COST Action CA18105

Risk-based meat inspection and integrated meat safety assurance - RIBMINS

The aim of RIBMINS network is to combine and strengthen European-wide research efforts on modern meat safety control systems.

—— DISCOVER MORE

WG 3 - Abattoir level controls and risk categorisation of abattoirs

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WG 3 - Abattoir level controls and risk categorisation of abattoirs

Overall aim of the WG3 work (2019-2023):

- Focused on abattoir chain of events;

- To provide useful information on control strategies at abattoir level for risk managers;

- Work focused on the abattoir components of the future MSAS.

- In line with and continuation of the work in WG2 (interventions, HEIs)

WG 3 - Abattoir level controls and risk categorisation of abattoirs

Objectives of the WG (2019-2023):

- Objective 3.1 Assessment of the effectiveness of new tools and methods for the detection of carcass faecal contamination;

- Objective 3.2 Assessment of the significance of **intervention** strategies (skin/hide and carcass meat decontamination methods) and alternative methods for animal slaughter and carcass dressing and cutting to reduce the microbiological load on carcasses in abattoirs;

- Objective 3.3 Assessment of the performance of the **food safety management systems** in abattoirs;

- Objective 3.4 Assessment of **harmonised epidemiological indicators** in risk categorisations of abattoirs.

WG 3 - Abattoir level controls and risk categorisation of abattoirs

Project Tasks:

- Task 3.1 Workshop on decontamination methods in abattoirs (today !);

- Task 3.2 Training School on tools and assessment of abattoir process hygiene (autumn 2020);

- Task 3.3 Workshop on use of harmonized epidemiological indicators in abattoir risk categorisation (autumn/winter 2021).

Project Deliverables:

- Deliverable 3.1 Report on methods and tools for the detection of carcass contamination and decontamination of animal skins and carcasses in abattoirs **(month 23, February 2021)**

- Deliverable 3.2 Report on harmonized epidemiological indicators in abattoir risk categorisation and integrated food safety management systems **(month 45, December 2022)**

Interventions

- Interventions are actions taken during slaughter and processing to reduce microbial contamination of carcasses
- Hazard based interventions**:**
  - Any intervention that has a significant and persistent effect in reducing carcass microbial contamination
  - Cattle hide interventions: chemical washes with vacuuming and immobilisation treatments
  - Carcass interventions: thermal interventions (hot water washes, pasteurisation treatments), organic acid washes
- GHP-based control measures:
  - lack of evidence (e.g. cattle hide removal practices, bunging/rodding);
  - have shown inconsistent results in reducing microbial contamination (particularly in respect to pathogens, e.g. hide cleanliness assessment, hide clipping, chilling);
  - no processing parameters can be clearly established (e.g. environment sanitation, equipment and tools sanitation, and trimming)
  - Steam vacuuming?

Specific tasks in year 1 and year 2

- **<u>Task 1</u>**: A systematic literature review to assess the significance of available tools and methods for detection of carcass contamination at abattoirs

- **Objectives**:

- To perform a broad systematic review of the literature of the effectiveness of tools and methods that can be used in abattoirs to detect carcass contamination

- To make recommendations on the performance of specific tools and methods for detection of carcass contamination and other contextual factors that will inform the risk management decisions for integrated meat safety assurance programmes

Specific tasks in year 1 and year 2

- **Tasks 2-5**: A systematic literature review to assess the significance of **intervention** methods to reduce the microbiological load on (beef, pork, sheep and poultry) at abattoirs

- **Objectives**:

- To perform a broad systematic review of the literature of a contribution of interventions applied in a (beef/pork/sheep/poultry) production chain for the reduction of bacterial load, with a focus on the pre-slaughter and slaughter production processes in abattoirs

- To make recommendations on the effectiveness (the quantifiable level of bacterial reduction) of specific interventions for (beef/pork/sheep/poultry) and other contextual factors that will inform the risk management decisions for integrated meat safety assurance programmes

Specific tasks in year 1 and year 2

- **Task 6**: To develop and distribute stakeholder oriented questionnaires (aimed at competent authorities and meat industry) across Europe

- **Objectives**:
- To determine the current industry uptake in Europe for tools and methods for detection of carcass contamination and interventions
- To determine what are the drivers and incentives for their use

- **Deliverables**:
  - Papers in scientific journals
  - Project Deliverable 3.1 Report on methods and tools for the detection of carcass contamination and decontamination of animal skins and carcasses in abattoirs **(month 23, February 2021)**

ECVPH workshop Edinburgh 3rd October '19

- Risk based meat inspection and Integrated meat safety assurance at abattoir level
- Organisers: Dragan Antic and Kurt Houf
- Concepts of:
  - Integrated meat safety assurance
  - Risk-based meat inspection

- What next in the EU?
  - Ongoing work in RIBMINS Project

- Abattoir related strategies – group work
  - Cases: foodborne pathogen/food commodity
  - Exchange of ideas and experience
  - Problems and solutions for control
  - Pros and cons of suggested solutions
  - How can controls be more 'integrated' and 'risk-based' ?

WG3 meeting: 21-22nd January 2020 Belgrade

- 1) To discuss the progress made in five reviews, it is expected that first few stages in systematic review will be done (database searches, relevance screening, relevance confirmation.

- 2) Development of a stakeholder oriented questionnaires and plan for distribution across Europe in competent authorities and industry

- **Current list of the WG3 members**

43 WG members that expressed interest to actively participate

22 European countries

Resource persons and consultants: from Academia and industry