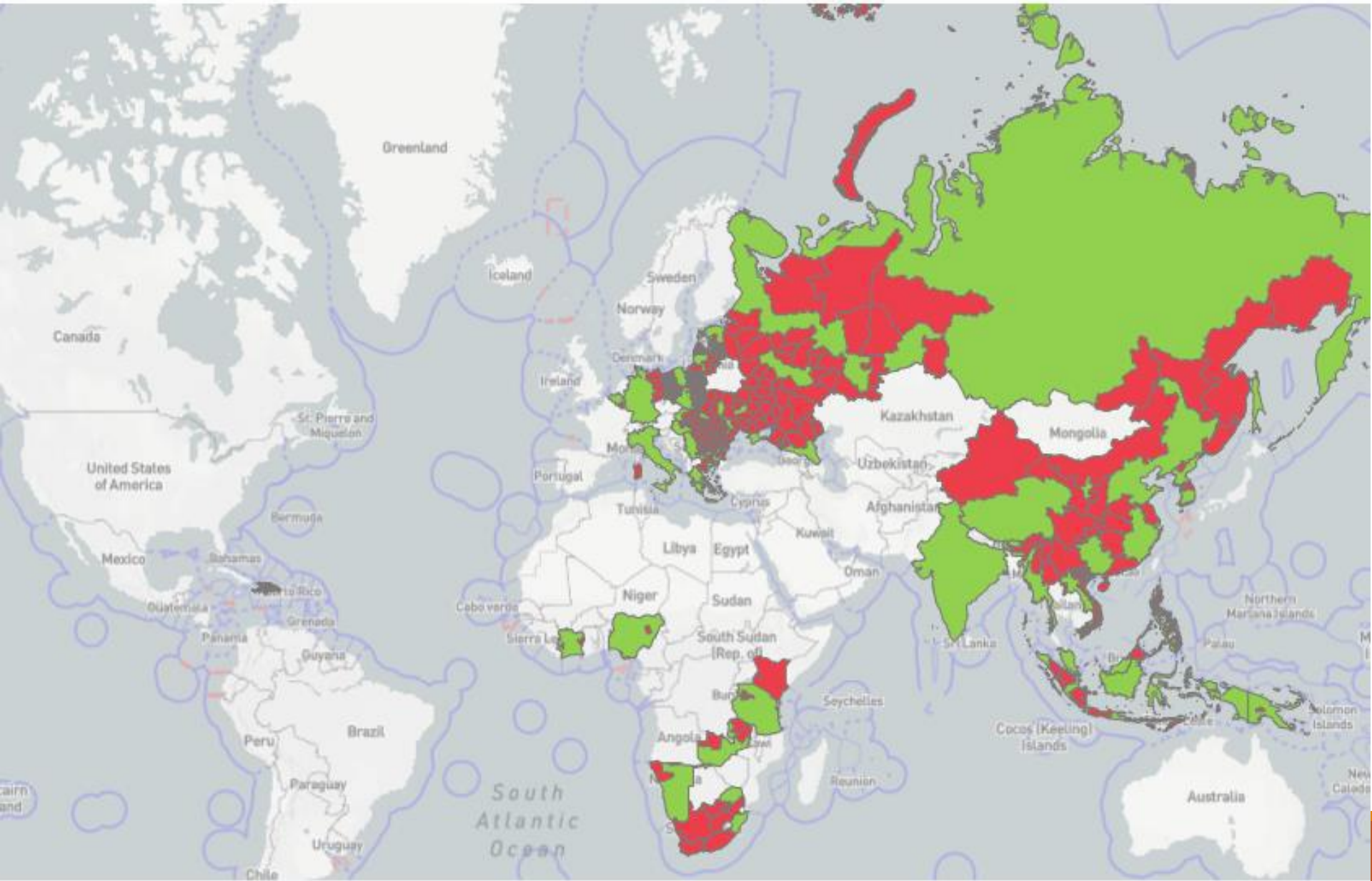


# Actions when ASF outbreak is confirmed: experience of the EU country

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Dr. Marius Masiulis,  
Head of Emergency Response Division  
State Food and Veterinary Service of Lithuania

# African swine fever



# What the farmer should do in case of suspicion?

- **isolate** all animals suspected of being infected;

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- **keep** the manure, including litter and used bedding, and any product, material or substance likely to be contaminated **isolated and protected** from insects and rodents;
- **implement** the appropriate **additional biosecurity measures** to avoid any risk of spread of the disease;
- **cease all movements** of kept susceptible animals from or to the establishment;
- **prevent non-essential movements** of animals, products, materials, substances, persons and means of transport from or to the establishment;
- **ensure that** production, health and traceability **records** of the establishment **are updated**;
- **provide** the competent authority, on its request, with **any relevant information** regarding the disease; and
- follow any instructions given by the competent authority regarding the control of the disease.



# What the veterinary service should do in case of suspicion?

**Ensure** that official veterinarians perform at least:

- (a) clinical examinations of kept animals at the establishment; and
- (b) collection of samples for laboratory examinations.

And **place the establishment under official surveillance** and immediately impose the following **preliminary restriction and biosecurity measures**:

- prohibition of movements of animals into and from the establishment;
- prohibition of movements of any product, material or substance likely to be contaminated with or likely to transmit diseases from the establishment;
- isolation of kept animals and protection from wild animals, and, when necessary, from insects and rodents;
- prohibition of killing/slaughtering of animals, unless authorized by the competent authority; and
- prohibition of non-essential movements of products, materials, substances, persons and means of transport into the establishments.

**The competent authority may establish a temporary restricted zone!**



# Actions when ASF outbreak is confirmed

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Official ban to move pigs;

Traceability of dispatched pigs and farms in contacts;

Setting protection (3 km) and surveillance zone (10 km) with the temporary movement ban;

Activation of contingency/action plan:

- Control point of entrance to outbreak farm and biosecurity;
- Epidemiological investigation;
- Culling;
- Destruction of carcasses;
- Disinfection.



## Measures when ASF outbreak is confirmed



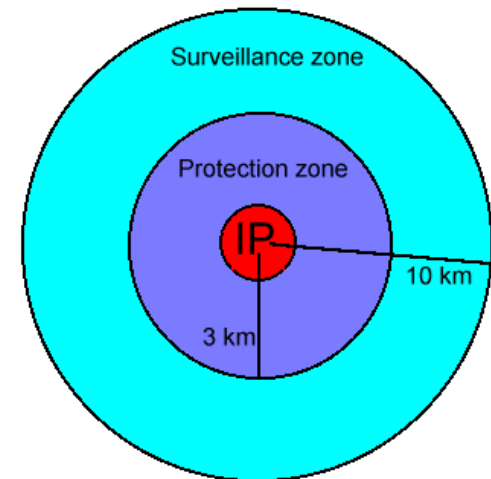
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- (a) **all** susceptible **animals kept** in the affected establishment **shall be killed** as soon as possible on the spot, within the establishment, in such a way as to avoid any risk of spreading the relevant disease agent during and after killing;
  - (b) all appropriate and necessary biosecurity measures shall be taken to avoid any possible spread of disease to unaffected kept or wild animals or to humans;
  - (c) bodies or parts of kept animals which have died, or which have been killed shall be disposed of;
  - (d) all potentially contaminated products, materials or substances present in the establishment shall be isolated until:
    - (i) they are disposed of or processed;
    - (ii) cleaning and disinfection measures are completed;
    - (iii) disposal is completed under the supervision of official veterinarians.

# Actions when ASF outbreak is confirmed

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The competent authority shall immediately establish around the affected establishment or location a restricted zone, which comprises:

- (a) a **protection zone** based on the minimum radius of 3 km;
- (b) a **surveillance zone** based on the minimum radius of 10 km; and
- (c) if necessary, further restricted zones around or adjacent to the protection and surveillance zones, where the competent authority shall apply the same measures as for the surveillance zone.



# Measures in the protection zone

## Duties of competent authority:

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- compile and keep up to date - all establishments keeping animals of listed species located in the restricted zone including the species, categories and number of animals in each establishment;
- in order to prevent the spreading of the disease and based on epidemiological information or other evidence - implement preventive killing or slaughtering of kept animals in the establishments located in the restricted zone;
- order and supervise all movements of entire bodies or parts of dead wild and kept animals – for processing or disposal;
- impose specific conditions for the transport of animals and products through the restricted zone;
- prohibit the activities, **including movements**, concerning animals of listed species and their products and other materials within, from and to the protection zone;
- ensure that official veterinarians carry out at least one visit to all the establishments

Minimum period of duration of measures in the protection zone – 15 days.



# Measures in the surveillance zone

The competent authority shall:

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- apply prohibitions, exemptions and derogations to activities, **including movements** concerning animals of listed species, the products thereof and other material, from and to the surveillance zone;
- ensure that official veterinarians carry out visits to a sample of establishments keeping animals of listed species in the surveillance zone;

Minimum period of duration of measures in the surveillance zone - **30 days.**

# Culling - choose the best method

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When you make a choice on the method to apply you have to be aware of the limitations of that method.

A question list will help to make a choice:

- How many animals are on the farm?
- What are the housing conditions?
- What are the limitations of the methodology?
- Which methods are available?
- What capacity do I need? (people, equipment,..)
- What are the consequences for the rest of the contingency plan (safety, animal welfare, costs, removal of carcasses, biosecurity,...)

# Domestic pigs culling in case of ASF outbreak

**Challenge: How to manage?**

**Captive bolt**



**Electrical stunning equipment**



**Lethal injection**



**CO2 Gas**

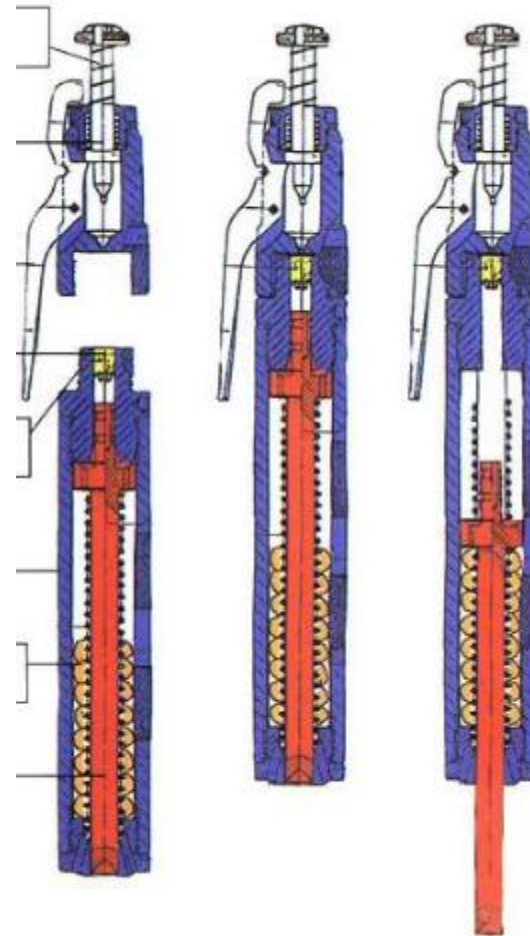


# Anesthetic used for pig euthanasia

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# Captive bolt



# Electrical stunning / killing equipment



**Work is dangerous!**



# CO2 gas

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# Disposal

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The most common disposal methods for carcasses and other materials are:

- burial (either at an existing licensed landfill site or in a specially designed and excavated pit),
- cremation (either on a pyre, or in an incinerator or pit burner),
- Rendering/incineration,
- composting and;
- disposal by alkaline hydrolysis

# Challenges

Where to store the carcasses?

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What to do with carcasses? Burn, burry, render or incinerate?

Cleaning and disinfection?



# Disposal

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- Occupational health and safety;
- Pathogen inactivation;
- Environmental concerns;
- Availability of capacity;
- Adequate funding;
- Staff resources;
- Societal acceptance and acceptance from farmers;
- Scavengers and vectors;
- Economic impact.



# Challenge: How to manage pigs disposal?

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**Rendering/incineration**



**Burning on site (??!!)**

**Burial on site**



# Burial on site



Police post















# Cleaning and disinfection

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- the cleansing and disinfection operations and, where necessary, the measures to destroy rodents and insects using officially authorised products must be carried out under official supervision and in accordance with the instructions given by the official veterinarian;
- the disinfectants to be used and their concentrations must be officially approved by the competent authority to ensure destruction of African swine fever virus;
- the efficacy of disinfectants must be regularly checked before use, as the efficacy of certain disinfectants is diminished by prolonged storage;
- the choice of disinfectants, insecticides and of procedures for disinfection and disinsectisation must be made taking into account the nature of the premises, vehicles and objects which are to be treated.

# Cleaning and disinfection

➤ **Preliminary cleansing and disinfection** - the disinfectant must remain on the surface for at least 24 hours;

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➤ **Final cleansing and disinfection:**

- manure and used bedding must be removed and treated;
- grease and dirt must be removed from all surfaces by the application of a degreasing agent and the surfaces washed with water;
- after washing with cold water, further spraying with disinfectant must be applied;
- **after seven days** the premises must be treated with a degreasing agent, rinsed with water, sprayed with disinfectant and rinsed again with water.

Disinfection of contaminated bedding, manure and slurry:

- manure and used bedding must be stacked to heat, sprayed with disinfectant and left for at least 42 days or destroyed by burning or burying;
- slurry must be stored for at least 42 days (in case of HPAI - 60 days) after the last addition of infective material, unless the competent authorities authorize a reduced storage period for slurry which has been effectively treated in accordance with the instructions given by the official veterinarian so as to ensure the destruction of the virus.



































Questions? Suggestions? Remarks?

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