

Risk-based meat inspection and integrated meat safety assurance

# RIBMINS mapping of systems in place for monitoring and management of AM residues

Lis Alban | 7 April 2022 | Córdoba, Spain
On behalf of WG1 on AM Residues









### Background

Consumers are preoccupied about residues of antimicrobials (AM) in meat

Although prevalence is very low

No international agreement about maximum residue limits (MRL)

- From high to low: USA > Codex > EU > Russia
- Resulting in costly rejections of imported meat

Many resources spent on monitoring and management

• But are resources spent in the most cost-effective way?





#### Case: Farmer calls in too late

- How do we handle the situation when a farmer calls in to inform the abattoir about the mistakenly delivery of an animal before the end of the withdrawal period?
- Are the current ways of handling sustainable?





#### Danish experience related to finding residues of AM in pigs in monitoring or because farmer called abattoir

madequate use of water. medication mixer

Lack of internal communication - Farmer called slaughterhouse in time and treated pigs were driven back

Farmer called driver in time to avoid deliverance of medication mixer combination with defect

Inadequate marking of treated animal

Inexperienced driver took wrong pigs to slaughter.

Interview with farmer did not reveal reason for finding slaughterhouse too late Farmer called

Farmer called slaughterhouse too late. All 170



#### Aims

These issues will be investigated through mapping of national programmes

 Earlier work has shown substantial differences within European countries (Alban et al., 2017)

We aim at identifying sets of best practices for monitoring

- Depending on country's surveillance objective
- Among others related to their kind of export and national risk perception

Food Control xxx (2017) xxx-xxx



Contents lists available at ScienceDirect

#### Food Control

journal homepage: www.elsevier.com



Modernizing the antimicrobial residue monitoring programs for pig meat in Europe – The balance between flexibility and harmonization

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ARTICLE INFO

Article history:
Available online xxx

Keywords: Residues EU legislation Risk-based Surveillance ABSTRACT

The EU Residue Directive is currently being renegotiated. One key question is how to balance flexibility and harmonization. To address this, we reviewed Danish, Dutch and Swiss monitoring programs for antimicrobial residues in pig meat using the recently developed RISKSUR design tool. The results identified variation regarding number of surveillance components, reactions to suspect and positive findings, prevention activities, diagnostic method, sample matrix, use of targeted/risk-based approaches, and sampling frequency. This variability could largely be explained by differences in overall surveillance objective: Denmark and the Netherlands have a large pork export and higher need for documenting compliance with legislation, whereas Switzerland only trading with EU has a lower need for spending resources on monitoring. It is recommended that the future EU Directive should set standards for monitoring to ensure a basic level of monitoring enabling comparison of results. Minimum handling of carcasses with residues above maximum residue level should be harmonized. Risk-based sampling should be encouraged, and results from risk-based and random sampling should be reported separately. Harmonization is unnecessary for number of surveillance components (but a private component is recommended), prevention, diagnostic method, and way of sampling — assuming that the diagnostic method and sampling matrix combination have sufficient validity.

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### **Ultimate** goal

#### To create basis for

- more cost-effective routine monitoring and
- more evidence-based procedures regarding when to condemn carcasses,
   edible organs, blood and animal by-products that might contain AM residues

May lead to a more harmonised approach in Europe

and allow for reducing food losses without jeopardizing consumer safety.

Hence, more sustainable food production, improved food security and reduced resource footprints

in line with European Green Deal





### Methodology



Focus is on pigs, delivered to an abattoir and maybe slaughtered

Only legal veterinary AMs of interest

Questionnaires developed with input from several partners from different countries

Targeted competent authorities (CA) and Food business operators (FBO)

#### Different areas covered

- 1. Routine monitoring, including handling of positives found in monitoring
- 2. Food Chain Information (FCI) and perception of value of monitoring
- Case: Farmer calls in about delivery of pig(s) before end of withdrawal period



### 1. Routine monitoring

- Questions related to system in place, including matrix, analysis method, and whether tested carcass is detained until negative test result etc
- Questions are following RISKSUR model for programme evaluation





#### 2. FCI and perception of value of monitoring

To understand why actions in place have value, for whom and when

E.g., when exporting to countries with lower
 MRL than in own country

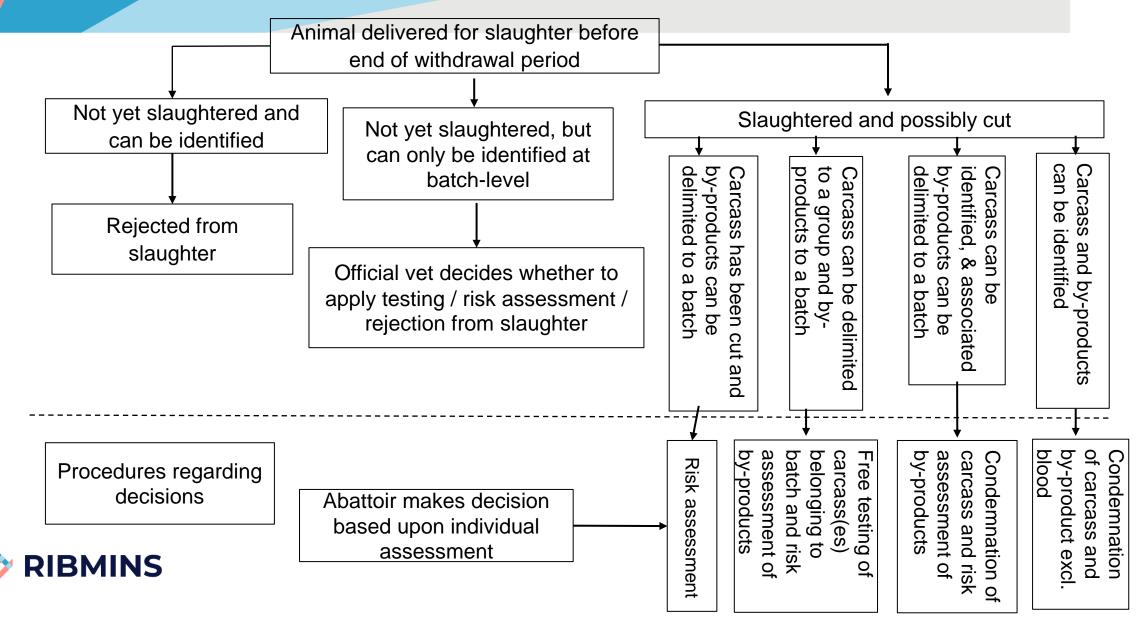
Feasible ideas for better FCI are asked for

• Maybe some countries have found a genious way?





#### 3. Farmer calls in..... several scenarios



### Application of system's thinking

Regarding the case when a farmer calls in:

We will aim at identifying a balance between prevention and management

 e.g., using system's thinking approach involving mapping of system and identification of positive and negative feedback loops Pig producer will focus on complying with withdrawal periods – including call abattoir in case of irregularities

Negative feedback loop

Reaction of competent authority loop

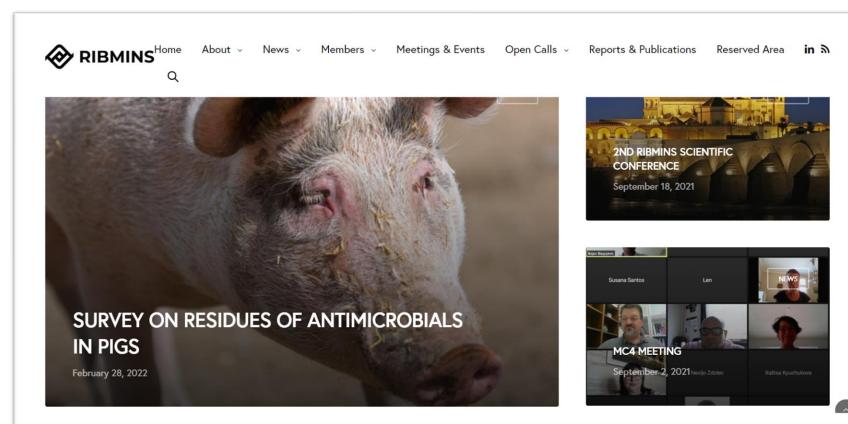
Pig producer will hide mistakes, if punnished for telling the truth



## Launch of survey

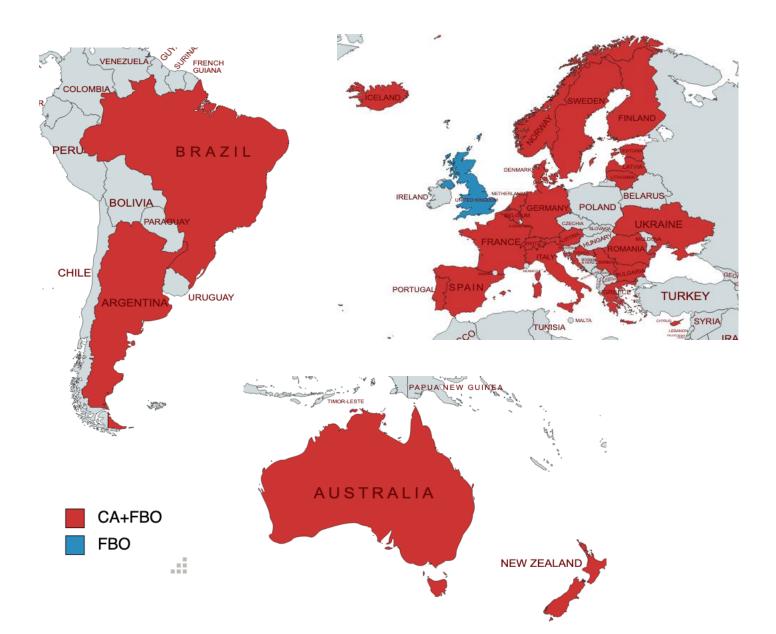
Time period: 29 March – 31 May 2022

- Introductory text placed on website of RIBMINS
- Open for all interested parties





#### First round of countries to contact



# We aim at contacting all European countries

- If you are representing a country not on the list, please contact us, if you want to be part of the survey
- The European meat industry's organisation UECBV has also been contacted



Working Group 1 on AM Residues





Derk, NL



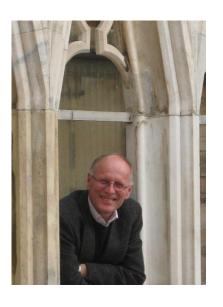
Alexandrina, RO



Madalina, RO



Rosa Maria, ES



Ivar, SE



Aivars, LV



Ioannis, GR



Ian, AU



Madalena, PT





Arja, SE



Silvia, IT



Lis, DK



Fernando, ES



Jesper, DK

# Thank you for your attention



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### Links to questionnaires

#### Link to CA version

https://forms.office.com/Pages/ResponsePage.aspx?id=E1PEUrE770OBJIyK\_J53nMAdCXNpjKlLit vaHUp4WVhURTVLNFpNSVI3RFdOVTIXNTVOWkVTOFhIVC4u

#### LINK to FBO version

https://forms.office.com/Pages/ResponsePage.aspx?id=E1PEUrE770OBJIyK\_J53nMAdCXNpjKlLit vaHUp4WVhUREhaTVBDOVdQUUo0Tko1REVWQTNUWVZZMi4u

