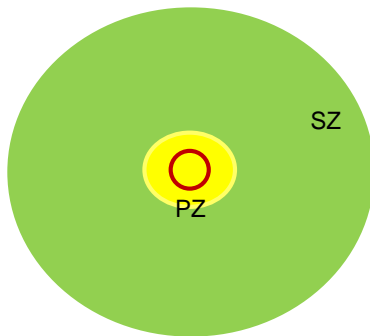


# Interpretation of clinical and diagnostical results

*K Depner*  
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Belgrade

## National control strategy



**Outbreak Centre (OC):** BYF, village, CF, place where an infected wild boar has been found. The area of a OC can have a radius of 5 – 20 km. Within the OC all pigs are culled.

**Protection Zone (PZ):** 3 - 20 km. All pigs will be slaughtered, no movement of pigs out or in. CF can be excluded.

**Surveillance Zone (SZ):** 20-150 km. No movement of pigs out or in, pork products have to be heat treated.

**Restricted zones (PZ + SZ)** are occasionally clinically checked for ASF at least once in the surrounding villages or farms.

The quarantine time after an outbreak lasts 40 days after cleaning and disinfection.

*Similar measures are applied for ASF in wild boar, the legislation does not differentiate between outbreaks in domestic pigs or cases in wild boar.*

## Surveillance domestic pigs

ASF surveillance is set up by the central administration.  
Two samples (blood or spleen) per quarter from each commercial farm are taken randomly.

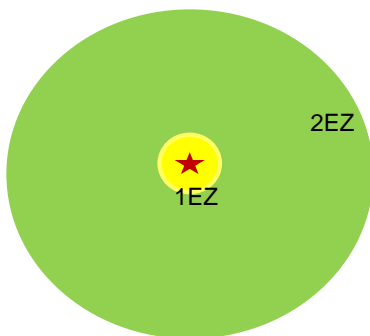
No specific prescriptions on which animals have to be sampled are in place, however sick or dead animals should be targeted.

Along the two ASF samples, it is recommended that at least 10% of dead animals should be sampled.

CF are reporting daily by phone to the local veterinary service the number of death and sick animals. All the communication is made by phone; no written reports are made.

During the past year, due to economical and strategical decisions (no money and no interference with enterprises) the veterinary service was not conducting any inspections on site.

## National control strategy



**Centre of Infection (CI):** BYF, village, CF, place where an infected wild boar has been found. The area of a CI can have a radius up to 5 km. Within the CI all pigs are culled.

**1<sup>st</sup> Endangered Zone (1EZ):** 5 - 20 km. All pigs will be slaughtered, no movement of pigs out or in, measures applied for 7 months. CF with high level of biosecurity are excluded.

**2<sup>nd</sup> Endangered Zone (2EZ):** 100-150 km. No movement of pigs out or in, pork products have to be heat treated

*Similar measures are applied for ASF in wild boar, the legislation does not differentiate between outbreaks in domestic pigs or cases in wild boar.*

## Surveillance domestic pigs

The ASF surveillance regime for domestic pigs is set up by the federal administration.

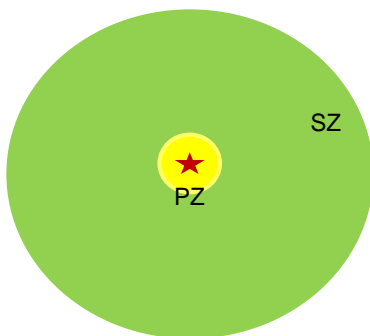
For each year the regional administration receives the plan in which it is listed how many pigs have to be sampled and tested quarterly in each district.

The plan is **based on a disease prevalence assumption of 5% with 95% confidence** of detection. The samples are taken randomly and are tested in specialized laboratories by PCR.

Additionally in large commercial farms **5% of each batch of slaughter pigs** going are blood samples and tested by PCR.

**Backyard pigs are not included in an ASF** targeted surveillance or monitoring programme and their registration and census is not under the control of the veterinary services.

## National control strategy



- Outbreak farm: culling of all animals
- Protection zone: 2 km around the outbreak, depopulation of all pigs in that area
- Surveillance zone: 100 km around the outbreak farm – Movement control of pigs; it is not allowed to take pigs and pork products out of the zone without official permission.

### Additional measures

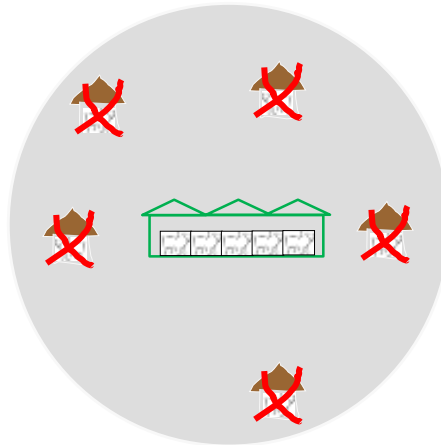
- *Depopulation of all back yard pigs kept 5 km around CF*
- *Intensive hunting to eliminate all wild boar.*
- *Enforcement of biosecurity measures*

## Surveillance domestic pigs

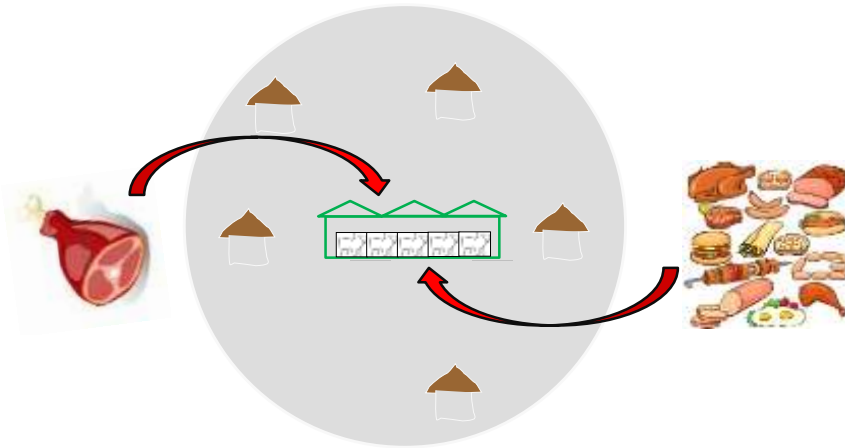
In **commercial farms** independently of their size following tests are carried out on a monthly basis:

- 10 randomly selected pigs for the presence of ASF antibodies (ELISA test)
- 5% of dead pigs for PCR testing (organ material)
- 4% of the slaughtered animals at the abattoir: PCR tested.  
*(requested by trade partner)*

**Backyard pigs** are inspected during home slaughtering by a veterinarian. In case of suspicion organ samples are taken for ASF testing.



**Getting rid or not getting rid of backyard pigs...?**



## Absence of pigs may cause a meat vacuum

The main problems are not the pigs but rather the infected meat!

## Conclusions and recommendations

Essential improvement is needed in the area of surveillance and risk based prevention.

So far the monitoring and surveillance activities for ASF are following recommendations issued by the federal veterinary service but they are not taking into account the epidemiological particularities and regional risks factors posed by ASF.

The surveillance activities are not based on scientific grounds, which take into considerations the biology of ASF. Therefore, the monitoring and surveillance data for domestic pigs and wild boar do not reflect the real epidemiological situation in the region.

The present approach (5/95%) is one of the weakest points of the surveillance plan. Under such premises ASF virus may only be detected if at least half of the district in a specific trimester will be infected.

## Conclusions and recommendations

An independent national expert group should be established to assist the central and local veterinary authorities. The group should consist of epidemiologists, risk assessors, laboratory experts, wild life experts.

A scientifically based ASF risk assessment following OIE guidelines should be performed focusing on: (i) possible risks of ASF virus spread, (ii) the best management options for domestic pigs and wild boar, both in infected areas and in the bordering risk areas, (iii) the suitability, effectiveness and the practical aspects of implementation of the main measures.

On the basis of the epidemiological situation and a properly conducted risk assessment following OIE guidelines, the group should define:

- the appropriate measures of surveillance/control;
- a sampling scheme;
- a testing regime for clinical and laboratory examinations.

## Conclusions and recommendations

The surveillance and monitoring activities should be based on the biological characteristics of ASF. Surveillance in domestic pigs should be focused on ASF early detection and thus considering sick/dead animals avoiding planning in advance the number of animals to be tested.

For wild boar passive surveillance (dead animals) should be enhanced in both infected and risk areas while maintaining the actual level of active surveillance.

The proportionality and effectiveness of the measures conducted within the restriction zones zone should take into consideration the epidemiological particularities of ASF as well as risk patterns.

ASF training courses for veterinary inspectors at regional level following OIE guidelines are recommended. In particular the epidemiological aspects of the disease should be discussed and elaborated in particular focusing on early detection and prevention.