# Biosecurity

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# **Today's themes**

- Quarantine rules
- Personnel access
- Delivery facilities
- Influenza

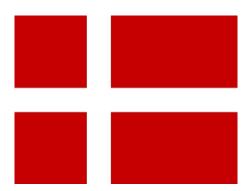




#### **Quarantine rules**

- 24 hours when arriving in Denmark from abroad
  - Important to shower and change shoes and clothes at home when arriving in Denmark
- 12 hours between inland herds with lower status







#### Personnel access

- Door must be locked
- Always enter the pig unit via entrance area
- Must be the only entrance to herd area
  - Visitor's list must be signed by all guests
- Change of clothes, wash and disinfection of hands
  - Warm water, soap, paper towels, hand disinfectants







#### **Entrance** area

- Divided in different zones
  - Outside zone
    - Outside shoes and clothes
  - Washing zone
    - Wash and desinfection of hands
    - Shower is recommended
  - Inside zone
    - Clean clothes and footwear for use in the stable

#### www.ssi.dk/hygiejne



#### Sådan udfører du håndvask

Håndvask udføres efter urene opgaver, når hænderne er blevet våde eller synligt forurenede og ved kontakt med patienter med infektiøs diarre.

Hænder og håndled fugtes, inden sæben kommes på.



Sæben fordeles på håndfladen, mellem fingrene, på hver finger, på håndryggen og omkring håndleddene.



Vask håndfladerne, mellem fingrene, fingerspidserne, tommelfingrene, håndryggene og håndleddene i mindst 15 sekunder.



Skyl sæben af og dup hænderne helt tørre.



Luk hanen med papirhåndklædet. Udfør hånddesinfektion.









ifektionshygiejne

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#### Personnel access - movie

# REMEMBER THE 7 STEPS WHEN ENTERING THE PEN



#### **Lunch room recommendations**

- The only place to eat at work
- Only food bought in Denmark
  - Especially no meat products from abroad, to prevent transmission of ASF
- Not allowed to bring food to the stable
- Change of clothes is recommended



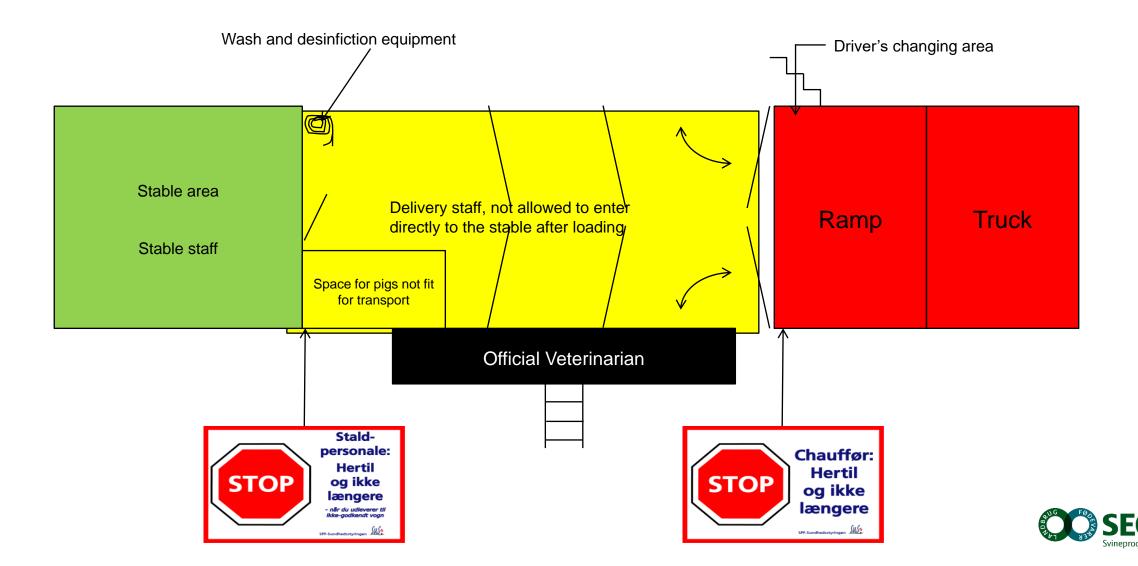


# **Delivery facilities**





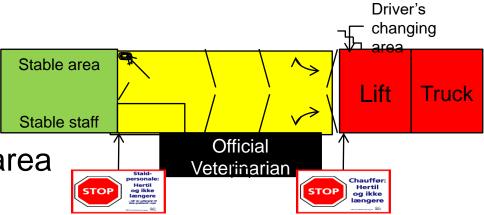
# Delivery facilities, "sluse" in Danish



# **Delivery room (yellow)**

Separate room in connection with the herd area

- Locked inside from the herd area
- Easy to clean, supply of heat
- Cleaning materials in the room







# **Delivery room**

- No return flow of water to the herd area (separate drain)
- Washed and disinfected from the outside
  - Preferably by an fieldworker or as last thing before going home
- 12 hours quarantine after disinfection before it can be entered from the herd area
- Approved by the health control

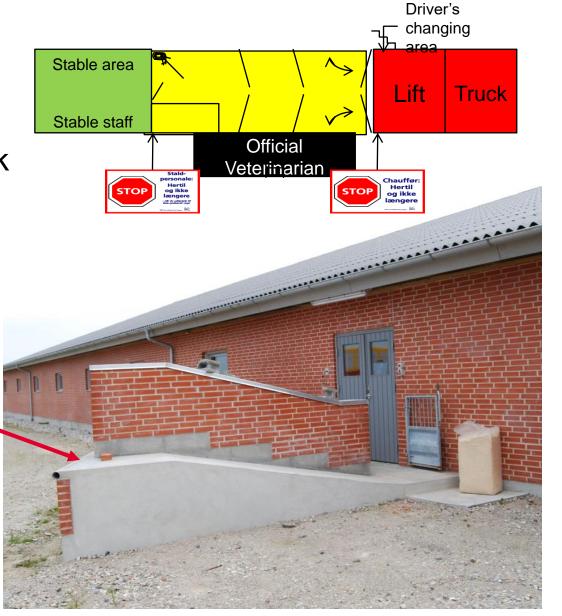




# **Delivery ramp (red)**

• The pigs are walking directly into the truck

- Easy to clean
  - Without any damages
- Changing area for the driver





# **Delivery ramp**

- High-pressure washer connection right inside the door or outside
  - Remember freeze protection and if possible, supply of heat
- Washing and disinfection from the inside and out
  right after use
- No return flow of the water to the herd area
- Disinfected immediately before use





# **Mobile delivery**

- Carriage for delivery to the arriving vehicle
- Loading space minimum 100 meters from the herd area
- Swine transportation bird tight and with closed front
- Easy to clean
- Washing at another property is recommended
- Min. 12 hours quarantine after washing and disinfection
- Swine transportation has to be approved by the health control





# **Special challenges**

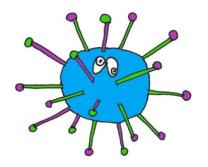
- Washing and disinfection in winter time
  - Temperature control
  - Disinfectants may be inactivated in cold temperatures
  - Indoor delivery facilities
- Delivery of pigs via the delivery facility
  - Farmers are their own border control
  - If the cleaning fails it is not only the customers, whom can get the unwanted infection





#### What is a virus?

- Extremely small particles
  - not visible in normal microscopes
- Need a cell to grow
  - Does not grow outside the body like bacteria
- Antibiotics have no effect on virus!









#### Influenza virus

- Seasonal occurence, mostly November-April
- Influenza virus has zoonotic potential
- It means that humans can infect pigs with influenza
- ... and pigs can infect humans
- It is rare, but possible!

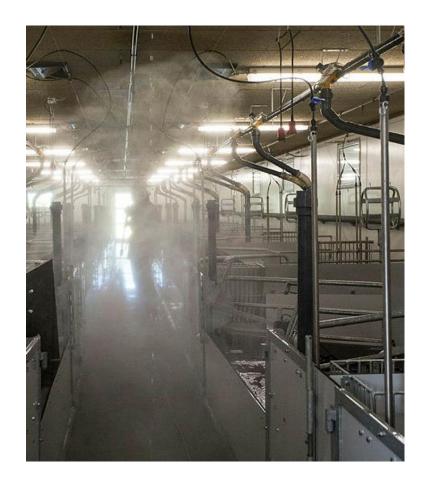




#### Transmission of influenza

- Transmission occurs by direct contact with infected animals, by air, humans or tools
- Can affect all ages from piglets to finishers and sows
- Strict sectioning and all in/all out is recommended
  - Followed by thoroughly cleaning before entering new pigs in the stable

Vaccination of pigs AND humans can prevent outbreaks





#### Prevention of influenza

- Often wash and disinfection of hands and tools
  - Sneeze and cough in the elbow
- Stay at home if sick with signs of influenza
  - Fever, muscle pain, cold
  - Stay at home until 24 hours after feeling well again







### Prevention against disease is your responsibility!

- Rules and common sense
- The health control is always ready to guide also about infection control in addition to the health controls rules and work out plans for the infection control





# **Questions?**

