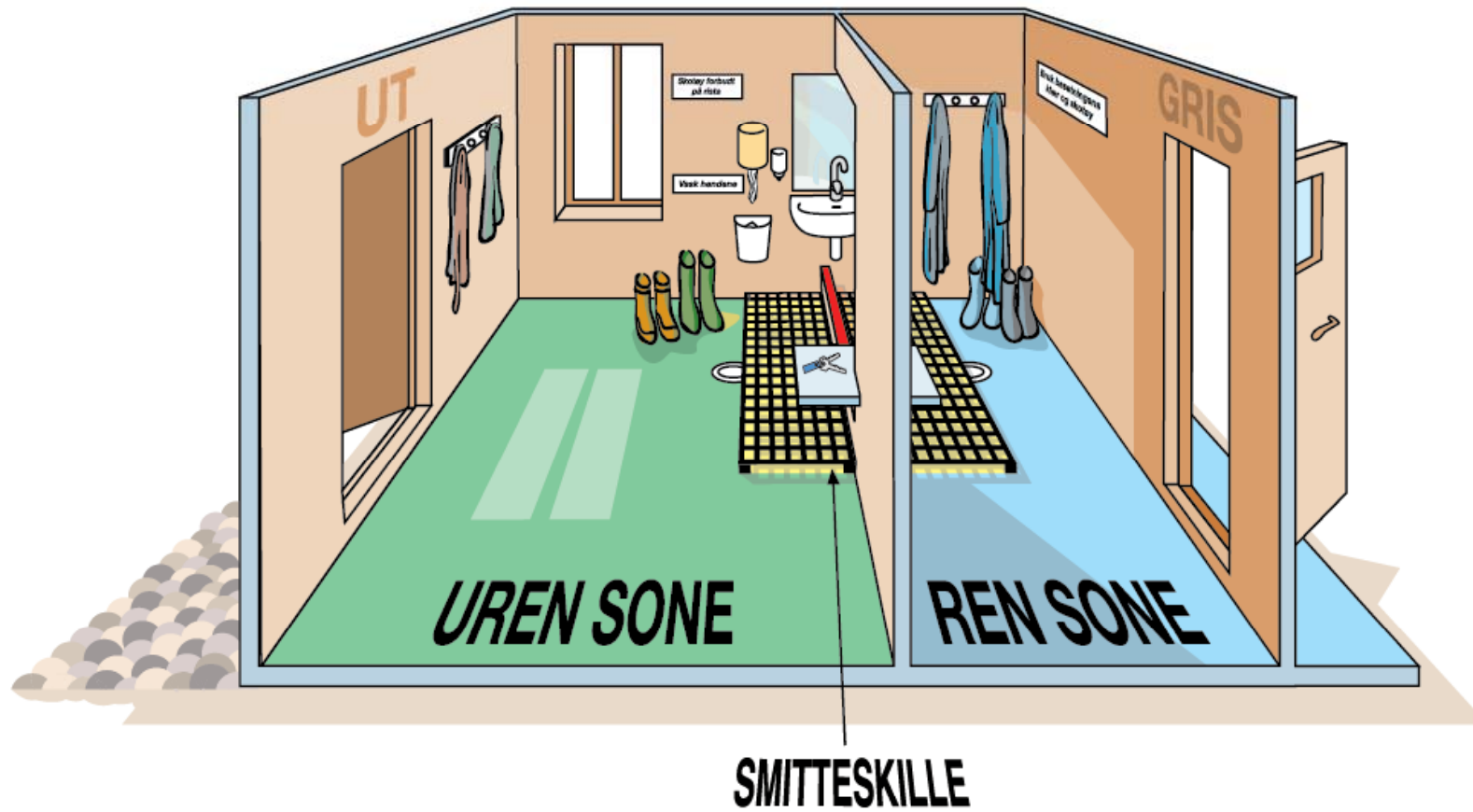
- Neighbouring farms:
 - Their health status, wind direction,
- How can infections be spread :
 - people visiting and working on the farm
 - animal movements into the farm
 - vehicles (trucks, cars....)
 - dogs, cats mice, rats and birds



Entrance

- All people, working or visiting the farm shall
 - Wash hands before entering the stables
 - Change to clothes and shoes belonging to the farm
- The entrance
 - shall have a clear definition of clean and dirty areas
 - shall always be kept tidy and clean

Entrance



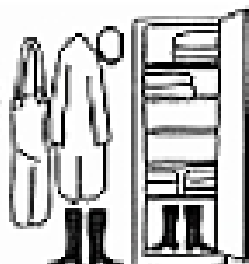
GRUNNET SMITTEBESKYTTELSE SKAL KLESSKIFTE FORETAS I FØLGENDE REKKEFØLGE:

1. HENG AV YTTERTØY PÅ KNAGGER UNDER VINDU, OG SETT SKOTØY PÅ GOLVET (IKKE SKOTØY PÅ GOLVRISTER)
2. VASK HENDENE
3. FINN REN KJELEDRESS I SKAP
4. FINN STØVLER (TAES PÅ I ENDEN AV GOLVRISTER)
5. ALLE SOM SKAL INN I GRISEHUSET MÅ BRUKE BESETNINGENS KLÆR OG SKOTØY

VETERINÆRER GJØR I TILLEGG FØLGENDE:

5

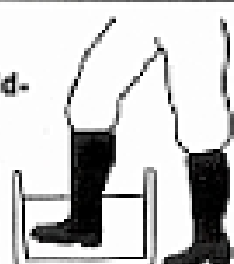
Staldtøj og staldfodtøj til staldpersonale, dyrlæge og kons, samt andre besøgende.



6

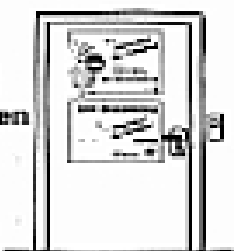
ANBEFALING:

Støvledesinfektion. Staldstøvler inden indgang i staldområdet.
F. 100 g Kloramin pr. 10 l. vand. Opløsningen udskiftes dagligt.



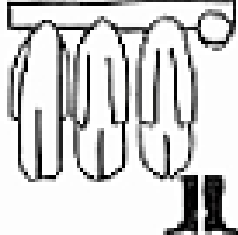
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Eneste indgang til staldområdet. Døren skal være aflåst. Anbring en ringeklokke ved døren.

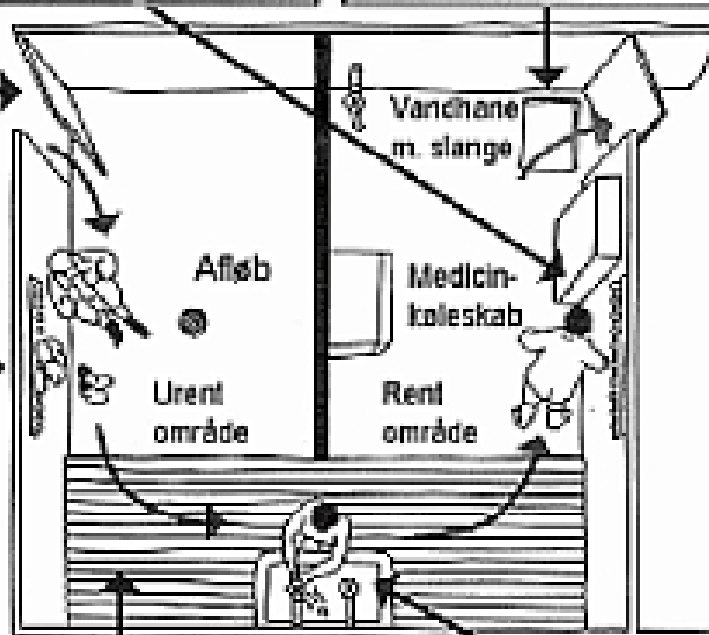


2

Udetøj og udefodtøj skal tages af i det rene område.



Stald



3

Trærist, som man kun må træde på med stræper. (aldrig støvler)



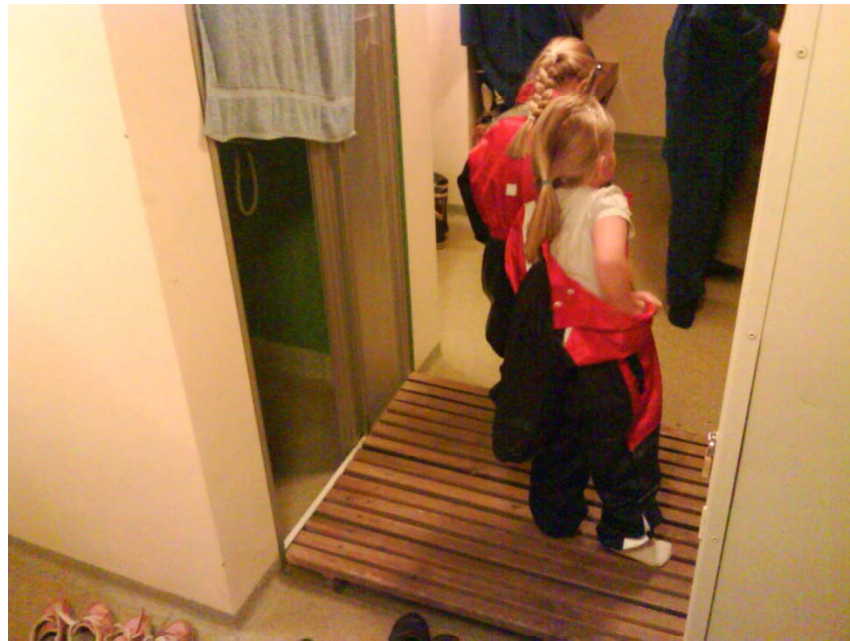
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Hænderne skal vaskes og desinficeres. (F. med Handohex)





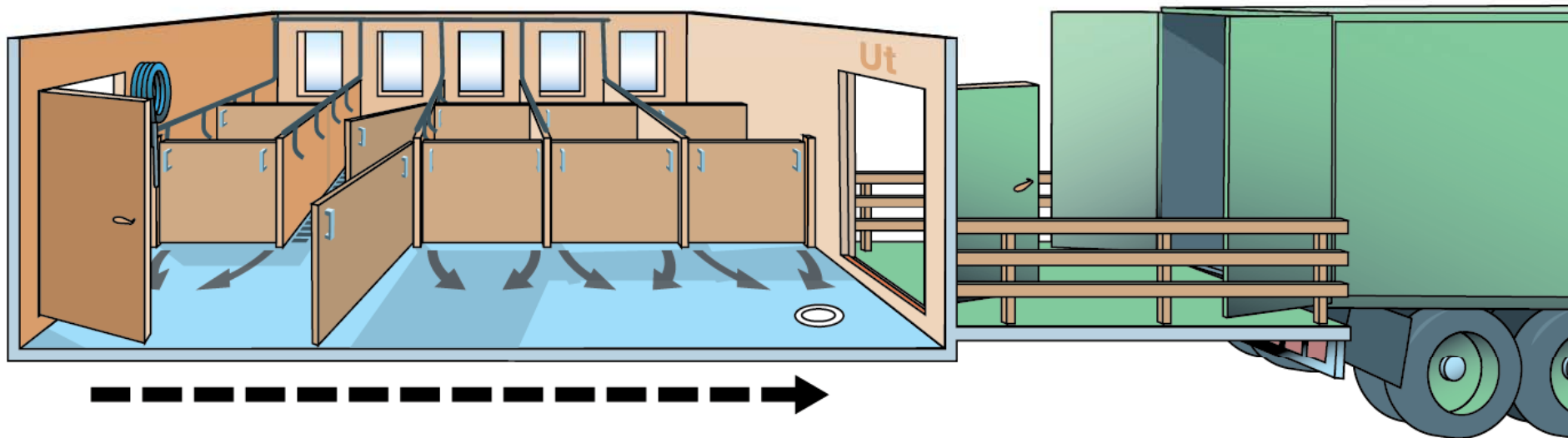
Entrance with shower possibility



Load out of pigs

- Trucks from slaughterhouse and from other farms are a health hazard.
- Load of pigs trough:
 - **Delivery room** only used for unloading
 - **Drive off** from the farm to meet the truck
 - **Sales ramp** outside the farm
- Important to wash delivery room or truck immediately after delivering of the pigs











Rampen har desuden varme i gulvet

Foto: Lisbeth Brehmer

Quarantine

- Pigs bought from an other farm should be placed in a quarantine for 2-3 weeks before entering the stables.
 - ☺ Separate house
 - +/- Separate room
 - ☹ Separate pen
- Observation of pigs on both farms
- Possible to sample pigs

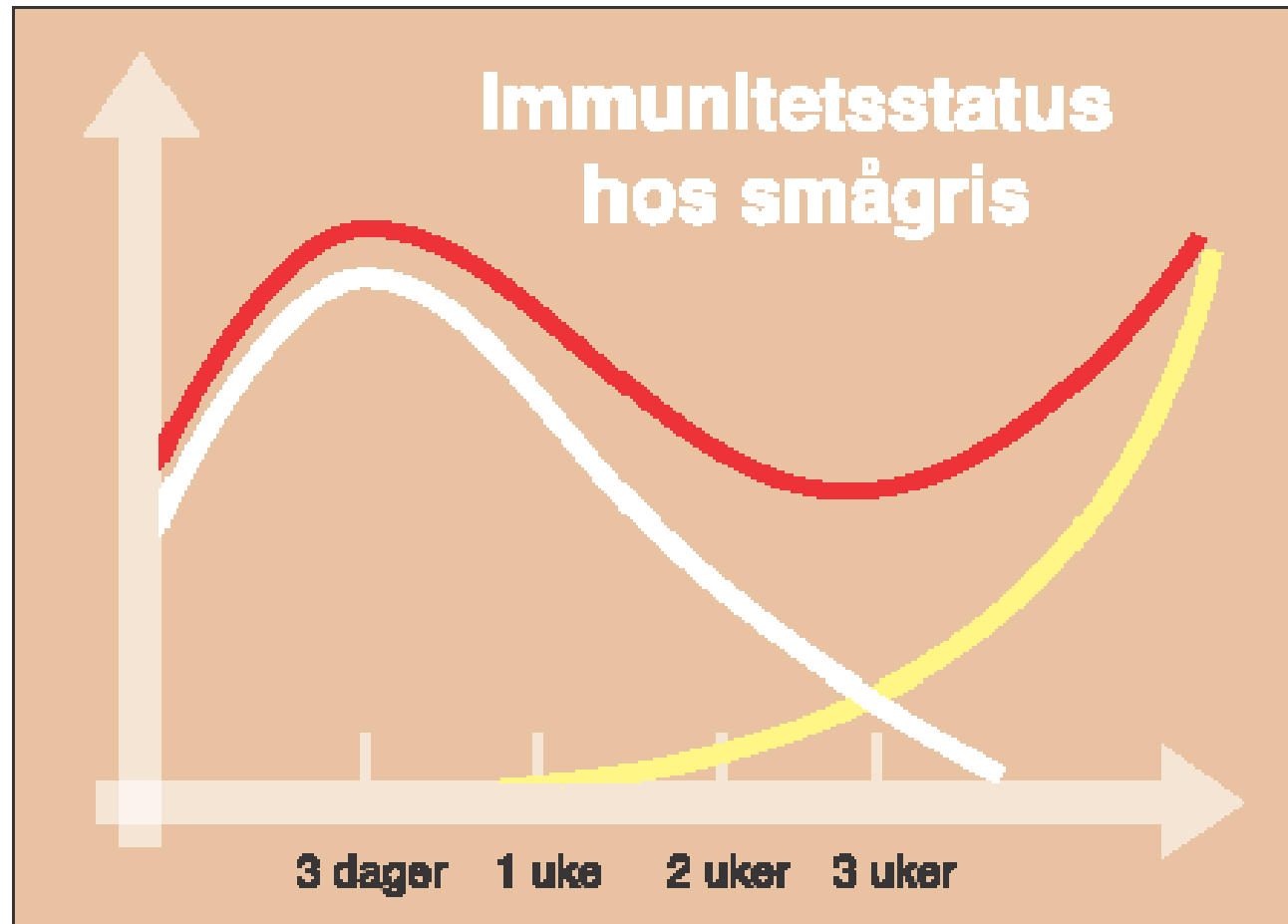
Internal biosecurity

Pig production is a «young individ production»

❖ The purpose for an all-in / all-out production:

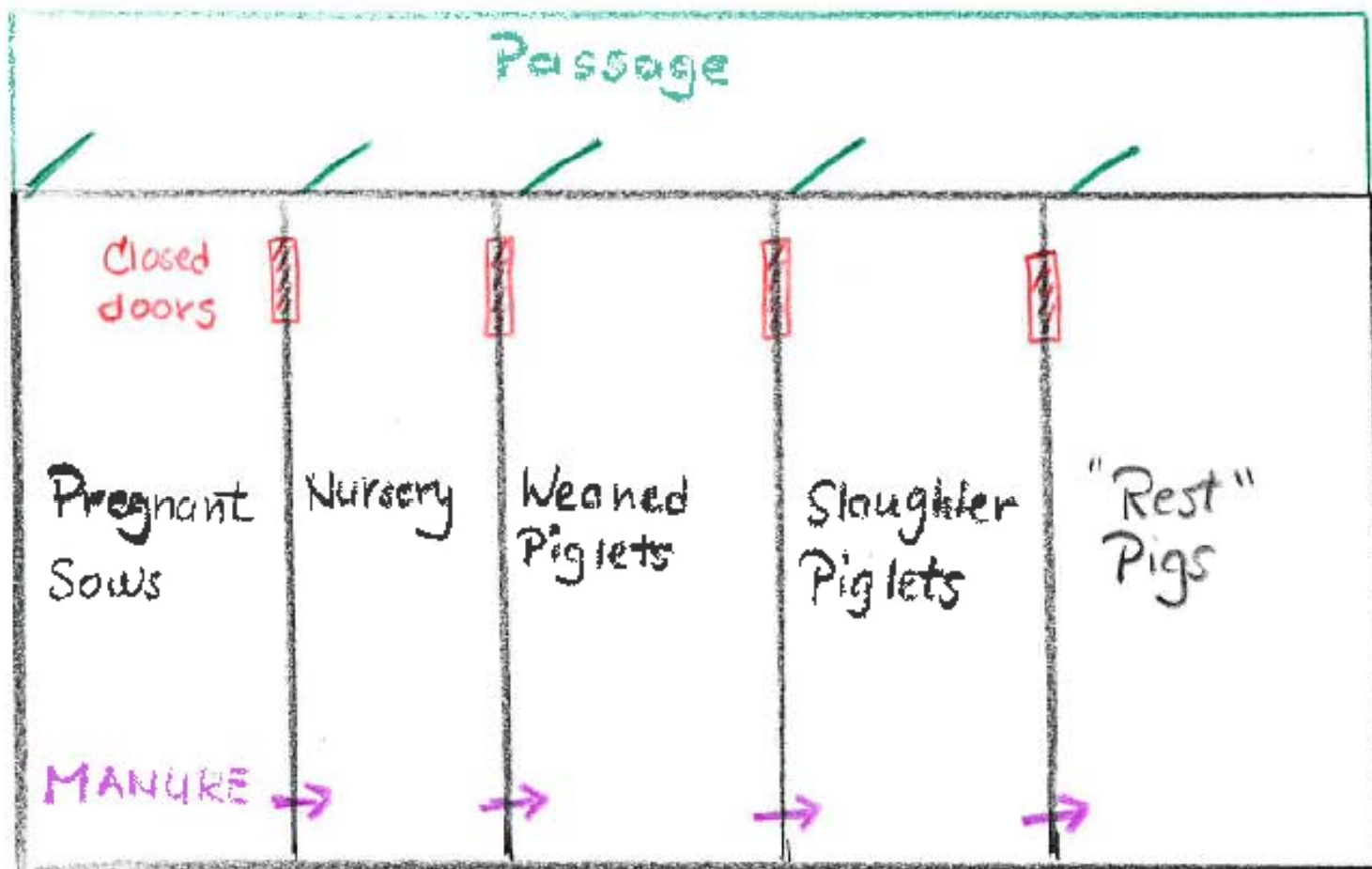
- Immunsystem is not fully developed
- Age segregation to avoid dissemination of disease
 - Different age groups – different diseases
- Possibilities to have the right climate conditions for different age groups
- Less stress influence - less diseases

Immunity among young pigs



All-in / all-out

- All-in / all-out :
 - Separate rooms for different ages
 - Never keep «fall behind pigs» left in the room
 - «Fall behind pigs» is best kept in own rooms
 - Fostering mothers used after weaning should be in the same room as the weaned piglets
 - Limited fostering, not before 6-12h not after 24 hours
 - Washing the pens/room between the batches

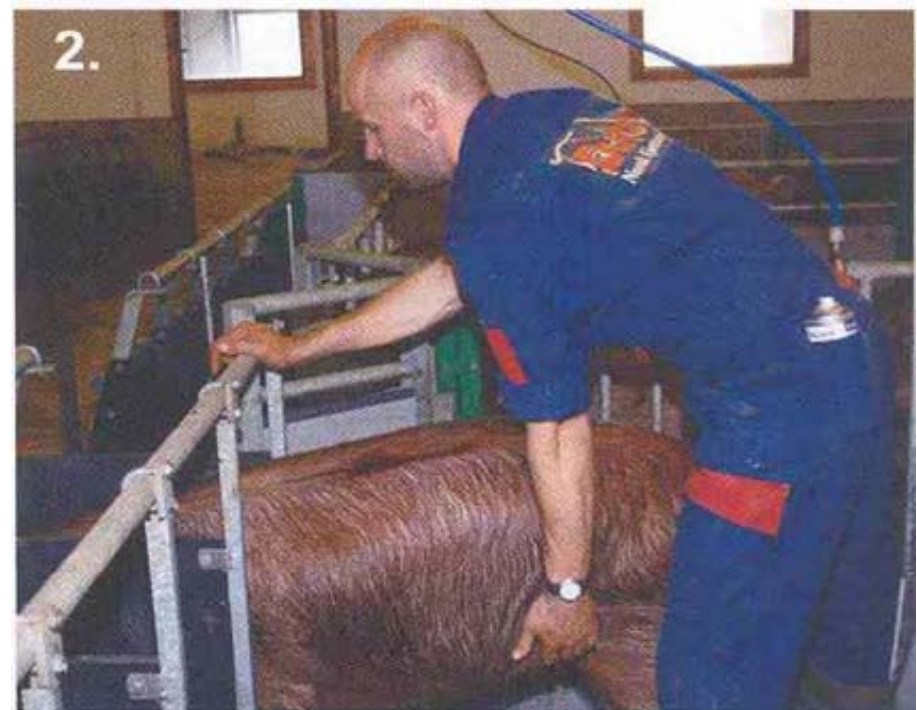
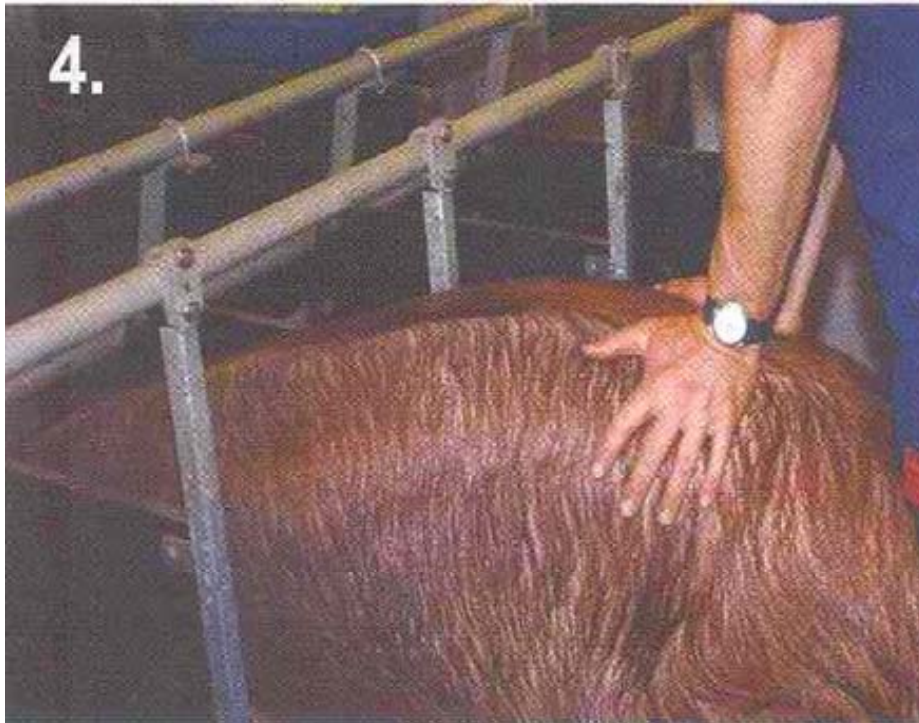


How to get an all-in/all-out production

- Batch farrowing
 - Good reproduction results is the key:
 - Have enough replacement gilts
 - What is the farrowing rate at your farm?
 - Breed them at about 8 months of age
 - Good insemination routines
 - Good hygiene
 - Good working facilities

Breeding

Stimulation



Prevention is better than cure



Colostrum

- Every piglet shall have colostrum from their own mother.
- As early after birth as possible
- Split the litter if the litter is large
- Help the piglets to the udder

Be there! This work has to be done



Nest and iron

Newborn piglets need a warm (30°C) nest.

Iron, **every** piglet must be given a sufficient amount of iron

- Injection
- Per os

Water supply reachable



Weaned piglets

Warm nests 20°C

Good water supply

Digestive feed

Controlled feeding
when problems
with diarrhea

Deworm before
selling/moving the
pigs



Overcrowding Eradication

**Overcrowding
must always be
avoided!**

It shall not be a
«just now»
situation all the
time.



Eradication

- **Mange:**
 - Give **ALL** pigs an injection of Ivomec® or Dectomax®
repeat after 14 days
- **Dysentery and mykoplasma:**
 - Keep only pigs over 10 months of age (mykop)
 - Give Tiamulin in water for 14 days
 - Wash all animal-rooms and other rooms
 - Get ride of the manure
 - Pigs that are treated shall be moved to clean rooms
 - **Bio security!!**
 - By pigs only from farms free from mange, dysentery and mykoplasma

A consistently high standard of cleaning and disinfection is an effective way to break the on-farm cycle of re-infection with infectious diseases!

- 5 basic steps:
 1. **Remove organic matter:** bedding, muck, feed residues, dust
 2. **Use a detergent:** soak all surfaces with cold water and apply a farm specific detergent under low pressure.
 3. **Clean:** work from top to bottom with temperate (30°C) water
 4. **Disinfect:** with a suitable disinfectant, fresh solution,
 - Use protecting clothes
 5. **Dry:** 5-6 days drying can reduce bacterial load 10-fold
 - Minimum 24 hours of drying

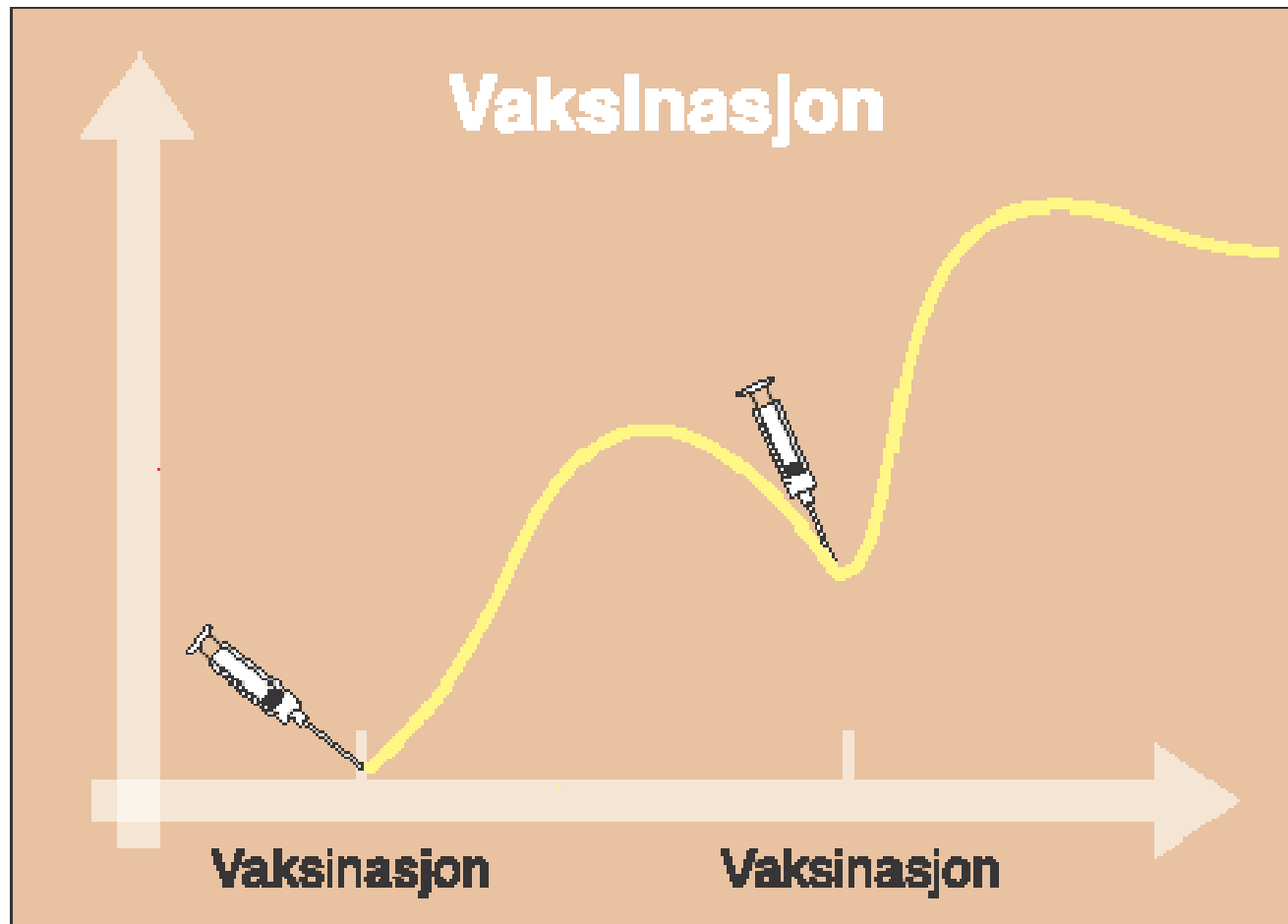
Do not forget the water system, use a recommended product



Vaccination is not a substitute for good pig management or good sanitation!

- If the immune system is weakened by stressful environment or inadequate nutrition, an overwhelming disease challenge can cause disease even in a vaccinated pigs.
- Make a vaccination program together with your veterinarian
- Follow the directions for dosage and administration
- Follow the label directions for storing and handling the vaccines.
- Use properly cleaned needles, one for the pig one for the bottle!
- Do not vaccinate a sick or stressed pig.

Vaccination – development of immunity





Antibiotics

«*No action today - no treat tomorrow*»

Proper use of antibiotics - How to act:

- Do not use antibiotics prophylactic!
 - Only sick animals shall be treated
- Avoid broad-spectered antibiotics
 - Use narrow-spectred antibiotics as often as possible
- Assessments and improvement of daily work methods
- ***Reduce transmissions of endemic infections trough an age segregated production***

Behavior - Stress

- It is of importance to avoid stress on the pigs, Stressed pigs are more susceptible for illnesses.
- Behave calm and predictable
- Avoid shouting and screaming
- Everyday stress situations has a negative influence
- Make good systems for moving pigs around
- Good contact with gilts and sows



Education of and information to the staff

To understand why different tasks has to be done at the right time and in right way one has to involve the staff in decisions about daily working routines.

If the staff do not understand why, when and how things shall be done most likely it will not be done in the right way



Summary

Good biosecurity and sanitation

All-in/all-out production

Good routines for essential tasks as colostrum, iron....

Vaccination is a valuable tool, not a substitute for bad management

Responsible use of antibiotics



A photograph of several piglets in a farm setting. The piglets are light pink and white, with some showing darker spots. They are standing on a bed of straw or hay. A large, semi-transparent brown circle is overlaid on the bottom half of the image, containing the word "ANIMALIA" in white, bold, uppercase letters. There are also two smaller circular insets: one on the right side showing a close-up of a piglet's eye and ear, and another at the bottom left showing a close-up of a piglet's ear and head.

ANIMALIA



ANIMALIA

HELSETJENESTEN FOR SVIN

