

CA18105



Risk-based meat inspection and
integrated meat safety assurance

Virtual Training school
**Risk-based Meat Safety Assurance Systems focusing on risk
categorisation of farms and abattoirs**

June 13th – 16th, 2023

Who, where, when?

Who: 50 selected participants from academia, food industry and competent authorities

Where: Virtual time zone: CET

When: June 13rd to June 16th, 2023

Aim

The training school will give insights into the challenges of risk-based meat safety assurance systems, current European legislations as well as future trends and tasks with a special focus on risk categorisation of farms and abattoirs.

Participants will receive a mix of high-quality presentations; participate in workshop exercises and group discussions.

During this 4-day online training school we want to learn from each other and get to know the different perspectives regarding meat safety assurance systems.

Furthermore, we hope to give you a unique opportunity to expand your professional network.

Organisers

RIBMINS project (Core group)

Diana Meemken and Truls Nesbakken (WG 2)

Dragan Antic and Kurt Houf (WG 3)

Sergio Ghidini

Technical support

Teachers (in order of appearance in the programme)

Diana Meemken, Freie Universität, Berlin, Germany

Dragan Antic, University of Liverpool, UK

Bojan Blagojevic, University of Novi Sad, Serbia

Simon Rüegg, University of Zurich, Switzerland

Lis Alban, University of Copenhagen, Denmark

Ole Alvseike, Animalia, Norway

Michaela Hempten, EFSA, Italy

Boris Antunovic, University of Zagreb, Croatia

Stig Gezelius, University of South-Eastern Norway, Norway

Truls Nesbakken, University of Life Sciences, Norway

Ting-Ting Li, Freie Universität Berlin, Germany

Susann Langforth, Freie Universität Berlin, Germany

Nina Langkabel, Freie Universität Berlin, Germany

Niko Dadios, Royal Veterinary College, UK

Morgane Salines, French Ministry of Agriculture, France

Silvia Bonardi, University of Parma, Italy

Martijn Bouwknecht, Vion Food Group, The Netherlands

Olga Varra, University of Parma, Italy

Mauro Conter, University of Parma, Italy

Madalena Vieira-Pinto, University of Vila Real, Portugal

Giovani Loris Alborali, IZSLER, Italy

Euarda Gomes-Neves, University of Porto, Portugal

Andrea Capobianco Dondona, Farm4Trade, Italy

Viktor Almqvist, University of Uppsala, Sweden

Simone Belluco, IZSVE, Italy

Eystein Skjerve, University of Life Sciences, Norway



CA18105



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Tuesday, June 13th

Introduction - Status quo and challenges of Risk-Based Meat Safety Assurance Systems (RB MSAS)	
09:00-09:20	Opening – Diana Meemken, Dragan Antic
09:20-09:50	Who is who – all participants
09:50-10:15	Introduction to Risk-based Meat Safety Assurance Systems - Bojan Blagojevic
10:15-10:30	Short coffee break
10:30-11:00	System thinking: Brucellosis - Simon Rüegg
11:00-11:20	Introducing the group work: a) Reasons for palpation and incision - Lis Alban b) Risk-based systems and sustainability - Ole Alvseike
11:20-11:40	Group work – all participants
11:40-12:20	Presentation/discussion of the key messages as results of the group work - all participants
12:20-13:20	Lunch break
European legislation: Changes and innovations	
13:20-13:45	Overview of EFSA’s opinions, basis for the modernisation of meat inspection - Michaela Hempen
13:45-14:10	Legislation framework that leads to Meat Safety Assurance System changes - Boris Antunovic
14:10-14:35	Enforcement and society: Why people obey or resist the law - Stig Gezelius
14:35-15:05	Process from traditional to visual only inspection as a follow-up of the group work a) - Lis Alban
15:05-15:35	Meat Safety Assurance Systems and Sustainability as follow-up from group work b) – Ole Alvseike



CA18105



Risk-based meat inspection and integrated meat safety assurance

Wednesday, June 14th

Risk categorization of farms and abattoirs	
09:00-09:15	Food Chain Information (FCI) and Harmonized Epidemiological Indicators (HEIs) as tool for risk categorisation of farms, background – Diana Meemken
09:15-09:40	FCI & HEIs for pigs - Ting-Ting Li
09:40-10:05	FCI & HEIs for broilers - Susann Langforth
10:05-10:30	FCI & HEIs for bovines - Nina Langkabel
10:30-10:40	Using FCI & HEIs for risk categorisation of farms - Diana Meemken
10:40-10:55	Short coffee break
10:55-11:25	Food safety management systems - Niko Dadios
11:25-12:05	Keynote on risk categorisation of abattoirs by FCI and HEIs - Morgane Salines
12:05-12:35	Introducing the concepts of risk analysis with focus on risk assessment – Lis Alban
12:35-13:35	Lunch break
Group work on different meat safety hazards- (Case 1-10, 5 participants per case)	
13:35-17:00	Case 1: Salmonella in pigs - Silvia Bonardi
	Case 2: Campylobacter in poultry - Dragan Antic
	Case 3: Toxoplasma in pigs - Martijn Bouwknecht
	Case 4: Dioxin in poultry - Olga Varra
	Case 5: Toxoplasma in sheep - Niko Dadios
	Case 6: STEC in beef - Bojan Blagojevic
	Case 7: Hepatitis E in pigs - Morgane Salines
	Case 8: Yersinia in pigs - Truls Nesbakken
	Case 9: ESBLs in pigs - Mauro Conter
	Case 10: Taenia in beef - Madalena Vieira-Pinto



CA18105



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Thursday, June 15th

Group work presentations	
09:00-09:20	Case 1: Salmonella in pigs
09:20-09:40	Case 2: Campylobacter in poultry
09:40-10:00	Case 3: Toxoplasma in pigs
10:00-10:20	Case 4: Dioxin in poultry
10:20-10:35	Short coffee break
10:35-10:55	Case 5: Toxoplasma in sheep
10:55-11:15	Case 6: STEC in beef
11:15-11:35	Case 7: Hepatitis E in pigs
11:35-11:55	Case 8: Yersinia in pigs
11:55-12:15	Case 9: ESBLs in pigs
12:15-12:35	Case 10: Taenia in beef
12:35-13:35	Lunch
Risk analysis: Risk assessment & Risk Communication	
13:35-14:15	Global risk categorisation of pig farms and pig abattoirs based on four pig hazards – Morgane Salines, Martijn Bouwknecht, Dragan Antic, Truls Nesbakken
14:15-14:45	Antibiotic consumption management in pig sector -Giovani Loris Alborali
14:45-15:15	Introducing the concepts of risk communication – Boris Antunovic
15:15-15:45	Official Veterinarians in Europe: a survey for the characterization of demographics and training needs for future Meat Safety Assurance System – Eduarda Gomes-Neves



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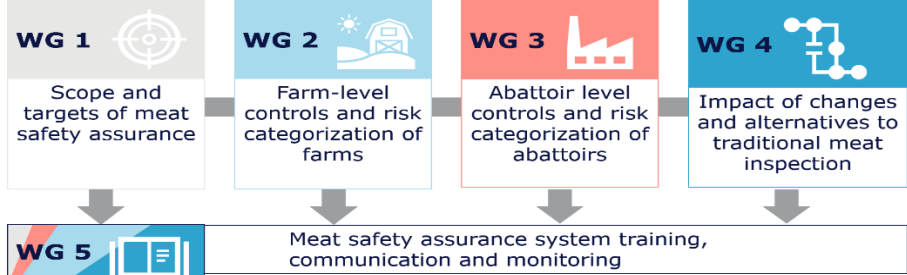


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Friday, June 16th

Future trends	
09:00-09:30	Challenges and opportunities in the implementation of new meat inspection systems in Europe – Boris Antunovic
09:30-10:00	Practical solutions to digital transformations – Ole Alvseike
10:00-10:15	Short coffee break
10:15-10:45	Practical solutions to computerized vision systems - Andrea Capobianco Dondona
10:45-11:15	Practical solutions to remote ante and post mortem inspection - Viktor Almqvist
11:15-11:45	Future roles of vets in food production: From pathology-> microbiology-> epidemiology - Simone Belluco
11:45-12:15	Risk-based handling in relation to meat inspection - Lis Alban
12:15-13:15	Lunch break
Future tasks	
13:15-13:45	New application possibilities in the diagnostic methods: multiserology - Diana Meemken
13:45-14:15	Metagenomics in food safety diagnostics in comparison to the classical culturing - Martjin Bouwknecht
14:15-14:35	New application possibilities in the diagnostic methods: Acute phase proteins - Bojan Blagojevic
14:35-15:05	Next steps: evidence-based decisions: data management, connection between lesion and microbiological burden, algorithm and artificial intelligence - Eystein Skjerve
15:05-15:20	Feedback from the participants
15:20-15:30	Farewell – Diana Meemken, Dragan Antic



Why RIBMINS?	Expected impact
<p>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.</p>	<p>Technological</p> <ul style="list-style-type: none"> ✓ Development of innovative meat inspection technologies based on food safety risk <p>Scientific</p> <ul style="list-style-type: none"> ✓ Filling knowledge-gaps and foster new research networks on risk-based meat inspection. <p>Socioeconomic</p> <ul style="list-style-type: none"> ✓ Strengthen public-private partnership and assist policy makers to identify targets and measures for reduction of public health and animal hazards.
<h3>Aim and Objectives</h3>	<h3>Constantly expanding!</h3>
<p>Develop a network to combine and strengthen European-wide research efforts on modern meat safety control systems</p> <ul style="list-style-type: none"> ✓ 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. 	<div data-bbox="957 1182 1428 1590"> <p>Our network</p> <ul style="list-style-type: none"> 35 European countries 4 International partners 2 near neighbours <p>Participants</p> <p>>230</p>  </div>
<h3>Framework</h3>	 <pre> graph TD WG1[WG 1: Scope and targets of meat safety assurance] --> WG2[WG 2: Farm-level controls and risk categorization of farms] WG2 --> WG3[WG 3: Abattoir level controls and risk categorization of abattoirs] WG3 --> WG4[WG 4: Impact of changes and alternatives to traditional meat inspection] WG1 --> WG5[WG 5: Meat safety assurance system training, communication and monitoring] WG2 --> WG5 WG3 --> WG5 WG4 --> WG5 </pre>
<p>Participants are working together in five working groups (WG)</p>	

