

Risk-based meat inspection and integrated meat safety assurance

# Training school on future meat safety

RIBMINS WG4 Virtual Training school (February 3<sup>rd</sup>-5<sup>th</sup>, 2020)

## Who, where, when?

Who: Between 40 and 50 selected participants from

academia, industry or authorities Where: Virtual time zone ITC UTC+1 Start date: February 3<sup>rd</sup>, 2021 End date: February 5<sup>th</sup>, 2021

## Aim

The training school will give an introduction to modernised meat inspection and future safe meat production, quotidian topics, and risk analysis. Participants will experience a mix of presentations, participate in exercises and group discussions. We want to challenge you, the participants, to bring your competence, perspectives, and curiosity to listen and learn from others' perspectives. Furthermore, we hope to give you a unique opportunity to expand your professional network, even though we admit this has become more difficult due to the pandemic.

## **Organizers**

Silvia Bonardi and Sergio Ghidini (University of Parma) Ole Alvseike and Lis Alban Technical support: Animalia AS

## **Teachers**

**Lis Alban**, Danish Agric. & Food Council/University of Copenhagen, Denmark

Silvia Bonardi, University of Parma, Italy Sergio Ghidini, University of Parma, Italy Frank Boelaert, EFSA, Parma, Italy

**Maurizo Ferri**, FVE UEVH (Union of European Veterinary Hygienists), Italy

**Ole Alvseike**, Animalia – Norwegian Meat and Poultry Research Centre, Norway









# Wednesday, Feb. 3<sup>rd</sup>

10:00 - 10:15 h	Welcome WG4-leader <i>Ole Alvseike</i> Online platform
10:15 - 10:30 h	Background RIBMINS and WG4 – <i>Lis Alban</i>
10:30 - 11:00 h	Presentation of students 30 seconds per person, prepare one slide each Name, country, position and a picture of yourself 3 keywords about your topics of professional interest
11:00 - 11:15h	Did you notice? What do you remember from your colleagues' presentations – <i>Ole Alvseike</i> – Kahoot
11:15 - 11:30 h	Short coffee and biological break
11:30 - 12:15 h	Principles for risk-based surveillance and control - applications for relevance in meat safety, including benefit-cost methodology – <i>Lis Alban</i> including questions and discussion (15 min)
12:15 - 13:15 h	Lunch
13:15 - 14:00 h	Overview and principles of meat inspection and hygiene legislation – <i>Sergio Ghidini</i> Keywords: MSAS, meat inspection, measurements of disease and risk, hygiene indicators, ALOP + questions and discussion (15 min)
14:00 - 14:45 h	Risk assessment related to replacement of traditional meat inspection with visual inspection only – <i>Lis Alban</i> including questions and discussion (15 min)
14:45 - 15:15 h	Paradigms in meat safety assurance systems – <i>Ole Alvseike</i>
15:15 - 15:45 h	Legislative needs, options, pro and cons – <i>Ole Alvseike</i> Flexible, Risk-based, Functional demands, Objective targets Alternative approaches, some strength and weaknesses with EFSA-system, "new" drivers etc.
15:45 - 16:00 h	Questions, discussions and perceptions of the day – <i>Ole Alvseike</i>









# Thursday, Feb. 4<sup>th</sup>

09:00 - 09:45 h	Salmonella in the pork production chain in the EU – <i>Silvia Bonardi</i> including questions and discussion (15 min)
09:45 - 10:30 h	Risk management of Campylobacter – <i>Frank Boelaert, EFSA</i> including questions and discussion (15 min)
10:30 - 11:00 h	Introduction of case work that will be done on Friday Feb. 5 <sup>th</sup> – <i>Ole Alvseike</i>
11:00 - 11:15 h	Short coffee and biological break
11:15 - 12:00 h	Meat inspection codes – impact on risks, harmonisation, data analysis and feedback – <i>Sergio Ghidini</i>
12:00 - 12:45 h	Examples of risk-based meat inspection - tuberculosis and cysticercosis cases – <i>Lis Alban</i> including questions and discussion (15 min)
12:45 - 13:45 h	Lunch
13:45 - 14:30 h	Harmonised epidemiological indicators – <i>Silvia Bonardi</i> Keywords: EFSA-report WG2 + including questions and discussion (15 min)
14:30 - 15:00 h	Food chain information systems – International & Italy – <i>Sergio Ghidini</i> Examples from different countries - including questions and discussion (10 min)
15:00 - 15:15 h	Short coffee and biological break
15:15 - 16:00 h	Future colleagues' profile – <i>Maurizio Ferri</i> Skills, competence and tasks vis à vis the new dossier of competence of public health veterinarians envisaged by the new EU legal framework (e.g. Del Reg 624/2019). FVE-position, variation in Europe, future concerns including questions and discussion (15 min)









## Friday, Feb. 5th

Participants are divided into e.g. 10 groups of 4-6 persons. The groups will have 2.5 hours to work with the cases. We expect a deliverable for the afternoon session: a ppt presentation (max. 10 slides and 10 minutes) in a predesigned format.

#### 08:30 - 09:30h

#### Introduction to work in groups

Five cases have been prepared that you are invited to elaborate on in groups.

Participants are also encouraged to suggest up to five additional cases. The case should be based on your own work and experience and be suitable for group work. Interesting cases are preferably open for discussion and without simple solutions. Suggested cases must be submitted together with application and cases will be selected by organising committee who will also help to prepare the case for group work.

Participants will be allocated to the different cases in advance, and you will receive literature, data, etc that you are expected to read in advance. You are also encouraged to seek additional information on your own.

#### Case I: Management of Erysipelas cases at slaughterhouse – introduction by Sergio Ghidini

A meat inspection case: the basics of the diseases are presented together with some practical cases that have to be managed at post-mortem inspection. Operator security, meat safety and protein waste (sustainability) will have to be assessed.

Use EU Regulations, and guidelines from national agencies.

## Case II: How to collect information in smart ways? – introduction by Ole Alvseike

You are the Architect: The Meat Factory Cell concept will be presented. Design its meat safety system and predict technical gaps, pro and cons. What should be undertaken, when, by who, how and why? Describe the need for records and sensors, thrust-worthy traceability and feedback systems, etc.

# Case III: Emerging diseases - Approaches when you know nothing — Chronic Wasting Disease as a case — introduction by Ole Alvseike

In Norway, CWD was detected in reindeer 3 years ago. Describe scenarios for origin of the disease, likely prevalence and distribution patterns globally, alternative strategies and perceived risks (likelihood X consequences). Finally, recommend a strategy to the national and EU veterinary authorities.

#### Case IV: Suggest surveillance and control related to Toxoplasma in pigs – introduction by Lis Alban

EFSA has identified Toxoplasma as a hazard of relevance of meat inspection of pigs. Despite of this only one abattoir company has a programme in place in Europe, and no official surveillance is in place. How could a programme be set up that would be cost-effective? Which HEI would you use and what risk mitigating actions should be suggested and for when?

# Case V: Design a surveillance and control programme to handle Salmonella in pigs – and pork -introduction by Silvia Bonardi.

The systems in place to control Salmonella vary between European countries. Design a surveillance and control program for a chosen country. Set ambitions, describe methods and needed resources, and predict likely results and obstacles.

## Case VI - X: To be suggested from participants based on own work or cases.

09:30 - 12:00 h	Work in groups including preparing presentation – <i>all teachers</i> available
12:00 - 13:00 h	Lunch
13:00 - 16:00 h	Presentations 10 min per group + 2 min questions – and a 20-minute break around 14:20 h
16:00 - 16:15 h	Evaluation – google schemes – <i>Ole Alvseike</i>
16:15 - 16:30 h	Farewell – Lis Alban, Silvia Bonardi, Sergio Ghidini, Ole Alvseike



# CA18105



# Risk-based meat inspection and integrated meat safety assurance

V. Muñoz-Gómez¹, P. Maurer², U. Jamnikar², B. Hengl⁴, I. Nastasijevic⁵, C. Guldimann⁶, E. Gomes Nevesˀ, B. Antunovic⁶, M. Morach⁶, B. Blagojevic⁶, S. Johler⁶

## Why RIBMINS?

Traditional meat inspection systems may not necessarily detect current public health hazards and increase the risk of cross-contamination through physical examination. There is a need to modernise the meat safety systems through a risk-based approach.

## **Aim**

Develop a network to combine and strengthen European-wide research efforts on modern meat safety control systems

## **Objectives**

- ✓ Coordinate research on risk-based meat inspection and meat safety assurance.
- ✓ Establish effective links between scientists, meat industry and policy makers.
- ✓ Exchange European experiences with overseas countries
- Develop training platform and train participants in the new system.

## Framework

Participants are working together in five working groups (WG)

## **Expected impact**

### **Technological**

✓ Development of innovative meat inspection technologies based on food safety risk

#### Scientific

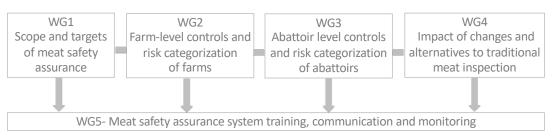
✓ Filling knowledge-gaps and foster new research networks on risk-based meat inspection.

#### Socioeconomic

✓ Strengthen public-private partnership and assist policy makers to identify targets and measures for reduction of public health and animal hazards.

## Constantly expanding!





RIBMINS network will help to develop and implement general principles of meat safety assurance system across Europe for the benefit of consumers, industry and protection of animal health and welfare.

Follow us!







