



Better Training for Safer Food *Initiative*

Biosecurity

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BTSEF

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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*

Just an example...

Clinical signs and symptoms



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*

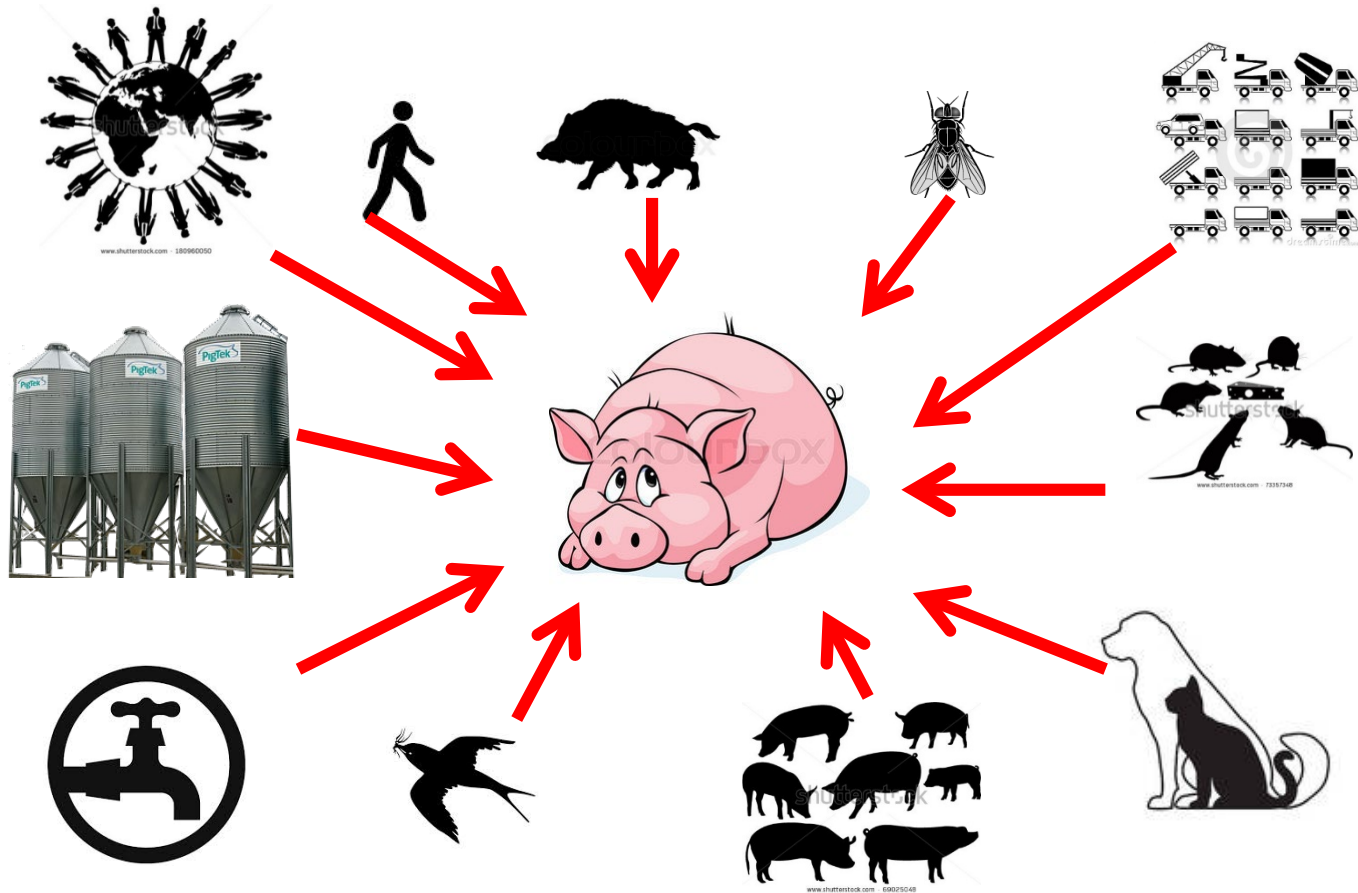
Biosecurity is a "philosophy" , it must be developed by producers

Biosecurity must become as lifestyle to guaranty success!



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BIOSECURITY





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Is risk the same?

Closed commercial farms



Backyard (non-professional) farms



Free range farms



RISK

Biosecurity in commercial farms

EXTERNAL BIOSECURITY - reduce disease introduction;

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 - reduce disease spread;

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)

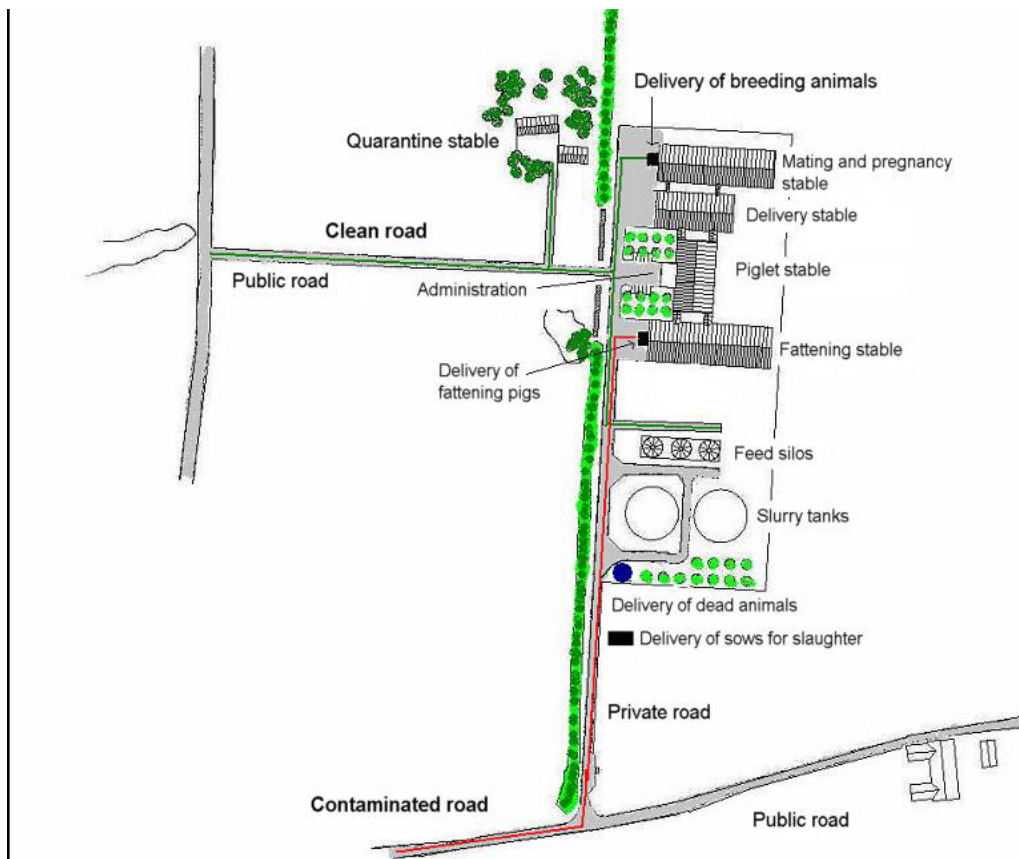
Dirty and clean areas / zones
Facilities at farm for the use of staff
Carcass management
Insect and rodent control program
Training program for staff
Information about service providers
Documentation of measures
Definition of persons in charge...
Self control system – random checks





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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**
 - health certificates, guaranties;
 - quarantine, lab tests before movement.



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Protection from wildlife and rodents



Introduction of animals

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

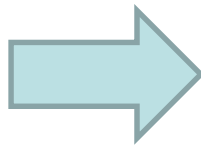
How to reduce the risk?

*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*



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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....??!!*



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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?!)**

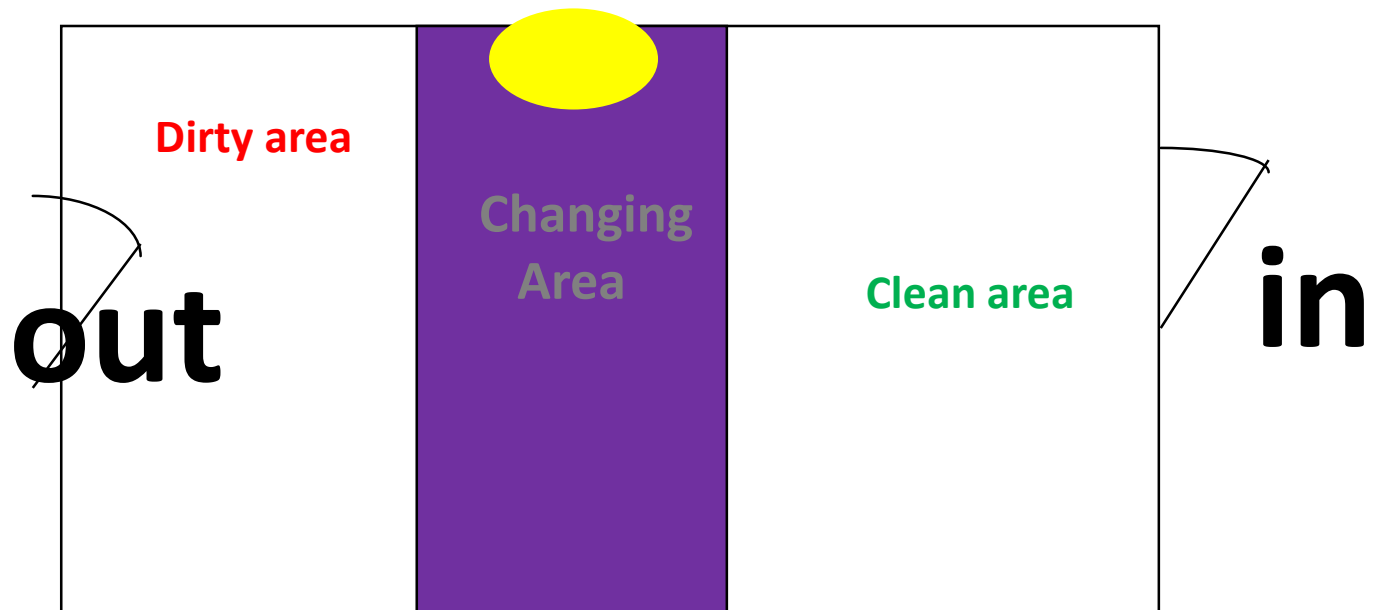


Control of rodents and insects

Content of the biosecurity plan (4)

Facilities for the change of footwear and clothes

Shower





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Dirty and clean areas in practice



Food safety

Content of the biosecurity plan (5)

Animal feed and water

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



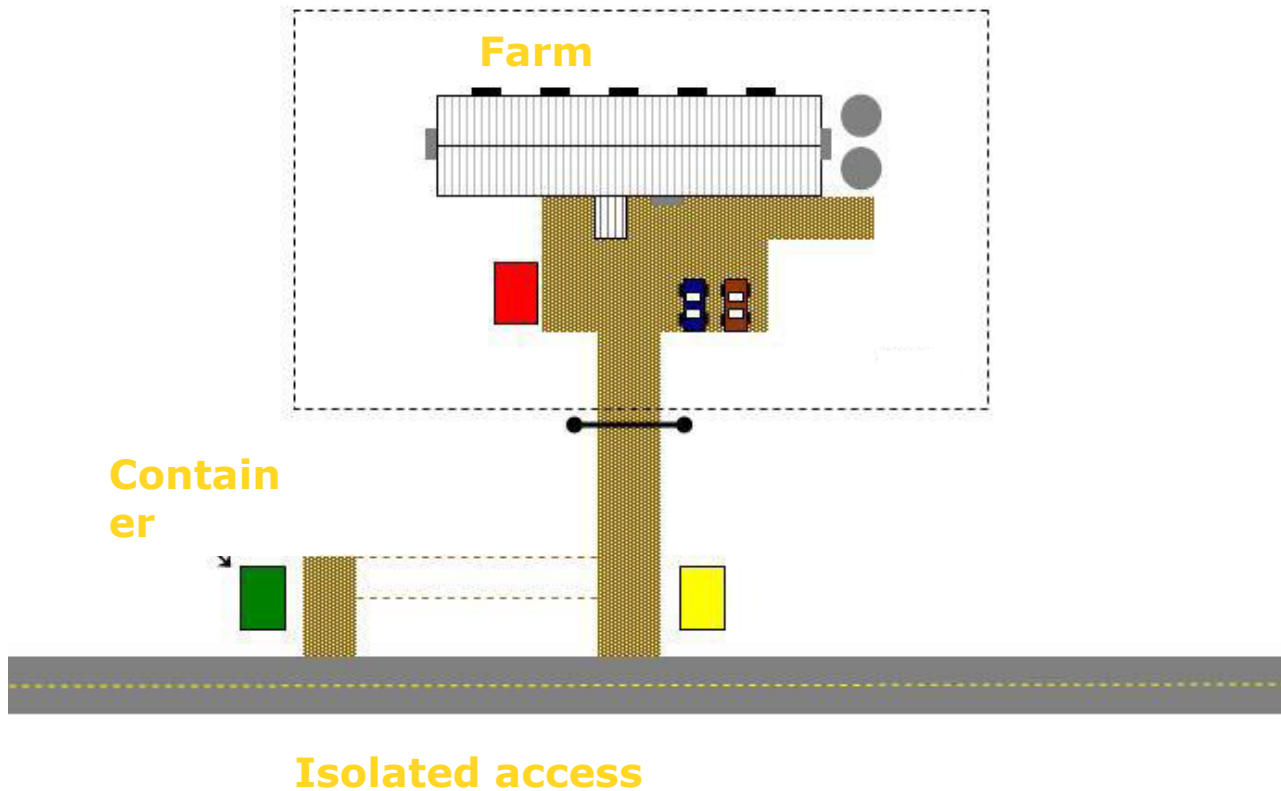
Collection of dead animals

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



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Safe collection of carcasses (example)



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**



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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)



Biosecurity in backyard farms

Basic minimum biosecurity rules:

No swill feeding

No contact between the pigs on the farm and wild animals (indoor 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 &
biosecurity*



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.



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Poster:

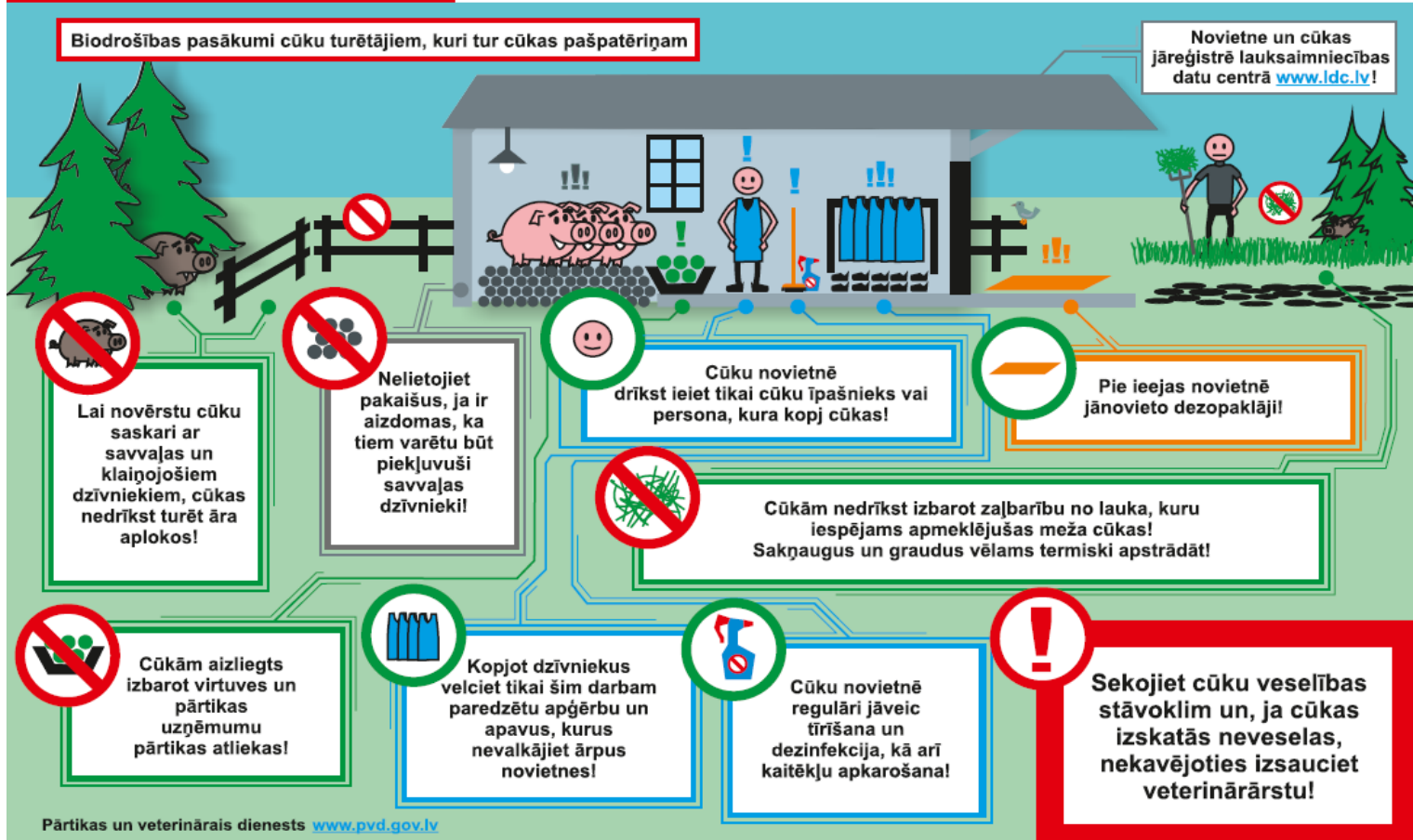
Biosecurity in backyard farms (LV)

UZMANĪBU

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

Biodrošības pasākumi cūku turētājiem, kuri tur cūkas pašpatēriņam

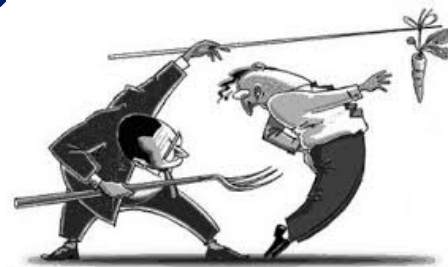
Novietne un cūkas jāreģistrē lauksaimniecības datu centrā www ldc.lv!



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 checks and consultation by official vets are needed – to get the trust of farmers and explain the importance of biosecurity measures.

REGULAR and repeated training and awareness campaigns are necessary!





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