

WP4: Main achievements during the COST-Action related to training & dissemination

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BETTER



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the European Union



Main achievements during the COST-Action related to training & dissemination

- 1) Topic discussion during the meetings**
- 2) Training schools**
- 3) STSM and VM**
- 4) Publications**
- 5) Dissemination during events**





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**Lisbon - Portugal
(8-9/06/2022)**



**Ghent - Belgium
(7-8/02/2023)**



**Tirana - Albania
(20-21/06/2023)**



**Padova - Italy
(6-7/02/2024)**



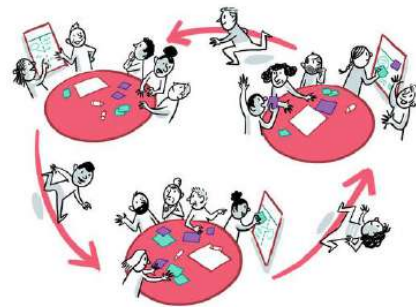
**Tartu - Estonia
(30-31/05/2024)**



**Skopje - Macedonia
(5/2/2025)**



**Barcelona - Spain
(5-6/06/2025)**



**Stakeholder
engagement**



Working group

**Working group
meetings**

Training and website papers

Perspective paper

Sustainability of the COST-Action

WG4 members at the Helsinki EU Office in Brussels



At the end of August 2024, WG4 organized also a meeting in Brussels.

The main purpose of the meeting was to continue preparing manuscripts based on the work done by STSMs and VM (i.e. Georgios Batikas, Anna Maria Iatrou, Marilena Filippitzi and Ramazan Yildiz).

Two axes were the biosecurity training needs and expectations and the biosecurity websites needs and expectations.



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02.

Recent Event Update: Training School



(14th – 18th of November 2022)



A training school has been performed in ULiège (Belgium). The training lasted 4 days and covered aspects related to the design, implementation, and assessment of biosecurity standard operating procedures (SOPs) in the Faculty of Veterinary Medicine.



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COST Action
“Biosecurity Enhanced Through Training
Evaluation and Raising Awareness”
(Acronym: BETTER)
CA20103

First training school
14-18 November 2022 at the
Faculty of Veterinary Medicine,
University of Liège (Belgium)

“Biosecurity SOPs at Faculty of Veterinary
Medicine:
Conception – Implementation – Evaluation”

2



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COST Action
“Biosecurity Enhanced Through Training
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Third training school
7-8 May 2025, Helsinki, Finland

***“Economic analysis and tools for effective
communication and endorsement of enhanced
biosecurity measures”***



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STSM

1

- Mapping on biosecurity projects and trainings (*Giorgos Batikas & Anna Maria Iatrou, Aristotle University of Thessaloniki, Greece – 2023*)

2

- Putting together a publication: What is a "good" biosecurity training or website for a farmer or a veterinarian (*Ramazan Yildiz, Mehmet Akif Ersoy University, Turkey – 2024*)



VM

3

- Identification of the existing biosecurity websites on biosecurity (including online tools to assess biosecurity) resulting from an extensive internet/web search (*Maria Eleni Filippitzi, Aristotle University of Thessaloniki, Greece – 2023*)

4

- Drafting a policy brief and perspective paper on biosecurity training and dissemination (*Blerta Mehmedi, University of Prishtina, Kosova - 2025*) --> start in September 2025





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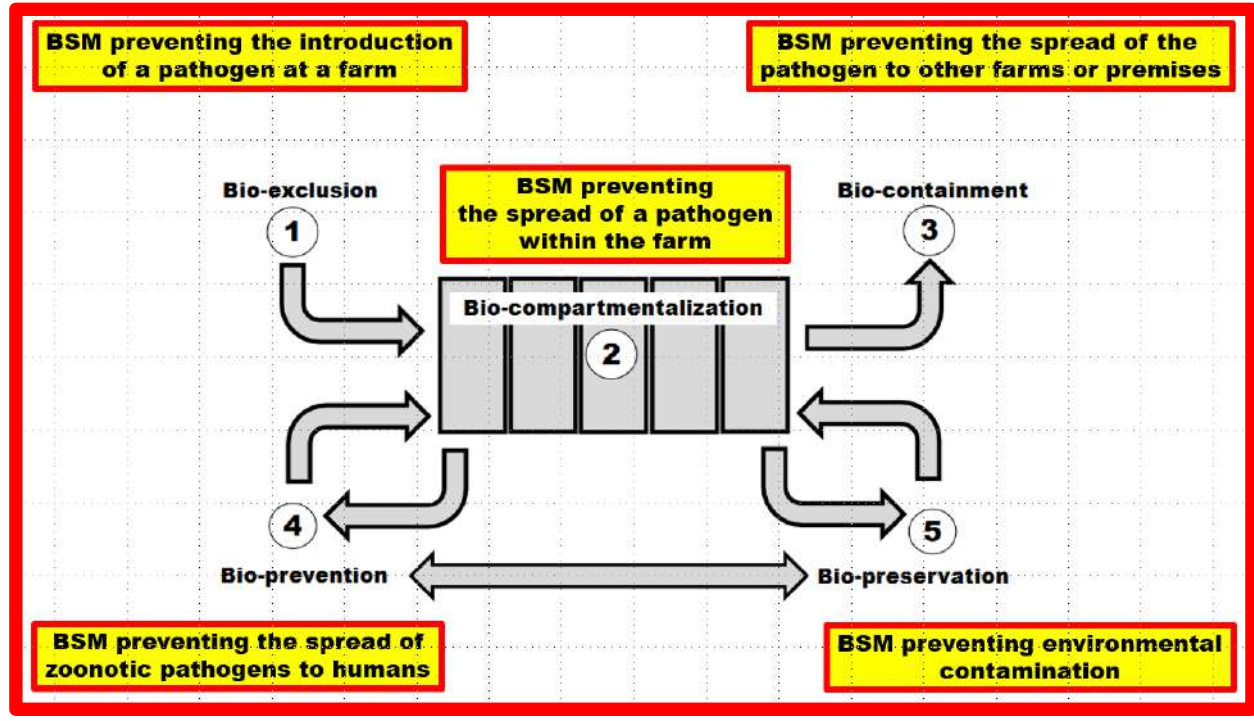
Article

Evaluation Survey on Agreement with Existing Definitions of Biosecurity with a Focus on Livestock

Claude Saegerman ^{1,2,*}, Gianni Parisi ¹, Jarkko Niemi ³, Marie-France Humblet ^{2,4}, Jorge Ron-Román ⁵, Bachir Souley Kouato ⁶, Alberto Allepuz ⁷, Vincent Porphyre ^{8,9}, Maria Rodrigues da Costa ¹⁰ and Véronique Renault ¹¹

Le top 3 des definitions

Code	Definition
FAO A	A strategic and integrated concept that encompasses the policy and regulatory frameworks (including instruments and activities) that analyse and manage risk in food safety, public health, animal life and health, and plant life and health, including associated environmental risk [13].
AHL B	The sum of management and physical measures designed to reduce the risk of the introduction, development, and spread of diseases to, from, and within: (a) an animal population, or (b) an establishment, zone, compartment, means of transport or any other facilities, premises, or location [1].
C	The prevention of misuse through loss, theft, diversion, or intentional release of pathogens, toxins, and any other biological materials [14].
D	The vital work of strategy, efforts, and planning to protect human, animal, and environmental health against biological threats [15].
E	The strategies to assess and manage the risk of infectious diseases, quarantine pests, invasive alien species, living modified organisms, and biological weapons [16].
F	A unified concept to integrate human, animal, plant, and environmental health [10].
G	All measures to prevent the introduction of pathogens (bio-exclusion) and reduce the spread of pathogens (bio-containment) [17].
5Bs H	All measures: (1) to limit the risk of introduction (bio-exclusion); (2) to limit the spread of the pathogen within the same facility, e.g., by isolating excreting animals (bio-compartmentation); (3) to limit the spread of the disease agent outside the facility (inter-herd transmission) (bio-containment); (4) to prevent the risk of human contamination (bio-prevention); and (5) to prevent any environmental bio-contamination and persistence of the pathogen (bio-preservation) [18].



2



Farmers

- Training focusing on practical aspects
- Planning of training sessions in the day to accommodate workload
- Need to prepare multiple reminders of training
- Short duration of events

Private vets

Practitioners

- Mixed approach (theoretical and practical parts)
- People are invited to create a biosecurity plan and a follow-up report

Vet-students

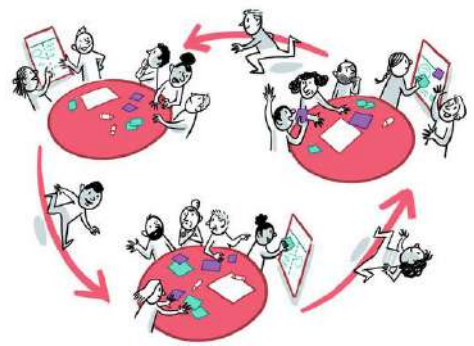
- Knowledge of the main principles of biosecurity
- Understanding the spread of pathogens and the repercussions on the cost of animal products
- Good/best practices of cleaning and disinfection
- Development of clear protocols (transporters)
- Mixture of formal and informal training
- Training on communication skills

Hindawi
Transboundary and Emerging Diseases
Volume 2024, Article ID 6743691, 11 pages
<https://doi.org/10.1155/2024/6743691>

WILEY | Hindawi

Research Article
Scanning European Needs and Expectations Related to Livestock Biosecurity Training by Using the World Café Method

Claude Saegerman¹, Jarkko K. Niemi², Nancy De Briyne³, Wiebke Jansen³, Alain Cantaloube⁴, Marcel Heylen⁵, Tarmo Niine⁶, Julia Gabrielle Jerab⁷, Alberto Allepuz⁸, Ilias Chantziaras⁷, Maria Rodrigues da Costa⁹, Marie-France Humblet¹⁰ and Maria Eleni Filippitzi¹¹



3



**What are desirable
biosecurity trainings
for veterinary practitioners and
farmers?**

Anna Maria Iatrou, Blerta Mehmedi Kastrati et al.

Journal of Biosafety and Biosecurity

Minor revision

The online survey (74 responses) revealed:

- A perceived big gap in biosecurity training among veterinary practitioners, with notable differences between species groups.

The World Café (60 people) emphasized :

- The need for a blended approach to biosecurity training, combining both theoretical knowledge and practical applications/examples.
- Communication skills were identified as a significant gap in training, with veterinarians acknowledging difficulties in effectively communicating the importance of biosecurity measures to farmers.
- One of the needs highlighted was the formal certification of biosecurity training backed by quality control.
- The study also highlighted the importance of actively involving farmers in the development and validation of biosecurity training programs to ensure that the content, format, and certification align with their specific needs.

4



What is a "good" website for communicating biosecurity information to farmers and veterinarians?

Ramazan Yildiz, Georgios Batikas, et al.

Research in Veterinary Science

Submitted

Three steps:

- World Café to identify features of a good biosecurity website.
- Online survey and generative AI, results screened by researchers.
- Improvement needs detected by comparing the 2 first steps.

Key findings:

- **Farmer needs:** ease of use, cost-free access, available in local language, content including (e.g.) biosecurity lessons with media, examples of farm practices, biosecurity guidelines, self-evaluation tests of person's knowledge and farm's biosecurity level, and news about disease outbreaks and regulations.
- **Vet needs:** more detailed protocols, guidelines and tools than a website for farmers, and resources for creating biosecurity plans and enhancing veterinarian-farmer communication.
- **In general:** Most of the websites had a limited number of "good" features present. The greatest improvement potential among the websites was in adding information on how to communicate about biosecurity, biosecurity's costs and benefits, self-evaluation tests, and videos and illustrations about biosecurity measures.

5



Tailored biosecurity training for veterinarians and farmers: bridging knowledge and practice gaps

Blerta Mehmedi et al.

Frontiers in Veterinary Science

Submitted

Perspective paper

- To foster active learning and facilitate behavioural changes, a 5-progressive training modules is proposed, each utilizing a blended learning approach that incorporates on-site workshops, peer-to-peer networks,
- Tools such as the “5-Minute Biosecurity Check” and economic impact analyses serve to reinforce the motivation and contextual relevance.
- The framework's flexible “pick-and-choose” structure allows stakeholders to customize the content according to local requirements and available resources.
- Embedded mentorship opportunities and multilingual materials further contribute to the continuous professional development.
- By translating biosecurity knowledge into shared responsibility and routine practices, this framework has the potential to enhance farm resilience, inform the evaluation of training efficacy, and encourage interdisciplinary collaboration among veterinary educators, sociologists, economists, policymakers, and producer organizations.



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2023

KNOW Unit

Parma, 23 March 2023



Invitation to 29th Emerging Risks Exchange Network meeting (EREN)

3-4 May 2023, PARMA, Italy



COST Action
“Biosecurity Enhanced Through Training
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(BETTER) CA20103

Evaluation survey on agreement with existing definitions of biosecurity with a focus on livestock

Claude Saegerman and collaborators

Claude.Saegerman@uliege.be



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**2023 international ISESSAH conference, June
13-15, 2023, Helsinki, Finland**

2023

Biosecurity enhanced through training evaluation and raising awareness

Allepuz, A.¹, Chantziaras, I.², Filippitzi, M.E.³, Staric, J.⁴, Prodanov, J.⁵, Rodrigues Costa, M.⁶, Tamminen, L.M.⁷, Saegerman, C.⁸, Nunes, T.⁹, Ciaravino, G.¹, Kjosevski, M.¹⁰, Niine, T.¹¹, Ardakani, Z.¹², Niemi, J.K.¹³ / ¹Universitat Autònoma de Barcelona, Spain, ²Ghent University, Belgium, ³Aristotle University of Thessaloniki, Greece, ⁴University of Ljubljana, Slovenia, ⁵Scientific Veterinary Institute "Novi Sad", Serbia, ⁶Scotland's Rural College, United Kingdom, ⁷Swedish University of Agricultural Sciences, Sweden, ⁸University of Liege, Belgium, ⁹Faculdade de Medicina Veterinária, Universidade de Lisboa, Portugal, ¹⁰Faculty of Veterinary Medicine, Ss. Cyril and Methodius University in Skopje, North Macedonia, ¹¹Estonian University of Life Sciences, Estonia, ¹²University of Bologna, Italy, ¹³Natural Resources Institute Finland (Luke), Finland.

The BETTER COST Action will evaluate how biosecurity is currently used and use participative approaches to understand motivators and barriers for biosecurity implementation

Biosecurity is of paramount importance to prevent the introduction and spread of pathogens and, consequently, to preserve the health of farmed animals. Despite the benefits, biosecurity is limited due to:

- Lack of knowledge on ways for improvement.
- Shortage of adequate ways to enhance communication.



2024



Published in
"Estonian Veterinary Review »
October 2024.



BETTERi üldkoosolekul osalejad.

BIO
SEC
URE

BETTER

Tartu võõrustas bioturvalisuse asjatundjaid

Kevadel oli veterinaarmeditsiini ja loomakasvatuse instituudil
au korraldada Tartus kaks olulist bioturvalisuse sündmust:
BIOSECUREi ning BETTERi üldkoosolekud.

Tekst Tarmo Niine, Phd DVM, veterinaarimmunoloogia vanemlektor Foto Lidiia Moskalenko

COST info session: https://www.belspo.be/belspo/cost/agenda_fr.stm



2025



07.05.2025

AGENDA COST GENERAL INFORMATION SESSION 2025 (MORNING)

10:00-10:10	Welcome words and COST in Belgium by Pascale Van Dinter, Belgian member of COST Committee of Senior Officials / COST National Coordinator, BELSPO
10:10-11:00	What is COST and how to engage with COST by Bart Veys from the COST Association
11:00-11:20	Added value and benefits by Prof. Claude Saegerman from UREAR-ULiège (FARAH) and Leader of the WP4 Training and dissemination in CA20103: Biosecurity Enhanced Through Training Evaluation and Raising Awareness.
11:20-11:50	Added value and benefits by Prof. Margot Deruyck from UGent and MC-Member and Science Communication Coordinator in CA20120: Intelligence-Enabling Radio Communications for Seamless Inclusive Interactions.
11:50	Q&A
12:00	End of session



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