18 February 2019

Risk assessment on African swine fever transmission from different matrices

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Animal Health and Welfare Team

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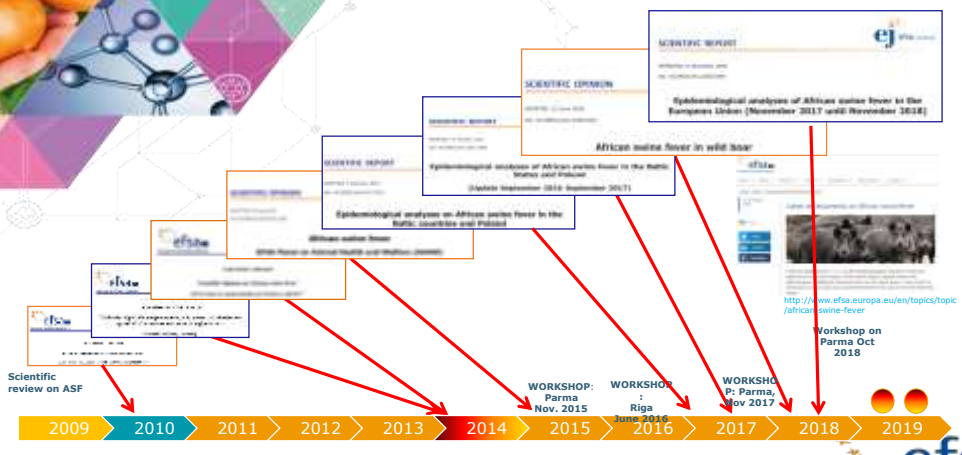
European Food Safety Authority

OVERVIEW OF EFSA'S PAST ASSESSMENTS ON ASF



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Scientific Reports and Opinions on EFSA's websi

- http://www.efsa.europa.eu/en/topics/topic/african-swine-fever

ASF-related activities in 2019

- Request for Scientific Report of EFSA - December 2019
  - Descriptive epidemiology
  - Risk factors for occurrence in wild boar and domestic pigs
  - Wild boar measures and strategies
    - Hunting (methods, density and threshold)
    - Fencing
    - Surveillance

ASF related activities in 2019

- Request for Scientific Opinion AHAW Panel - June 2019
  - 1. Assess the risk of spread of ASF in the South Eastern Countries of Europe
  - 2. Review the evaluation of the ability of matrices to present a risk to transmit ASF.
- Request for Scientific Report of EFSA - June 2019
  - 1. Review the main ASF research gaps, with the aim of facilitate evidence-informed decision making on prevention and spread, in particular from an epidemiological and risk management perspective.

Risk Assessment for ASF spread in SE-EUROPE

- Animal distribution
  - Wild boar populations (ENETWILD)
  - Domestic pig populations
- Animal husbandry (EUROSTAT?)
- Trade (pigs, pork, other matrices..)
- People movement (hunting tourism, tourism,…)
- Preparedness of national authorities

Risk Assessment for ASF spread -Preparedness

- Risk originating from the organisation and the level of preparedness of the National Authorities
- Scope of the questionnaire is to measure this risk by evaluating the preparedness of the authorities in different domains
- For each domain, a set of questions is going to be applied in order to better estimate the level of preparedness

Preparedness:domains to be assessed

- Awareness and Training
- Resources of Veterinary Services
- Laboratory Capacity
- Notification System
- Registration System for domestic pigs and products
- Wild Boars and Hunting Management
- Preventive Measures
- Contingency Plan
- Control Measures
- Depopulation
- Legal Framework
- International Cooperation and Initiatives

An example: Control Measures

- Measures in case of suspicion in a holding:
  - measures for the holding
  - temporary control zone
- Measures in case of confirmation in a holding:
  - measures for the affected holding
  - measures for holdings in contact
  - zooning
- Suspicion or confirmation in feral pigs:
  - defining the infected area
  - measures within the infected area

Risk of matrices to transmit ASF.

- Context
  - Update needed of previous qualitative assessment from 2014
    - include retrospective analysis of ASF spread mechanisms.
    - ranked on the basis of their level of risk with a view to enhance preparedness and prevention.
    - propose and assess a strategy to manage the risks

Review the evaluation of the ability of matrices to present a risk to transmit ASF.

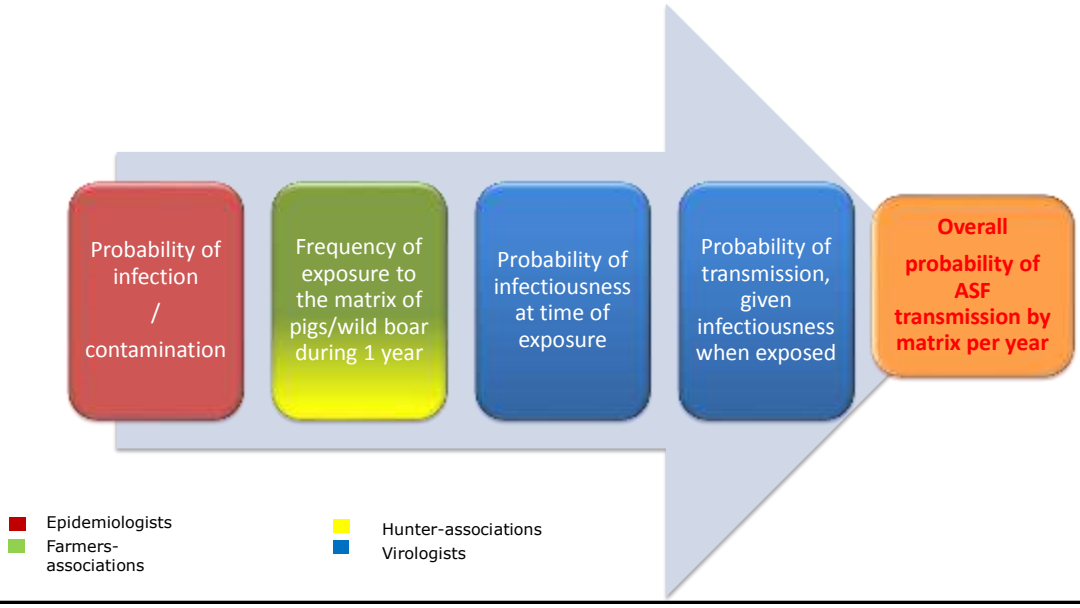
Rank	Matrix
Very high	Frozen meat
High	• Chilled meat • Wild boar (transported) • Domestic pigs (transported) • Skin fat • Vehicles for animal transport contaminated inside
Moderate	• Naturally smoked meat • Salted, fermented, dried (+/spiced) meat (e.g. pepperoni, salami,...) • Salted, dried meat (e.g., salted and dried hams, shoulders, loins...) • Any vehicles contaminated outside • People involved with pig-keeping • Slurry • Animal feed • Litter • Fomites
Low	• People not involved with pig- keeping • Ticks
Very low	• Vegetables • Crops • Pests (rodents) • Pets • Hay and straw • Bloodsucking insects
Negligible	• Meat cooked for 70 °C for 30 min

EFSA, 2014 ranking of the ability to contain infectious ASFV

Data collection

- CATEGORIES OF MATRICES :
  - Unprocessed matrices from pig origin
    e.g. fresh meat, fresh blood, faecal material, urine, semen and embryos
  - Animal by products from pig origin used as feed materials in pig feed
    e.g. greaves, blood products, hydrolysed proteins, gelatine, collagen
  - Processed matrices used as feed additives
    e.g. Vitamin D, Lysine, Choline
  - Processed matrices derived from pig/wild boar origin used as food
    e.g. cooked cured meat, precooked products, raw cured meat, raw fermented meat or kitchen waste containing any of these listed
  - Contaminated matrices
    e.g. contaminated feed, water, aerosol, vehicles, bedding (e.g. straw, wood chips), cereals (e.g. barley, maize), forages (e.g. fresh grass, hay, silage,..)

2019: Ranking of the combined probability of ASF transmission through a given matrix



Gap Analysis

- Most important research gaps to address the needs of different stakeholders involved in the prevention and control of ASF.
- Research priorities that should be addressed in a short time frame (< 1 year).

Request for Scientific and Technical Assistance on African Swine Fever (Gap analysis)

Why this questionnaire?

Questions

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