SCIENTIFIC NETWORK FOR ZOONOSES MONITORING DATA – 42nd meeting

15 - 17 October 2024
14:00-18:00 / 09:00-18:00 / 09:00-13:00
Minutes agreed on 04 November 2024

Location: EFSA -Board Room /Web conference

Attendees:

- Network Participants:

Country	Organisation
Austria	Austrian Agency for Health and Food Safety (AGES)
Belgium	Federal Agency for the Safety of the Food Chain (FAVV)
Bulgaria	Bulgarian Food Safety Agency (BFSA)
Croatia	Croatian Agency for Agriculture and Food (HAPIH)
Cyprus	Veterinary Services
Czechia	State Veterinary Administration of the Czech Republic (SVA)
Denmark	Technical University of Denmark - National Food Institute (DTU)
Estonia	Agriculture and Food Board
Finland	Finnish Food Authority
France	French Agency for Food, Environmental and Occupational Health & Safety (ANSES)
Germany	German Federal Institute for Risk Assessment (BfR)
Germany	German Federal Office of Consumer Protection and Food Safety (BVL)
Greece	Ministry of Rural Development and Food
Hungary	National Food Chain Safety Office (NEBIH)
Ireland	Department of Agriculture, Food and the Marine
Ireland	Food Safety Authority of Ireland (FSAI)
Iceland	Icelandic Food and Veterinary Authority (MAST)
Italy	Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"
Latvia	Food and Veterinary Service of the Republic of Latvia
Lithuania	National Food and Veterinary Risk Assessment Institute of Lithuania
Luxembourg	Luxembourg Veterinary and Food Administration - ALVA
Malta	Ministry for Agriculture, Fisheries and Animal Rights
Netherlands	Netherlands Food and Consumer Product Safety Authority (NVWA)
Norway	Norwegian Veterinary Institute
Poland	General Veterinary Inspectorate
Portugal	Direção Geral de Alimentação e Veterinária (DGAV)
Romania	National Sanitary Veterinary and Food Safety Authority (ANSVSA)
Slovakia	State Veterinary and Food Administration of Slovak Republic (SVPS)
Slovenia	Administration of the Republic of Slovenia for Food Safety, Veterinary Sector and Plant Protection
Spain	Ministerio de Agricultura, Pesca, y Alimentación (MAPA)
	Agencia Española de Seguridad Alimentaria y Nutrición (AESAN)
Sweden	Swedish Veterinary Agency (SVA)
Switzerland	Federal Food Safety and Veterinary Office (BLV)

- European Commission: Food Hygiene, feed and fraud

- European Union Reference Laboratories (EURLs): Campylobacter, Parasites, Brucella
- IPA country: Bosnia and Hertzegovina (Food Safety Agency), Kosovo (Food and Veterinary Agency of Kosovo), Montenegro Republic of North Macedonia (Food and Veterinary Agency),

Serbia (Ministry of Agriculture and Environmental Protection), Turkiye (Ministry of Agriculture and Forestry General Directorate of Food and Control)

- Contractors:
  ZOE Consortium: Gaia Scavia, Laura Amato, Giorgia Angeloni, Paolo Calistri.
- Invited speakers: Food and Agriculture Organization of the United Nations (FAO): Alejandro Dorado García
- EFSA:
  ED Team Chief Scientist Office: Carlos Das Neves

  BIOHAW Unit: Frank Boelaert (co-chair), Valentina Rizzi, Frank Verdonck, Inmaculada Aznar, Mirko Rossi, Pierre-Alexandre Beloeil, Ernesto Liebana, Eleonora Sarno, Andrea Gervelmeyer, Giusi Amore, Elisabeth Dottolo, Raquel Garcia Fierro.

  IDATA Unit: Anca Stoicescu (co-chair), Fabrizio Abbinante, Sofia Ioannidou, Catalin Iancu, Guido Zunino, Vittoria Flamini, Valentina Bocca, Luca Pasinato.

1. Welcome and apologies for absence

Anca Stoicescu (IDATA Unit, EFSA) opened the 42nd meeting of the EFSA Zoonoses Monitoring Data Network and welcomed the participants.

The newly appointed Network Members were welcomed to the group and shortly introduced themselves.

2. Adoption of the agenda

The agenda was adopted without changes.

3. Minutes of the 41st meeting of the Network held on 09-11 October 2023, hybrid

The minutes had been previously agreed by written procedure on 24 October 2023 and subsequently published on the EFSA website on the same date. There were no pending actions from the previous meeting. Comments received through the meeting feedback survey were presented.

4. Session 1: Status of production of 2023 EUOHZ report and communication tools

4.1 Update on EU One Health Zoonoses report 2023

Paolo Calistri (leader of the ZOE consortium) and Gaia Scavia (leader work package (WP) 1) updated on the activities during 2024 for the preparation of the 2023 EU One Health Zoonoses Report that is produced by WP1 of the ZOE Consortium. The new features introduced in the EUOHZ 2023 Report aim to simplify the report and enhance the interaction between the consultation of the static report and the data visualization and consultation tools (dashboard), as well as the story maps. In 2024, the dashboards for online data visualization and consultation will be completed (covering all zoonotic agents considered a priority by Directive 99/2003/EC, in addition to Rabies and West Nile), along with the story maps (available for all zoonotic agents except West Nile). The latter are intended for deeper insights and aimed at a general audience.

A crucial element is the quality of the data, to which the consortium's experts contribute through the scientific validation of the data reported annually to EFSA. The validation is based on an assessment against a series of criteria, including plausibility, reliability, accuracy, and consistency. The scientific data validation process has progressively improved over the years, with enhanced guidelines and rules for data collection provided by EFSA.

4.2 Zoonoses and foodborne outbreaks key findings

Frank Boelaert (BIOHAW Unit, EFSA) presented an update on the 2023 EUOHZ report. The draft report was circulated to the reporting countries for consultation on 7 October 2024 and their feedback is expected by 23 October 2024 at the latest. The final report will be published on 10 December 2024. He presented some preliminary confidential key findings on zoonoses and zoonotic agents.

Giusi Amore (BIOHAW Unit, EFSA) presented preliminary and confidential results on the monitoring of foodborne outbreaks (FBOs) in 2023. Foodborne outbreaks were detailed further as breakdown figures based on the causative agent and place of exposure. Temporal trends of the number of outbreaks were shown as well.

4.3 Update dashboards and story maps

Laura Amato (ZOE consortium) presented the development of two sets of online interactive communication tools: four dashboards (on *Trichinella*, *Echinococcus*, rabies and West Nile virus), and seven story maps (on *Trichinella*, *Echinococcus*, *Yersinia*, *Toxoplasma gondii*, rabies, Q fever, and tularaemia). The presentation highlighted key features of the two communication tools, including target audience, purpose, structure, and contents. With short demonstration videos, the functions of the two tools are explored, focusing on both general aspects and pathogen/topic-specific features.

5. Session 2: Feedback on 2023 data reporting

5.1 Feedback on 2023 data reporting

Anca Stoicescu (IDATA Unit, EFSA) presented the feedback received from reporting countries via the electronic survey on the 2023 data reporting. MSs provided comments on various aspects, including the reporting manuals, EFSA's MicroStrategy reports, the EFSA catalogues, the data validation business rules, the reporting tools, and the EFSA Data Collection Framework (DCF). In response, EFSA outlined actions to address the feedback and enhance the data collection process for 2024.

5.2 Feedback on 2023 data validation

Giorgia Angeloni (ZOE consortium) presented the activities related to 2023 data validation. Details on questions/requests for clarifications and data correction sent by the ZOE consortium experts to the reporting countries were briefly presented. It was noted that compared to the previous years the data quality increased, also due to the implementation of additional business rules. The web tool used for managing communication and feedback to/from the countries allowed users to have a clear overview of the process and the duration needed for feedback. The identified issues relate mostly to *Listeria*, *Salmonella*, *Campylobacter*, and foodborne outbreaks, which remain key areas of focus. Common issues included missing or misreported data, inconsistencies with monitoring systems, and data plausibility concerns. However, the active engagement of reporting countries, their timely corrections, and feedback have contributed to significant improvements in the data validation process.

Network representatives indicated that there could be delays in reporting AMR results, due to constraints in laboratory resources and short validation periods. EFSA clarified that only results submitted by the legal deadline can be included in the EUOHZ report and that AMR data can also be updated in November with the results from the reference testing.

6. Session 3: Scientific topics

6.1 EFSA's Bird Flu Radar

Inmaculada Aznar (BIOHAW, EFSA) presented the EFSA SIGMA data model. SIGMA sets standards for data collection from Member States (MSs), enhancing the quality, comparability, and efficiency of data over time. The system introduces automated data collection, streamlining the retrieval of up-to-date information for risk assessments and providing MSs with tools to generate national reports, reducing duplication of reporting efforts.

The presentation highlighted the value of collecting animal population data using SIGMA, specifically in monitoring African swine fever (ASF) and avian influenza (AI). For ASF, the data are used to monitor disease impact, including the incidence and the proportion of pigs lost across regions. For AI, the data help assess control options, including risk estimation for poultry, and serve as an early warning tool. The risk maps are available to affected countries that have submitted population data.

The more detailed, SIGMA-compliant, animal population data complement the EFSA aggregated compulsory animal population data collected using the zoonoses data collection system. A single submission of animal population data, which would satisfy MSs' reporting requirements, is currently explored in-house at EFSA. Two countries (Finland and Romania) supported the idea but would like to be reassured about the consistency of the datasets. EFSA informed current in-house analyses are ongoing.

6.2 FAO's work on Antimicrobial Resistance Monitoring (AMR) surveillance and InFARM

Alejandro Dorado García presented the International FAO AMR (InFARM) system, which consists of an IT platform and related FAO activities that assist countries in collecting, collating, analysing, visualizing, and effectively utilizing their AMR monitoring and surveillance data primarily from livestock, fisheries, and aquaculture, along with their associated food products.

InFARM builds on prior collective experience and knowledge gained by FAO and Quadripartite organizations through the implementation of activities on surveillance capacity building. These include the deployment of the FAO Assessment Tool for Laboratories and AMR Surveillance Systems (ATLASS) and the extensive support on the development of national surveillance activities and programmes through the provision of guidelines and materials.

InFARM is expected to play a pivotal role in assisting countries that are willing to share their AMR data in animals and food for global surveillance. It will act as the bridge for integrating these data with information from the WHO Global Antimicrobial Resistance and Use Surveillance System (GLASS) and the WOAH ANImal antiMicrobial USE Global Database (ANIMUSE) into the Quadripartite Global Integrated System for Surveillance of Antimicrobial Resistance and Antimicrobial Usage (GISSA).

Data privacy is guaranteed by providing users access to separate private and public interfaces with various levels of confidentiality for data sharing. Members enrolled in InFARM will have the possibility to share data in the private interface (only accessible to designated officials in the country) or to make data publicly available for the international community.

FAO is calling on its members to participate in the first InFARM annual open call for data in 2024. FAO will reach out to key personnel in national authorities responsible for AMR surveillance in agrifood systems, requesting the designation of InFARM focal points. These authorities typically include Ministries of Agriculture and Food Safety Authorities or Agencies.

6.3 Austria: Views of collected data transmission of AMR-data from EFSA's Scientific Data Warehouse to the FAO InFARM System

At the beginning of August, network member, Peter Much, was approached by colleagues at the Austrian Ministry of Health to take on the role of national FAO-InFARM Focal Point. After reviewing the system, he accepted the role, which involves transmitting AMR data to the InFARM system. Austria, like the EU, already has well-established AMR monitoring programs that generate valuable data, which could benefit countries lacking similar resources. Sharing this data on a global scale would help raise awareness of antibiotic resistance, improve risk assessments, and enhance preventive measures.

Upon reviewing the InFARM data model, Peter Much noticed its similarity to the model used for submitting AMR data to EFSA. This observation led him to propose a more efficient approach: instead of each MS separately preparing data for InFARM, the dataset already stored in EFSA's data warehouse could be utilized. This would simplify the process, requiring only one submission for all MSs that agree to this approach.

However, legal requirements must be considered, and there is a need for clarity on whether data co-financed by the European Commission can be shared. Austria is prepared to support EFSA in addressing these aspects and looks forward to further discussion on this matter.

DG SANTE G5 expressed support for the initiative to avoid double reporting, emphasizing that only MSs can decide on data sharing. A step-by-step approach is required: a) Identify the necessary data, b) Determine what data are already publicly available at the EU level, c) Data that are not publicly available can only be shared with the consent of the MS, d) EFSA may only share data with the explicit consent of the MSs.

EFSA will conduct a follow-up email survey to a) Confirm whether MSs have any confidential data in the EFSA Data Warehouse (DWH) that should not be shared or published, and b) Assess MSs' interest in allowing EFSA to directly forward their data to the FAO InFARM platform.

6.4 Dutch decision trees for labeling certain prevalence data

Due to the complexity and size of the various zoonoses monitoring plans in the Netherlands, the reporting team often faces challenges when labelling prevalence data with the correct sampling context, sampling strategy, and sampler. To address these issues, decision trees were developed to assist data providers and the reporting team in correctly labelling samples. By following a series of guided questions, these decision trees lead users to the most appropriate label for their sample. The tool also accounts for cases where certain combinations are not permitted or where exceptions may apply. While the decision trees have been made with Dutch examples in mind, they can be shared with other MSs reporting prevalence data.

MSs received well the presentation. They were invited to review the decision trees and provide feedback by 8 November. Following this review, EFSA will finalise the decision trees for inclusion as annexes in the next version of the reporting manual.

7. Session 4: outlook on 2024 and future data reporting activities

7.1 Reporting of *Salmonella* in poultry flocks to EFSA and HaDEA, Reporting on whole genome sequencing

DG SANTE G5 aims to reduce the administrative burden on MSs by avoiding duplication in *Salmonella* reporting to EFSA (under Directive 2003/99/EC) and European Health and Digital Executive Agency (HaDEA). Following consultations between the Commission, EFSA, and HaDEA, it was agreed that technical data should primarily be submitted to EFSA, with HaDEA accessing this data upon request. This approach simplifies both the submission form for HaDEA co-financing requests and the final data collection report.

However, small poultry flocks—except those producing products not intended for market—are still required to report to EFSA under Regulation (EC) No 2160/2003, despite being excluded from certain harmonized monitoring requirements for breeding hens, broilers, laying hens, and turkeys under specific regulations. Reporting to EFSA will cover all breeding flocks, broilers, laying hens, and fattening turkeys, rearing and adult flocks. Results from sampling requirements on *Salmonella* control in rearing poultry are not systematically reported to EFSA, but should now be included. These reporting requirements will not add an extra burden to MSs, as many countries already report this data.

DG SANTE G5 informed on the new Commission Implementing Regulation on the mandatory whole genome sequencing of isolates within FBO, covering *Salmonella* enterica, *Listeria* monocytogenes, *Escherichia coli*, and *Campylobacter jejuni/coli*. Isolates must be collected from feed, animals, food, and related environments, with food business operators required to submit results to EFSA's database without delay. The regulation, voted on during the Standing Committee on 11 October 2024, will be published by early 2025 and applied 18 months later. The impact on annual reporting to EFSA is minimal, as EFSA has already developed a One Health WGS System for mandatory outbreak-related data and voluntary WGS results for the same pathogens. Submission of other WGS profiles is not yet possible. During annual reporting under the FBO data model, a link may need to be added mandatorily for outbreaks with submitted WGS profiles.

7.2 Improvements of 2024 data reporting

Anca Stoicescu (IDATA Unit, EFSA) briefed the audience on the improvements to be implemented in view of the 2024 data reporting. No changes are planned in the Data Collection Framework (DCF), in the data models and in the Excel mapping tool except for update of catalogues for the aggregated prevalence data submission, disease status and for foodborne outbreaks. An overview of the three available reporting guidance documents was provided, together with the planned improvements/clarifications. Changes in business rules and catalogue terms (including deprecation or modification of existing ones and addition of new ones) were presented. If new analysis is needed, the MicroStrategy reports will be updated.

7.3 2024 data reporting: key data to provide

Frank Boelaert (BIOHAW Unit, EFSA) presented key data from the scientific point of view to be provided for the 2024 reporting period. The new Regulation (EU) 2024/2463, effective from 3 October 2024, mandates that official laboratories use the analytical methods listed in Annex I of Regulation (EC) No 2073/2005 when testing for *L. monocytogenes*, *Salmonella*, *E. coli*, and other pathogens during official controls. Competent authorities may allow alternative methods, including proprietary ones, if they are validated against reference methods or other recognized protocols. Proprietary methods must be certified by an independent body, ensuring the manufacturer’s process is periodically reassessed, at least every five years, to maintain compliance with production quality assurance standards. All EFTA Member States, including Switzerland, are required to report in accordance with Directive 2003/99/EC. Switzerland’s reporting obligations follow the specific

agreement between the European Commission and Switzerland (EC-CH agreement). In the context of the PHC for *Campylobacter* on broiler carcases, it is mandatory to report total number of samples tested for *Campylobacter* and the number of samples with counts exceeding 1,000 cfu/g, differentiating between samples taken by competent authorities (CA) and food business operators (FBOp) sampling. PHC monitoring results for *Salmonella* on carcases of pigs, cattle, sheep, goats, horses, broilers and turkeys should include the total number of samples tested and the number of *Salmonella*-positive samples, differentiating between samples as indicated in Commission Implementing Regulation (EU) No 2019/627. For *Salmonella* monitoring results, flocks, both rearing and adult ones, positivity to any *Salmonella* spp. ought to be reported as well as positivity to target serovars. For *Salmonella* NCPs in broilers, breeding turkeys and fattening turkeys, separate data need to be provided by sampler, including a) the merged results from the CA and the FBOp, b) separate results from CA and c) separate results from FBOp. In accordance with Commission Implementing Regulation (EU) 2019/1793 on the temporary increase of official controls and emergency measures governing the entry into the Union of certain goods from certain third countries MSs are asked to report on *Salmonella* findings in presumed risky food matrices using the term 'EU increased control programme on imported food'. In the context of the FSC for *Listeria monocytogenes* all samples having results above the limit of the detection of the method should be reported as positive samples. In the case of Shiga toxin-producing *Escherichia coli* (STEC) the identification of the *stx* genes is a prerequisite for identifying a STEC (strains of *E. coli* that are capable of producing Shiga toxin (STX) or possessing the *stx* genes). Therefore, it is mandatory to report on the characterization of the *stx* genes, notably *stx*1 and/or *stx*2 and the subtypes. For *Trichinella* it is important to make clear distinction between domestic pigs raised under controlled housing conditions, recognized by the CA, as opposed to 'other' domestic pigs. More details on this reporting will be in the reporting guidance (manuals).

7.4 2024 data reporting: timelines

Anca Stoicescu (IDATA Unit, EFSA) presented the 2024 data reporting timelines.

The milestones of the 2024 data reporting were agreed as follows:

- Proposals for new terms to be added in the catalogues: 30 November 2024;
- Publication of the supporting manuals: 31 January 2025;
- Requests for training: 31 January 2025;
- Revision of data providers list: 28 February 2025;
- Opening of the reporting period: 1 April 2025;
- Closure of the reporting period: 31 May 2025, submission of new datasets after the deadline will not be allowed;
- Text forms: 31 May 2025;
- Submitted data will be displayed in the EU Summary reports in MicroStrategy the day following submission; any change in data during the data reporting and correction periods will be reflected automatically in the EU Summary reports in MicroStrategy the day following a dataset submission;
- First validation period: 2 – 12 June 2025;
- Letters requesting scientific clarifications and/or corrections (if needed) sent to the MSs: 13 June 2025;
- First data correction by MSs: 13 - 29 June 2025;
- Final validation period: 30 June – 9 July 2025;
- Second letters requesting scientific clarifications and/or corrections (if needed) sent to the MSs: 10 July 2025;
- Final data correction: 10 – 18 July 2025;
- Acceptance of the data in DWH by 22 July 2025;
- After 18 July 2025, data cannot be changed, as data extracted on this date will be used to draft the 2024 EUOHZ report. Erroneous data (e.g., combination of matrix/pathogen) will not be included in the analysis;

- Amendments to 2024 data and historical data can be carried out between 1 and 30 November 2025. These data will be used in the National reports and in the DWH but will not be included in the 2024 EUOHZ report.

The Network agreed to the timelines proposed. Reporting officers were requested to clearly communicate to the national experts involved in data collection and data reporting the deadlines for 2024 data reporting and validation. Additionally, it is strongly recommended that all the new data providers and reporting officers are trained by EFSA prior to the data reporting period.

7.5 Artificial Intelligence (AI) activities at EFSA

Vittoria Flamini (IDATA, EFSA) presented on the EFSA's AI Task Force that aims to leverage AI technologies to enhance EFSA's operations while managing associated risks. The task force's primary objective is to ensure that EFSA staff are well-equipped to advance AI efforts and that the organization operates efficiently, collaboratively, and responsibly within its ecosystem. By the end of 2024, the task force expects to establish a consensus on key principles and definitions to guide EFSA's AI approach. Additionally, a preliminary framework for using AI tools will be developed to address emerging challenges. The task force focuses on three core mandates: WEAVE: Preparing EFSA to be AI-ready, not only as a provider of AI solutions but as part of a broader AI-ready ecosystem involving EU agencies and stakeholders. TRANSFORM: Supporting transformative AI-driven initiatives that could lead to significant organizational changes within EFSA. ORIENT: Addressing critical issues such as ethics, security, authorship, and human-AI interactions. This will involve developing a preliminary framework to guide decision-making on AI use. These efforts aim to position EFSA as a leader in AI innovation within the EU regulatory landscape.

7.6 EFSA's rebuild project – status update and survey results

Valentina Bocca (IDATA Unit, EFSA) presented the rebuild project and its importance for the transition to a new data collection and analysis system in accordance with the EFSA Strategy 2027. The primary goal of EFSA's Rebuild project is to re-engineer the data collection and analysis system to modernize the way data are ingested and managed in EFSA, to increase the speed of its processes, to empower stakeholders to create data products, services and tools.

The focus of the presentation was on Work Package (WP) 2, namely the New Data Ingestion and Management system. The WP2 foresees two waves of implementation; the first wave aims at building the foundation layer, using modern systems to perform regular data collection of structured data and it is expected to go live in November 2025, followed by a pilot phase during 2026. Wave 2 aims to explore innovative data management and sharing methods and will cover also other types of data collection. It also foresees the involvement of Member States through a grant to establish a strategic support and gather recommendations.

EFSA is currently in the phase of blueprint revision and acceptance and will soon start the implementation of wave 1. Given the limitations of the current system collected during the business analysis activity, the new system is expected to leverage on the new technologies to upgrade and provide better user experience.

Starting from March 2026, EFSA seeks the collaboration of up to 3 MSs from 2 data collections (AMR and Chemical Monitoring) to pilot the new system and provide feedback. Participating countries are expected to transmit official data via current DCF and re-transmit the data later in the new system. Additional details on the system, the selection procedure and the pilot will be provided during 2025.

7.7 One Health surveillance for Early detection of Cross-border Threats to Public Health in Animals and the Environment

The ongoing collaboration between EFSA and 23 MSs having a direct grant agreement of the EU4Health Programme 2022 was presented. An overview of the priority pathogens targeted by these surveillance activities and the different surveillance approaches being used was given. Throughout the three years of this project, MSs will collect and test samples, enhance their One Health capacities and submit results to EFSA. EFSA will analyse the data and present the results in dashboards accessible to the One Health surveillance countries, ECDC and the EU. It was highlighted that a risk assessment – reprioritisation exercise is scheduled for mid-2025, and that the activities will continue until the end of 2026. The One Health surveillance results regarding *Echinococcus*, *Coxiella burnetii* and West Nile Fever will also be shown in the EU One Health Zoonoses Reports.

8. Session 5: Scientific topics

8.1 EFSA Burden of zoonoses project

Frank Boelaert (BIOHAW Unit, EFSA) presented the rationale for launching the EFSA framework contract call "Burden of Zoonoses in European Union and EEA/EFTA Countries". The submission deadline for tenderers was 14 February 2024. This project will build on the European Centre for Disease Prevention and Control (ECDC)'s 'Burden of Communicable Disease in Europe' study and on the World Organisation for Animal Health (WOAH)'s 'Global Burden of Animal Diseases (GBADs) programme'. The objectives of the 4-year contract are:

- estimate the dual burden (zDALYs) of nine foodborne zoonoses in the EU MSs and EEA/EFTA countries (campylobacteriosis, salmonellosis, listeriosis, infection with Shiga toxin-producing *Escherichia coli* (STEC), zoonotic tuberculosis, brucellosis, trichinellosis, echinococcosis, and yersiniosis),

- estimate the possible tangible (direct and indirect costs) and intangible costs of human and animal disease, which are not considered in zDALYs, for the nine specified foodborne zoonoses,

- develop, a methodological framework to combine the zDALYs and costs estimators into an overall estimator, for the specified nine foodborne zoonoses

A consortium was awarded the contract, which is led by Sciensano (Belgium), with partners: Ghent University (Belgium), Danish Technical University (Denmark), National Institute for Public Health and the Environment and Utrecht University (the Netherlands). A framework contract was signed during July 2024. Activities are likely to start in November 2024.

8.2 Burden of zoonoses in EU and EEA/EFTA countries (OC/EFSA/BIOHAW/2023/02)

The "Burden of Disease" concept aims to quantify the impact of various infectious diseases on populations, aiming to inform public health strategies. One of the key metrics used in this context is Disability-Adjusted Life Year (DALY), which combines the morbidity and mortality impact of diseases into a single number. In addition to health impacts, the burden of disease concept extends to the economic impact of diseases. These include direct costs such as healthcare expenses (e.g., hospitalization, medication) and indirect costs like productivity losses from absenteeism or premature death.

To accurately measure the burden of zoonoses, it is essential to consider the impact on the livestock sector as well. Animal Loss Equivalents (ALE), which quantify productivity losses in livestock, can be combined with DALYs to create zDALYs—a comprehensive metric that reflects both human and animal disease burdens. In addition to productivity losses, the economic costs in the animal sector

include tangible costs, such as disease control and eradication measures, and trade or movement restrictions, as well as intangible costs, like the loss of consumer confidence and market disruptions. Together, these factors provide a more holistic view of the true economic and social burden of zoonotic diseases.

The "Burden of Zoonoses" project focuses on establishing a comprehensive framework to measure the impact of zoonotic diseases on both human health and the livestock sector. The project targets nine key foodborne zoonoses, including campylobacteriosis, salmonellosis, and listeriosis. The project is structured over four years and will proceed in stages: a feasibility study, data identification and collection, a case study, and finally a full study. Dissemination will be achieved through dashboards and story maps, helping stakeholders visualize and understand the burden of foodborne zoonoses in Europe.

8.3 Building a Global Platform for Zoonotic Disease Prevention: the role of the PREZODE International Data Working Group

Paola Caceres' presentation outlined the role of the PREZODE International Data Working Group (IDWG) in building a global platform for zoonotic disease prevention. PREZODE, a One Health initiative launched in January 2021, aims to prevent the emergence of zoonotic diseases by coordinating research, surveillance, and operational projects under a common framework. One of its key goals is to create a platform for data sharing and a resource center to support evidence-based policy decisions.

The International Data Working Group (IDWG) focuses on understanding zoonotic risk, co-designing solutions to reduce risk, and strengthening early warning systems. It is working to prototype a global information system for surveillance and early detection. The team has built on four years of work through 27 international workshops conducted over 19 months, engaging global experts to identify gaps in pandemic prevention efforts. This led to the development of the PREZODE Strategic Agenda and the launch of five pillar working groups. Additionally, the IDWG identified data management needs for PREZODE’s projects, particularly in making data accessible and shareable according to FAIR principles (Findable, Accessible, Interoperable, Reusable). Recommendations were provided to support researchers in open data sharing and to establish an international platform where such data can be accessed.

8.4 Update on Rapid Outbreak Assessments and related activities

Eleonora Sarno (BIOHAW Unit, EFSA) presented the current activities on FBO assessment. Foodborne diseases remain a significant public health concern in the EU. EFSA assesses foodborne outbreaks with a multi-country dimension in close collaboration with the European Centre for Disease Prevention and Control (ECDC), and produces scientific assessments also known as Rapid Outbreak Assessments (ROA). These technical reports support risk managers and policymakers in the EU (officials of the European Commission and EU MSs) for the investigation of events and for the implementation of interventions along the food chain aimed at the removal of the contaminated food and the prevention of new infection cases. The aim of this presentation is to illustrate an example of published multi-country outbreak. The food incident regards a prolonged multi-country cluster of *Listeria monocytogenes* ST155 infections linked to ready-to-eat fish products.

9. Session 6: outlook on 2024 and future data reporting activities

9.1 EU One Health Zoonoses report 2024 and following

Mirko Rossi (EFSA) briefly updated the audience orally on the state of progress with regard to the EFSA open call for tender aimed at selecting a tenderer to support EFSA in preparing the future four EU One Health Zoonoses reports 2024-2027.

9.2 Update on baseline surveys on antimicrobial resistance

Pierre-Alexandre Beloeil (BIOHAW Unit, EFSA) presented updates on two baseline surveys that will take place in the next years. An overview of the technical specifications for the EU-wide baseline survey on MRSA in pigs was provided. The samples for this baseline survey should be collected and analysed during 2025 and reported to EFSA in 2026. The implementing regulation has been already published and adopted by the European Commission (link). A second mandate was received from the EC regarding defining technical specifications for a baseline survey on antimicrobial resistance in aquaculture. A Working Group has been set up with the aim of proposing priority combinations of aquaculture animals / target bacteria, a complete sampling framework and related protocols and for providing guidance for technical reporting. EFSA will organise a dedicated info-session on reporting of MRSA baseline survey data.

10. Session 7: Conclusion

10.1 Any Other Business

Mirko Rossi (EFSA) proposed that a survey will be sent to the members. alternates and observers of the Main zoonoses Network members and the specific subgroups (AMR, FBO, WGS and TSE) to sick for agreement of publication of the names and surnames on the list of Network members available on EFSA website (currently only the name of organisations is published).

10.2 Date for next meeting

Next meeting dates proposed: Tuesday-Thursday 14-16 October 2025 (lunch to lunch) at EFSA premises in Parma and online. EFSA will inform the Network Representatives if any changes occur.

10.3 Conclusions

Anca Stoicescu and Frank Boelaert summarised the main discussions and agreements reached during the meeting. The Chairs informed that the minutes and the list of main actions will be sent by email to the Network Representatives after the meeting.

10.4 Cross-Agency One Health Task Force

Carlos Das Neves (Chief Scientist, EFSA) presented the EFSA activities related to the One Health approach. The recommendations of EFSA's 2022 One Conference focused on food safety matters from one health perspective. The conclusions of the conference led to the creation of the One Health cross-agency Task Force, which beyond EFSA involves the European Environment Agency (EEA), the European Centre for Disease Prevention and Control (ECDC), the European Chemicals Agency (ECHA), and the European Medicines Agency (EMA). The challenge of the One Health approach is the disconnect with respect to the risk analysis and more specifically related to the collaboration between political leadership, private sector, society and research professionals, due to specific reasons at each level.

The discussion triggered regarded the roadmap of the EFSA One Health Task Force, which should focus on defining the science gaps, on the collaboration with the EC and other EU agencies and on advising the establishment of a legal framework. Additionally, the potential implementation of a One Health system in EU legislation was discussed. Finally, the unbalanced representation of different scientific areas at the operational levels (e.g. veterinarians as compared to medical doctors) was addressed. Steps are already made at the EU level and ultimately, measures must be taken also at the MSs' level.

10.5 Closure of the Network meeting

The Chairs thanked the Network Representatives for an intensive and productive meeting and closed the meeting at 13:00.

Appendix: List of Action Points agreed at the meeting

No	Agenda point	What	Action points	Deadline
1	4.2	Zoonoses and foodborne outbreaks major key findings	Zoonoses Monitoring Data (ZMD) network representatives to provide their review of the draft EUOHZ 2023 report (instructions given by email on 7 October 2024).	By 23 October 2024
2	4.3	Update on dashboards and story maps	ZMD network representatives to provide their review of the pilot EUOHZ 2023 report dashboards and story maps via the dedicated electronic survey (instructions given by email on 7 October 2024).	By 23 October 2024
3	5.1	Feedback on 2023 data reporting	EFSA encourages ZMD network members to use the EFSA online web Catalogue browser	Anytime is needed
4	5.2	Feedback on 2023 data validation	EFSA to provide data validators with appropriate details (record Id and/or result Id and transmission Id) that will help identifying the records prone to data correction	During the validation periods
5	6.1	EFSA's Bird Flu Radar	EFSA is evaluating the data reported by MSs using two data models, SIGMA and Zoonoses animal population (differences in statistics due to differing granularity).	By end of November 2024
6	6.2	FAO's work on AMR surveillance and InFARM	EFSA to organise a survey to a) confirm whether MSs have any confidential data in the EFSA Data Warehouse (DWH) that should not be shared or published, and b) assess MSs' interest in having EFSA directly forward their data to the FAO InFARM platform.	By end of October 2024
7	6.3	Dutch decision trees for labelling certain prevalence data	EFSA to provide the network representatives with the draft decision trees.	By 18 October 2024
8	6.3	Dutch decision trees for labelling certain prevalence data	ZMD network representatives to comment the Dutch decision trees for labelling certain prevalence data	By 8 November

No	Agenda point	What	Action points	Deadline
9	6.3	Dutch decision trees for labelling certain prevalence data	EFSA to finalize the decision trees, for inclusion as annexes in the next version of the reporting manual.	By end of November
10	7.1	Reporting of *Salmonella* in poultry flocks to EFSA and HaDEA, Reporting on whole genome sequencing	ZMD network representatives to write to EC in case additional clarifications on legal interpretations are required.	
11	7.2	Improvements of 2024 data reporting	ZMD network representatives to comment in the draft manual for 2024 zoonoses data (EFSA-Q-2024-00XXX Manual for 2024 zoonoses data.docx) on data representativeness at national level (e.g. rabies in bats, *Echinococcus*).	As soon as possible
12	7.2	Improvements of 2024 data reporting	EFSA to circulate the reporting manuals to ZMD network representatives for consultation on 3 January 2025 and publish them on 31 January 2025.	By 31 January 2025
13	7.2	Improvements of 2024 data reporting	ZMD network representatives to review the reporting manuals by agreed deadline	By 17 January
14	7.2	Improvements of 2024 data reporting	EFSA to send revised templates of text forms for zoonoses and AMR	By 25 October 2024
15	7.2	Improvements of 2024 data reporting	ZMD network representatives to review the revised templates of text forms for zoonoses and AMR	By 15 November 2024
16	7.3	2024 data reporting: key data to provide	ZMD network representatives to thoroughly review all mandatory data to provide, as well as the reporting requirements for 2024	As soon as possible
17	7.4	Data reporting: timelines	ZMD network representatives to express their training needs to EFSA, keeping their national Focal Point in copy.	By 31 January 2025
18	7.4	Data reporting: timelines	ZMD network representatives to communicate the agreed timelines for reporting 2024 data to the relevant experts involved in data collection and reporting	As soon as possible
19	7.5	Artificial Intelligence (AI) activities at EFSA	EFSA to keep the ZMD network representatives as regards the activities on AI in EFSA	Permanent
20	7.6	EFSA's rebuild project	ZMD network representatives to send any concerns/questions/clarifications regarding the rebuild project to data.collection@efsa.europa.eu	As soon as the

No	Agenda point	What	Action points	Deadline
21	7.7	One Health Surveillance for early detection of zoonotic cross-border pathogens in animals and the environment	EFSA to present in the EUOHZ 2024 report the results regarding *Echinococcus*, *Coxiella burnetii* and West Nile Fever reported in the One Health surveillance data stream	
22	8.5	Update on Rapid Outbreak Assessments and related activities	ZMD Network representatives to consider submitting WGS results on a regular basis to support EFSA's activities on outbreak investigations	During the year
23	9.2	Update on baseline surveys on antimicrobial resistance	EFSA to organise dedicated info-session on the of MRSA baseline survey (data reporting and sampling scheme)	23 October 2024
24	9.2	Update on baseline surveys (AMR)	EFSA to circulate the agenda of the info session on the of MRSA baseline survey before 23 October 2024.	As soon as possible
25	9.2	Update on baseline surveys (AMR)	ZMD Network representatives to send their questions and comments on the MRSA baseline survey prior the info session scheduled on 23 October 2024.	By October 22
26	10.2	Dates for next meeting	Next meeting to be organised 14-16 October 2025 in Parma and online.	By June 2025
27	10.5	Evaluation survey of the network meeting https://ec.europa.eu/eusurvey/runner/Scientific_Network_for_Zoonoses_Monitoring_Data_evaluation_of_42nd_meeting	ZMD Network members to fill in the survey.	By 21 October 2024

Colour legend	
	Action points for EFSA
	Action points for Network Representatives
	Action points for both EFSA and Network Representatives