

# **Better Training for Safer Food**

*Initiative* 

### Biosecurity in pig farm

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Belgrade, 6-8 November 2018



## Just an example...



High biosecurity level farm

~19 000 pigs (closed cycle)

Double fenced

video security cameras

Disinfection at entrance

Security control at entrance

Is this enough???

## Just an example...





#### Farm was affected by ASF in July 2014

~ 19 000 pigs killed

Economical losses

Source of infection and pathways unknown...



# **Concept of biosecurity**

**Biosecurity:** security from exposure to harmful biological agents

**Biosecurity:** complex of measures taken to reduce the risk of introduction and spread of diseases on herd

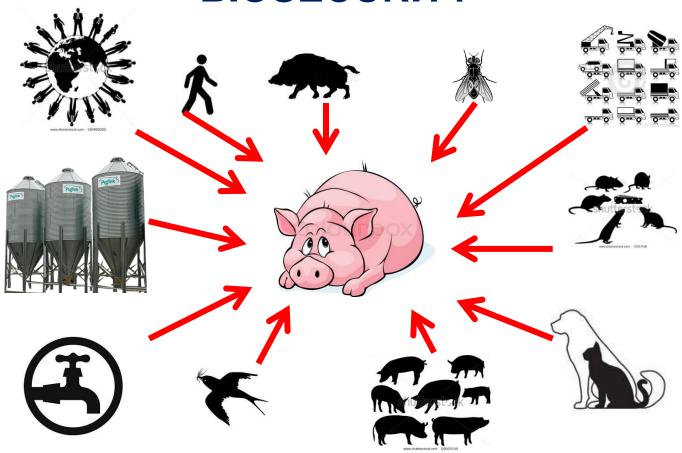
**Biosecurity:** The prevention of disease causing agents entering or leaving any place where farm animals are present

**Biosecurity** is a "philosophy", it must be developed by producers

Biosecurity must become as lifestyle to guaranty success!



# **BIOSECURITY**





### Is risk the same?

**Closed commercial** farms



**Backyard (non-professional) farms** 



**Free range farms** 







# **Biosecurity in commercial farms**

### EXTERNAL BIOSECURITY - <u>reduce disease</u> <u>introduction</u>;

includes:

Fencing

Buying-in policy

Loading / unloading areas

Isolation - Quarantine

Movement restrictions

Cleansing and disinfection procedures

(people, equipment, vehicles)

Transport - records

Visitors - records

Collaboration partners / suppliers

Training program

**Awareness** 

#### INTERNAL BIOSECURITY - <u>reduce disease</u> <u>spread</u>;

includes:

Isolation of animals

Grouping of animals, health

Grouping of animals - category and age

Removal of dead animals

Control of rodents and insects

Disease recording

Production recording

Cleansing and disinfection procedures

Training program

**Awareness** 

.....



## **Biosecurity plan – where to start from?**

General information on farm:

Geographical information
Production system
Movement of animals
Movement of people
Animal health records





# Location and layout of the farm







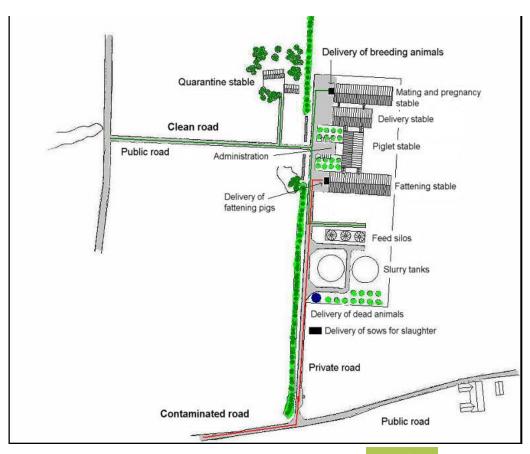
# Biosecurity plan – where to start from? (2)

Dirty and clean areas / zones
Facilities at farm for the use of staff
Carcass management
Insect and rodent control program
Training program for staff
Information about service providers
Documentation of measures
Definition of persons in charge...
Self control system – random checks





# Farm lay-out (example)



- Access to the farm for different purposes
- Clean and dirty roads, areas
- Identification of activities, movements



### Content of the biosecurity plan

### 1. External biosecurity



- Demarcation of the farm and farm territory
  - zones with different risk;
  - unauthorized persons, transport;
  - wild animals, birds, rodents....
- Control of entering animals, semen, ova and embryos
  - heath certificates, guaranties;
  - quarantine, lab tests before movement.

# Protection from wildlife and rodents







### **Introduction of animals**

Any introduction of new animals presents high risk to the farm!!!

How to reduce the risk?

Careful evaluation of the health status of suppliers / partners; Number of suppliers – as low as possible; Vehicles used for movement of animals (owned, rented....) Cleaning and disinfection of loading / unloading areas Quarantine



# **Loading area**









# Content of the biosecurity plan (2)

#### Control of visitor movement:

- maximum restricted (.....piglet trade...);
- requirements for visitors (declaration on no farm / hunting visiting for at least 48-72 hours);
  - register of visitors (journal);
- entering rules (disinfection mat, change of clothes, boots, shower, disinfection, hygiene).

#### Control of vehicles:

- restrictions for transport entering farm territory;
  - requirements for vehicles (disinfection barrier);
  - definition of internal vehicles;
  - drivers....??!!





# Cleaning and disinfection of vehicles









# Content of the biosecurity plan (3)

### Employees:

- contract (detailed as possible)
- regular training!
- sanitary point, disinfection
- change of clothes and boots
- respect clean and dirty zones
- specific requirements (cannot visit other farms or keep pigs, hunting, food from home?!)







# Content of the biosecurity plan (4)

Facilities for the change of footwear and clothes

# **Shower**

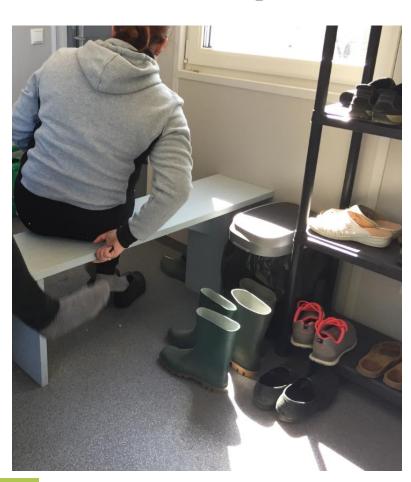




# Dirty and clean areas in practice









# Content of the biosecurity plan (5)

#### Animal feed and water

- trusted establishments;
- no water from rivers, lakes...
- laboratory analysis (regular).

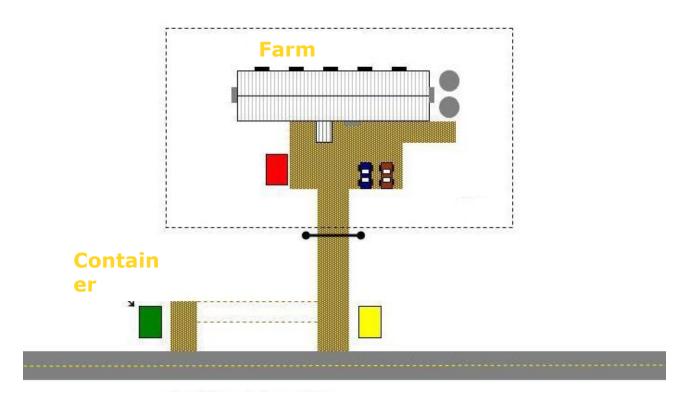


### Collection of dead animals

- storage place (container);
- collection truck <u>does not</u> enter the farm territory, <u>does not</u> cross the internal clean roads.



# Safe collection of carcasses (example)



**Isolated access** 

Food safety



# Content of the biosecurity plan (5)

### 2. Internal biosecurity

- Principle «all in all out»
- Cleaning and disinfection:
  - pens, corridors, storage rooms, feed towers
  - equipment and tools
- Dead animal collection, storage (where?)
- Restricted movement for animals and employees within a farm
- Waste hygiene



## **Dead animal collection**





# How to apply biosecurity in free range farms?

Basic principles (considering the risk):

Physical isolation - fencing, roof, nets ...

Indoor keeping only (pigs in ASF affected/ at risk areas)



rood safety



# Biosecurity in backyard farms

Basic minimum biosecurity rules:

No swill feeding

No contact between the pigs on the farm and wild animals (indor keeping)

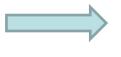
The owner/keeper change clothes entering the stable and leaving the stable

Is that enough?



# **Biosecurity in backyard farms**

Simple but effective biosecurity rules



Balance: Investment & biosecutrity





# **Example: Biosecurity requirements for backyard pig farms**

#### Based on:

ASF Strategy for Eastern Part of the EU (SANTE/7113/2015-Rev 9)

https://ec.europa.eu/food/sites/food/files/animals/docs/ad\_control-measures\_asf\_wrk-doc-sante-2015-7113.pdf

#### Main biosecurity requirements:

- Only indoor keeping no direct contact with wild boar
- Specific clothes / boots for the use only in a farm
- No swill feeding
- No fresh grass feeding
- Straw for bedding allowed only for at least 90 days after harvesting
- Regular cleaning, disinfection, rodent & insect control
- Disinfection pad at the entrance of farm
- No entrance for unauthorized persons
- Water resistant container for dead animals
- Protective clothing and boots for visitors
- Registration of visitors
- Home slaughtering only under veterinary supervision.

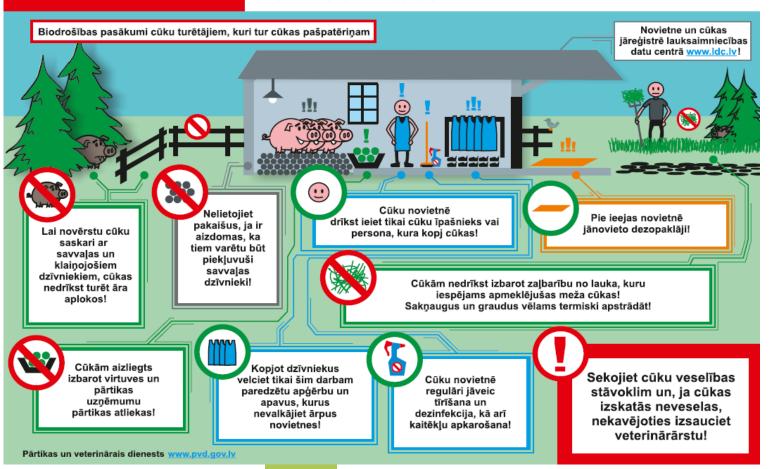


### **Poster:**

Biose curity in backy ard farms (LV)

# UZMANĪBU

KAS JĀIEVĒRO, LAI PASARGĀTU CŪKU NOVIETNI NO ĀFRIKAS CŪKU MĒRA (ĀCM) UN CITĀM CŪKU INFEKCIJAS SLIMĪBĀM

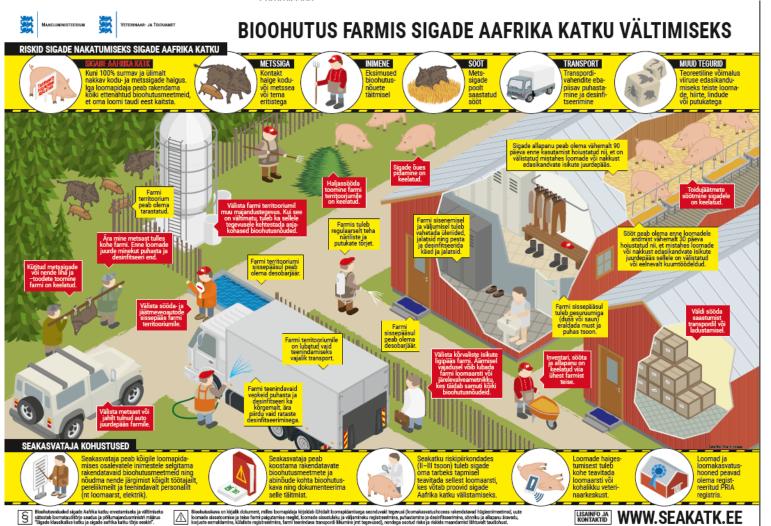


Food safety





Biosec urity in comme rcial farms (EE)





### How to motivate farmers?

#### **BIOSECURITY:**

helps keep out exotic diseases reduces the risk of zoonotic diseases

limits the occurrence and spread of diseases and helps to protect other farms

gives better production results (reproduction, growth, etc.)

improves overall herd health status improves animal welfare improves quality and safety of produced products cuts costs of disease treatment and reduces losses, which could improve farm profitability.



### **Conclusions**

Good biosecurity is the only way to keep disease away from farms.

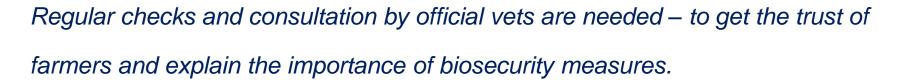
Biosecurity shortcomings increase the risk of disease introduction in a farm.

Legal basis for biosecurity – very important!

Proper (daily) implementation – even more important!

Backyards and free range farms – at the highest risk!

Commercial farms – the highest economical losses...



REGULAR and repeated training and awareness campaigns are necessary!





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Food safety