



#### Introduction



Swine veterinarian since 1997

Diplomat ECPHM

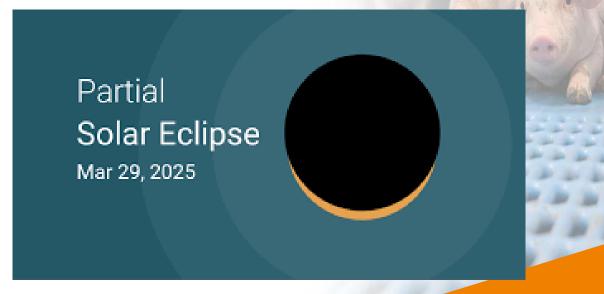
BU manager swine GD animal health



#### What will be happening in 2025







## Pig farming in 2025





#### **ASF** = African Swine Fever



- African Swine Fever
  - DNA virus, biggest virus in swine
  - Infects domestic swine, wild boar, warthog
  - Attacks the cells of the immune system

- Clinical signs
  - High Fever, Hemorrhages,
    Sudden Death



## **Therapy - Intervention**



No vaccine (yet)

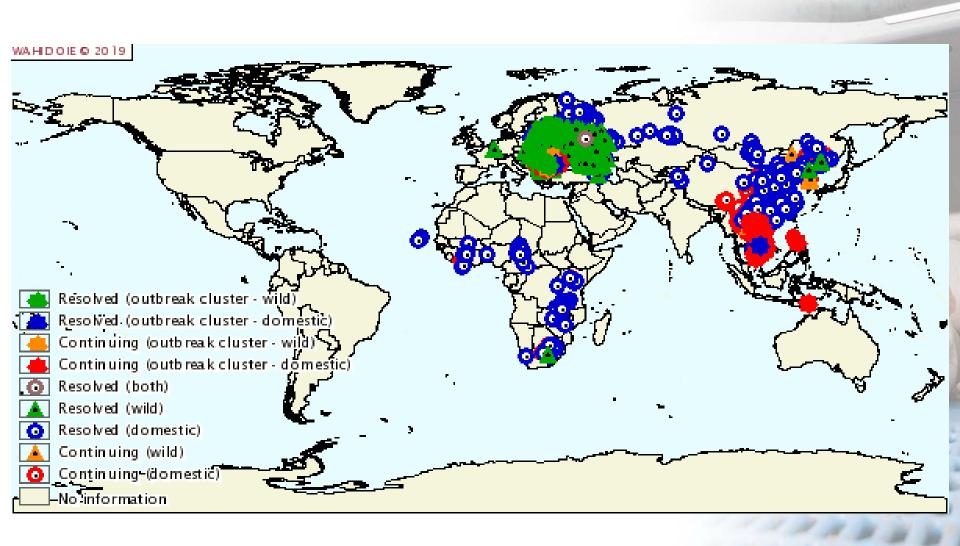
Stamping out by culling of infected herds



 Reduction of introduction risks via high biosecurity standard.

#### Reality

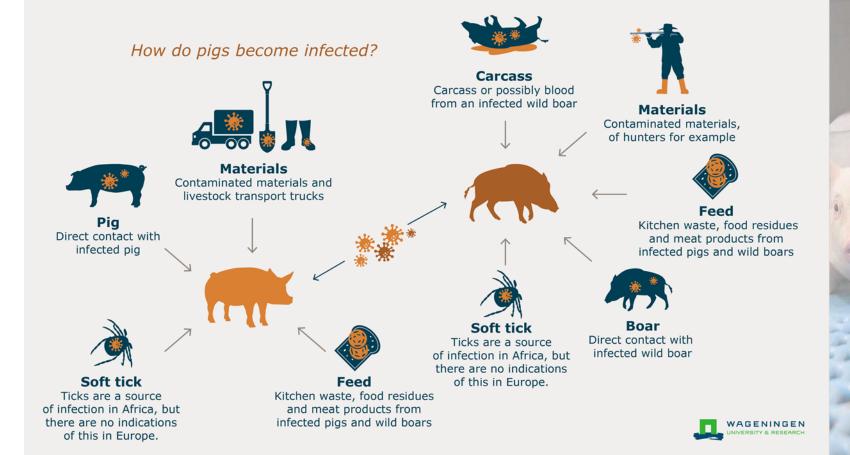






#### **African Swine Fever**

How do wild boars become infected?



#### **2019 ASF**



Back yard farming is major risk for pig industry

 Biosecurity standards applied in most (all) countries in the world are not able to prevent introduction of ASF

Mostly due to working methods and mistakes made by people

#### **Effect of ASF worldwide**

Reduction # pigs slaughtered worldwide

Increasing prices of pork

Not all pigs are culled

More and more pork will be ASF positive





MENU 🗸

#### **SCIENTIFIC REPORTS**

Article | Open Access | Published: 08 October 2019

# Risk of African swine fever virus introduction into the United States through smuggling of pork in air passenger luggage

Cristina Jurado ⊡, Lina Mur, María Sol Pérez Aguirreburualde, Estefanía Cadenas-Fernández, Beatriz Martínez-López, José Manuel Sánchez-Vizcaíno & Andrés Perez

#### Biosecurity is the answer



The original definition of biosecurity started out as a set of preventive measures designed to reduce the risk of transmission of <u>infectious</u> <u>diseases</u> in crops and livestock, quarantined pests, <u>invasive alien species</u>, and living <u>modified organisms</u> (Koblentz, 2010).

## External versus internal

## **Keeping the enemy out**





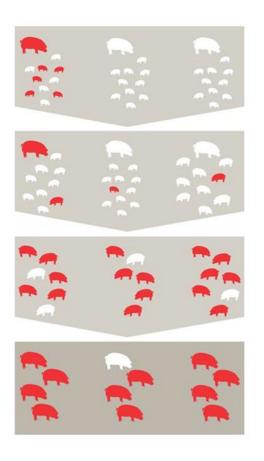
## Controlling entry of people and ....

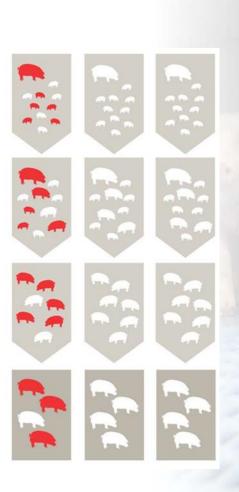




## Why biosecurity?

No infection means.... no disease



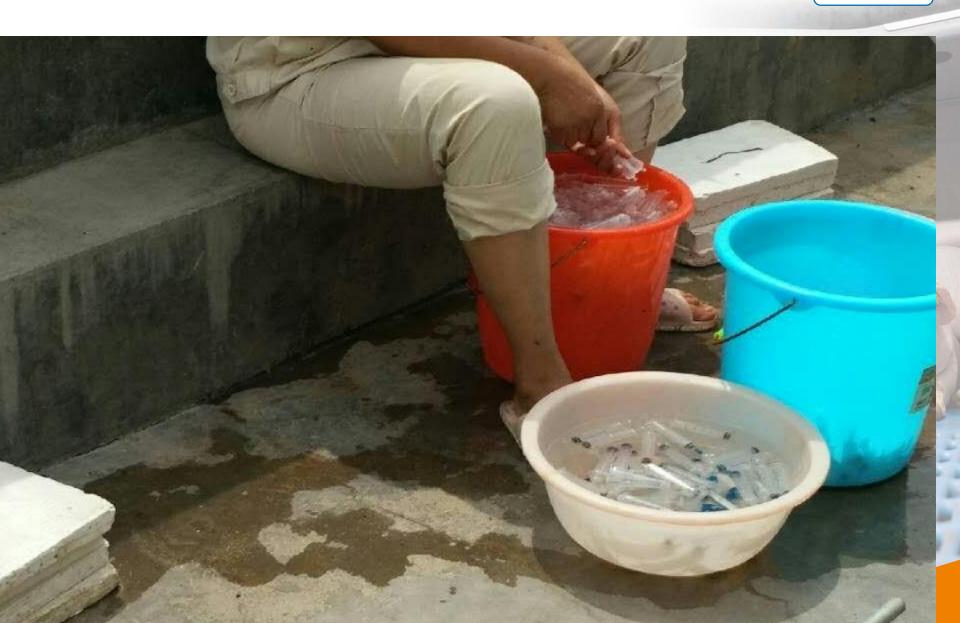


#### **Toolbox**

- Hygiene (cleaning and disinfecting)
- Batch management (no mixing of animals)
- Excellent conditions (food, water, air)
- Excellent stockman ship

Very 2019







# 2025



# Millenials

- Flexible vegetarian
- More interest in animal welfare
- Concerns about the climate
- Healthy lifestyle and food culture



#### **Themes**



## Climate

- CO<sub>2</sub> footprint
- Shift in vectors

## Health

- Zoonosis
- Antimicrobial resistance

# Welfare

- Housing
- Castration / tail docking

#### **Climate**

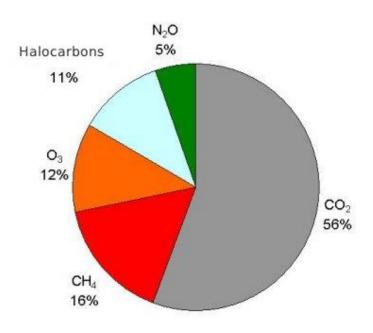


#### **Global warming**

Green house gasses have an effect on the rise of

temperature

- Challenge
  - Reduction of CO2 footprint



## Reduction CO<sub>2</sub> footprint



- Reducing nitrogen in animal diets
- Manure management, including solid-liquid separation
- Improving animal health status

# Improving feed efficiency

## **Climate change**





#### **Healthy animals (anno 2025)**



- SPF herds
  - Free from.....
- Result:
  - No spoiling of energy and proteins to fight infections
  - No antibiotics → No antibiotic resistance
  - No vaccinations

## **Effect on productivity**



Higher ADG

Lower mortality

Lower feed conversion rates

## **Housing conditions**



#### **Farm layout**

Multi site

Easy to clean and disinfect

Logical design of routing

Preferable all in – all out per location

MANAGED BY A PROFESSIONAL MANAGER

NO CONCESSIONS TO THE HEALTH STATUS

#### Results...



- SPF yields an annual benefit
- 1,000 sow herd
- more than € 350,000,
- more than € 250,000 in the finishing phase

Most important drivers are FCR and Feed prices.

#### **Animal welfare**



In relation to housing – rooting behaviour



## **Challenges**



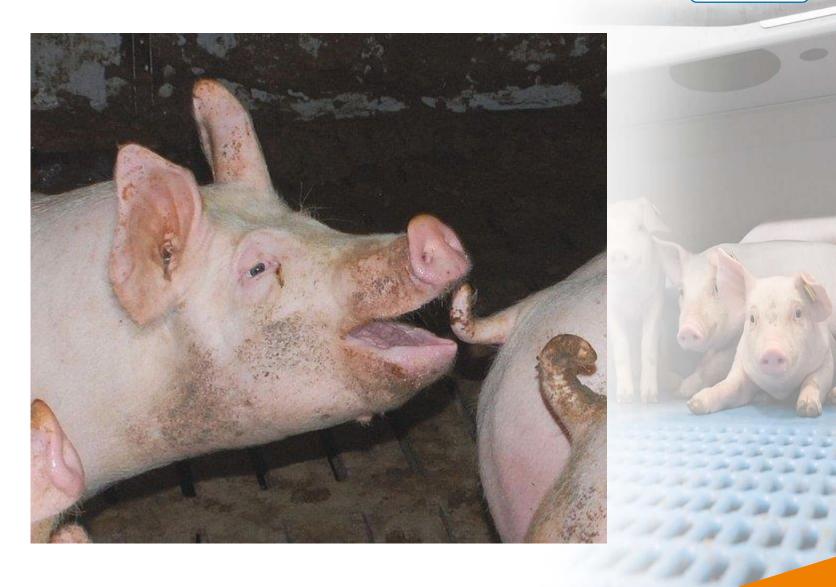
Lameness and OCD





## Tail biting and Ear necrosis





#### Conclusion



Milenials will change the world

- Housing condition should include answers for
  - Climate Change,
  - Animal Welfare and
  - Animal Health



