13th -14th June 2024

WEB MINUTES

Stakeholder Discussion Group on Emerging Risks

These web minutes summarise the topics presented and discussed at the 31st meeting of the Stakeholder Discussion Group on Emerging Risks

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of the agenda

The agenda was adopted with minor changes: providing an update on the upcoming EFSA project on food supplements and an additional topic on risk associated with the use of disposable gloves.

3. Introduction to the event

The StaDG- ER Coordinator updated the participants on the follow up actions from the previous meeting.

4. StaDG-ER members - Presentation and discussion of new emerging issues

4.1 Vertical transmission of Salmonella Reading by Nicola King (ESR New Zealand)

Outbreaks of *Salmonella Reading* infection occurred in the USA and Canada during 2017-2020, caused by exposure to this serotype through handling raw turkey products (meat, pet food) or working with live turkeys. Isolates from turkeys and human cases were highly clonal and adapted to turkeys. When ingested by turkeys, *S. Reading* can colonise multiple organs. A recent report showed that *S. Reading* can colonise the reproductive organs of turkey hens and contaminate the internal contents of eggs from these hens (i.e., transovarian or vertical transmission). However, the hens were inoculated intravaginally with a high dose. Confirmation of transovarian transmission is needed under real conditions.

4.2 Insect-based foods in ecommerce: Non-compliant labelling and adulteration by Nicola King (ESR New Zealand)

Trade of insect-based products is increasing, and many products are available from e-commerce (online) platforms. A survey of insect-based products purchased through e-commerce platforms has revealed widespread non-compliance with EU

labelling requirements. Laboratory testing of 46 products showed that one-third contained insect species that were not listed on the label. This included insects not authorised in the EU. Additionally, traces of beef and pork were found in one product, which raises concerns about contamination from feed or other sources. . The presence of unauthorized insect species for human consumption and consequently undeclared allergens is the main safety concern.

4.3 Consumer trends and potential food safety issues by Bizhan Pourkomailian (Serving Europe)

Predicting trends in consumer food habits across the world is a challenge because of very different cultural relations to food. These predictions are further complicated by stimuli such as misinformation, trust in external standards, a desire for more exotic ingredients as well as well-being needs. In Europe, there is a clear trend of consumers moving away from red to white meat or vegetarian diet. It implies that exposure to pathogen species (traditionally Shiga toxin-producing *Escherichia coli* with red meat) is modified with now more prominent species such as Salmonella or Vibrio as we shift from one protein category to another. More focus may be needed in agriculture and Good Agricultural Practices with regards to vegetables. As animal protein demand reduces and plant-based increases, more land would be needed for growing food ingredients. This may lead to increased pests pressure, resulting in greater use of pesticides, leading to non-compliance to regulations, leading to fraud and finally to unsafe food. This possible chain reaction requires our undivided focus on the horizon due to consumer trends in diet change.

4.4 Potential risk to consumers from cyclic imines by Dr Tim Harwood (Cawthron Institute, NZ) & Dr Sarah Finch (AgResearch, NZ)

Cyclic Imines are a lipophilic class of shellfish toxin produced by known species of marine microalgae. The major toxins of this class are Gymnodiminies, Spirolides and Pinnatoxins which are found in a range of shellfish species from all around the world. To assess the risk posed by these compounds all occurrence and toxicity data were collected from the literature. High concentrations of spirolides have never been reported making them of low risk to human health. Despite occasional very high concentrations of gymnodimines and pinnatoxins in some shellfish collected from hot spots around the world, no illnesses have been reported, even when consumers have been directly questioned. Therefore, the risk of gymnodimines and pinnatoxins does not appear to be high. However, further occurrence and toxicity data are required for a more robust risk assessment. Additionally, toxicity equivalence factors need to be determined for structural analogues so that their different toxicities can be accounted for when analysing samples analytically.

5. StaDG-ER members – Follow up on previous issues discussed

5.1 Q Fever - A livestock disease under control but an underestimated public health risk by Laurent Delooz (FESASS - European Federation for Animal Health and Sanitary Security)

In 2009, the Netherlands experienced a human outbreak of Q fever closely linked to an outbreak of Q fever in ruminant livestock. The contaminations were explained by the proximity of farms located in densely populated areas. The current epidemiological context shows that Q fever is endemic in Europe, that it is present in a very large number of livestock (>20% in Belgium) and that contact between the potentially contaminated environment and humans is significant. As the route of transmission of Q fever is mainly airborne and not by food (milk, cheese), health authorities should put in place measures linked to environmental contamination (manure, etc.) rather than on food. In addition, certain people are highly exposed (breeders, veterinarians, slaughterhouse workers, etc.) and could benefit from prevention measures such as vaccination. Furthermore, a recent study showed that a significant proportion of highly exposed sectors were poorly informed and recommends awareness campaigns aimed at physicians, veterinarians and breeders about disease detection, and ways to protect themselves. The increasing temperatures in Europe and their impact on various factors such as wind, drought were discussed as a potential driver to increase exposure to this disease, urging the need for an impact analysis on drivers.

5.2 Micro and nano plastics in agricultural soils could act as vectors of pollutants in the food chain by Luigi Tozzi (SAFE)

The Green Deal introduces new techniques and technologies to reduce the use of pesticides, antibiotics, fertilisers and herbicides. Micro- and nano-plastics have been used for a long time as carriers for active substances. The EU Commission banned their use in cosmetics because of the risks to the environment. Heavy metals and other potentially toxic substances have recently been found to be transmitted by these particles. New routes of contamination of agricultural soils and water have recently been discovered, such as: Mulching films used for herbicide reduction, compost used for fertilisation. The contamination process involves adsorption pathways via electrostatic attraction and surface complexation of unwanted substances with micro/nanoplastics, as well as physisorption and chemisorption mechanisms. While further studies are needed, it's not possible to rule out the risk of contamination of the food chain. The need to further investigate the potential risks associated with the contamination of the food chain with Phenyltriethoxysilane (PTEs) via macro-meso-nano plastics was highlighted including the influence of new green agricultural techniques (like mulching, composting, and new fertilisers and pesticides) on the presence of these macro-, meso-, and nano-plastic in soil, water, and air as a factor in the contamination of the food chain with PTEs.

5.3 Semicarbazide in whey protein products by Christian Bruun Kastrup (EDA)

A study by the European Dairy Association (EDA) and the European Whey Processors Association (EWPA) investigated semicarbazide levels in dairy-based products. The study aimed to clarify the sources of semicarbazide, previously used as a marker for the illegal drug nitrofurazone and found that it can also form from other sources like packaging materials and processing conditions. Factors influencing its formation include high pH, hypochlorite, and storage conditions. Mitigation strategies, already part of good manufacturing practices, were highlighted. Findings were presented to the European Commission, and ongoing steps include continued monitoring, publishing research, and further studies on semicarbazide formation. The EU Commission is in the process to prepare an amendment to Regulation (EU) 2019/1871 keeping the exemption for already listed products (expected publication November 2024). Furthermore, EU Commission have prepared a mandate for EFSA for a specific scientific opinion on the risks for human health of semicarbazide as a processing contaminant, in view of setting a specific maximum level for semicarbazide as processing contaminant in relevant food.

5.4 Public health risk of HPAI H5N1 virus by Maurizio Ferri (FVE)

The persistent recirculation of avian influenza virus H5N1 clade 2.3.4.4b in wild and domestic mammalian populations is concerning due to the emergence of mammalian adaptive mutations (e.g., E627K), potential changes within the viral polymerase complex, which is an important factor for the virus's pathogenicity and successful replication within mammalian cells, and improved binding activities to sialic acid receptor. For the first time in the US, H5N1 clade 2.3.4.4b has been detected in dairy cow herds in several states, followed by three associated human cases. Both human and cattle genetic sequences showed mutation E627K. In addition, a recent study found a high expression of sialic acid receptors for avian and human influenza viruses in the bovine mammary gland tissue, and A(H5N1) was isolated in the US in a dolphin with brain inflammation and mutation S246N associated with reduced inhibition of oseltamivir, a drug used to treat symptoms caused by the flu virus in humans. These events dictate the adoption of a One Health approach to enhance disease surveillance of A(H5N1) at the human-animal interface and the promotion of a coordinated global response involving governments, healthcare organizations, researchers, and international agencies to reduce further spread, mitigate animal and public health impacts, and prevent potential pandemics.

6. Relevant issues from last EREN meeting by Milen Georgiev (EFSA)

Some topics discussed at the last 31st EREN meeting were identified as relevant to be shared with the StaDG-ER members to retrieve further information. These included: Food Safety and Antifungal Resistance, Baylisascaris procyonis larvae, Increasing Rates of Mono-n-hexyl Phthalate (MnHexP), Poly- and Perfluoroalkyl Substances (PFAS) Contamination from Sea Spray Aerosols, Invasive Mosquito Species, Chagas Disease, Psychoactive Truffles in Microdosing, PFAS and PFOS in Freshwater Fish, and Q-Fever in Bulgaria.

7. Updates on StaDG-ER identification systems

7.1 Interactive and user-friendly dashboard for monitoring food and feed safety alerts in the RASFF database by Lis Alban (UECBV)

It is important for food business operators (FBOs) to act and react on relevant events and developments. In the EU, data are gathered in the Rapid Alert Systems for Food and Feed (RASFF). However, overviews and deeper insights are not always easy to get – The Danish Agriculture & Food Council developed a dashboard to better screen the RASFF database for FBOs' need. The information can be filtered e.g., by product category and country. Moreover, details about the specific alert are provided including the size of the risk. The information retrieved can be saved for later use. The dashboard (in Danish) is free of charge and can be accessed here: https://lf.dk/viden-om/foedevareproduktion/food-and-feed-safety-alerts/

7.2 Summary of emerging risks identified by TIC Council by Nicola Colombo (SGS DIGICOMPLY)

Key updates on topics discussed in the previous meeting on the identification of citrine as a novel food allergen in citrus seeds and the dangers of Amanita muscaria mushrooms emphasized the need for continuous monitoring and research to ensure consumer safety. New findings were shared on the potential for gluten contamination from biodegradable straws, the rising concerns over quinoline alkaloids in lupin seeds due to increased consumption, and the impact of climate change on mycotoxin risks highlighted the need to retrieve further information on these topics.

7.3 Impact of the effect of climate change on food security and trade patterns for grains/oilseeds/pulses as a driver to quality and safety issues by Gianluca Nurra (COCERAL)

COCERAL, the European association of trade in cereals, oilseeds, rice, pulses, olive oil, oils and fats, animal feed and agrosupply, conducted its first biannual survey on mycotoxin management among its members in 2007, which was repeated in subsequent years. Although some questions were adapted or added over time, the survey's main objective remained the same – to provide an overview of mycotoxin management practices among COCERAL members. The latest COCERAL Mycotoxin management report, published on 2nd July 2024 (here), details how COCERAL members deal with mycotoxin through testing and prevention measures, and providing technical guidance to farmers. The report reveals increasing mycotoxin concerns, particularly aflatoxins in corn due to climate change-induced heat waves. Gianluca Nurra, Scientific and technical advisor at COCERAL highlighted the importance of biosecurity in the European agricultural commodity trade and emphasized the need for better predictive models to understand climate change's impact on mycotoxin prevalence and for more reliable quick tests for certain mycotoxins. He called for industry collaboration, scientific support, and potentially simplified EFSA data collection standards to tackle more rapidly the challenges posed by climate change to food safety and security.

7.4 AVC's expertise in identifying Emerging Risks. Veterinary Vaccine Shortage as a driver of Emerging Issues by Rimma Ishimbaeva (AVC)

The international expert community of AVC, organised into working groups on the food chain, animal health, and veterinary medicines, collaborates with European and national government bodies and other stakeholders to monitor and identify emerging issues. Analyzing the data, a shortage of veterinary vaccines was noted in a particular region (Russia) with possible consequences for Europe.The supply of vaccines to Russia is disrupted due to various factors, including regulatory, political, and production-related issues. This shortage could worsen the epidemiological situation of poultry and livestock previously controlled diseases, and affect food production and trade, causing economic challenges for the agricultural sector. Migrating birds can transmit diseases over vast geographical areas, increasing the risk of disease outbreaks at migration sites and along flyways that makes this problem global. It was suggested to collaborate on international multi-stakeholder level, to create a list of critical veterinary vaccines, monitor bird migration routes and reflect on strategic animal vaccination and treatment campaigns.

8. EFSA Environmental scanning activities

8.1 Update on FoodSafeR by Clémentine Eynard (EFSA)

The FoodSafeR project is a large EU-funded initiative involving roughly 20 organizations working to create an open digital hub for sharing information on emerging food safety risks. A Living Lab was conducted to develop this hub, featuring confidential workspaces for data exchange and integrate partners across Europe and internationally. EFSA is also testing the platform to disseminate news, increase visibility, and encourage collaboration on food safety matters. The platform offers functionalities such as posts, file attachments, workspaces for focused discussions, and an RSS feed for global food safety news. Concerns about sharing sensitive data and user access are being addressed by controlled admission and a phased opening, starting with professional networks in food safety. The overarching goal is to ensure that the platform remains a trusted and valuable tool for discussion of emerging food safety issues.

8.2 Outcome of the 8th Survey on draft Briefing Notes by Aurore Czerwiec (EFSA)

<u>Final emerging risk status:</u>

- Acrylamide contamination in plant-based protein ingredients: a growing concern
  A study published in 2023 found significant differences in acrylamide contamination among different types of plant-based protein ingredients (PBPIs) produced through various processing methods.
- Risks to human health associated with the proliferation of *Ostreopsis* in France (South-West coast)

During the summer 2021, *Ostreopsis* blooms were responsible for human outbreaks in France (South-West coast) involving at least 674 people who developed flu-like symptoms. Other outbreaks also occurred in summer 2022 in the same area.

- Food safety and antifungal resistance
  In 2022 WHO launched for the first time the global report/effort to estimate the emerging threat of fungal pathogens and antifungal resistance. There is increasing evidence that both the niche and the resistance rates of fungal pathogens have changed in the environment including the food industry. Additionally, there is data indicating that multi-resistant Candida strains are disseminated in the food chain in certain parts of the world.
- Chagas disease: An Underestimated Foodborne Disease?
  A recent study published in 2024 highlights the global burden of foodborne Chagas disease. Its incidence is rising in Europe and North America.

Final further information needed status:

- Alongshan virus in ticks
  A study published in 2023 shows that Alongshan virus is widely distributed among ticks in Germany and suggests that animals are likely to have frequent exposure to it, based on serological investigations.
- New mycotoxin producing fungi species.
  A study published in January 2021 identified 33 new strains of mycotoxin producing fungi within the genus Fusarium. Some of these fungi cause severe symptoms of Fusarium Head Blight, which is a disease of cereal crops.
- Quaternary ammonium compound
  A literature review published in 2023 evaluates the existing information on the ecological and human health effects of quaternary ammonium compounds and identifies several areas of potential concern, including acute and chronic toxicity to aquatic organisms, and adverse health outcomes such as dermal and respiratory effects, developmental and reproductive toxicity, and antimicrobial resistance.
- Health effects of emulsifiers
  Several studies published between 2021 and 2023 underlined the potential link between emulsifiers and intestinal inflammation, colorectal, breast and prostate cancers. In addition, a recent cohort study published in 2024 has unveiled a potential link between the consumption of certain emulsifiers (E407, E407a, E471) and an increased risk of cancer.
- *Arcobacter* risk to the food industry and human health
  In 2022, a study found that 22.3% of food samples tested contained *Arcobacter*, with *A. butzleri* being the most prevalent species. This species is commonly linked to human illnesses. In August 2023, a study was published on antibiotic resistance of *A. butzleri* strains from food and clinical samples. All the tested strains were resistant to tetracycline and cefotaxime.

8.3 Update on Oceans and Emerging Chemicals project by Angelo Maggiore (EFSA)

EFSA's foresight project on the safety of food and feed from the oceans is addressing future ocean usage and its potential impacts on food/feed safety and risk assessment. An in-person workshop in Lisbon March 2024 aimed to explore future scenarios for sea transport, trade, aquaculture, and seabed mining, focusing on implications for food/feed safety, risk-benefit analysis, and sustainability assessments. The findings will be reviewed in future EREN and StaDG-ER meetings, and further analysed under EFSA's horizon scanning workflow.

EFSA's SCREENER project evaluates emerging chemical risks in the food chain, specifically assessing 212 REACH chemicals and additional halogenated organic chemicals found in food samples using advanced mass spectrometry methods. Fifteen chemicals were prioritized for in-depth analysis, with the results of the hazard and exposure assessments presented. An upcoming workshop in September 2024 aims to discuss collaborative efforts for a permanent emerging chemical risk identification system and contribute to the development of an early warning system for such risks.

8.4 Update on food supplements project by Milen Georgiev (EFSA)

The Project on food supplements was organised via Tailor-Made Activities of EFSA's focal points and initiated at the end of April 2024. The participating countries include France, Italy, the Netherlands, Portugal, Ireland, Belgium, Denmark and observers from Sweden and Latvia.

8.5 Newsletter on emerging risk activities by Milen Georgiev (EFSA)

An update was provided to the StaDG-ER regarding a newsletter that is emailed to network members. The first issue was released in November 2023 and can be accessed via EFSA's Salesforce system. The newsletter focuses on recent meeting topics, including significant food safety incidents and issues. Its goal is to provide timely information, departing from EFSA's previous practice of annual reports on emerging risks. Some recent updates and topics were about: 1) Tara flower, 2) Lead in applesauce outbreak, 3) Global safety concerns on spices, 4) Chronic Wasting Disease (CWD) in deer.

8.6 Update on ERAP platform by Marina Mukhamadieva (d-fine)

The new emerging risk analysis platform (ERAP) was introduced; it aims at centralizing the emerging risk analysis process. The meeting included a demonstration of the platform's various functionalities. Participants were invited to use the platform and providing feedback for further improvement.

9. AOB/Final discussions & Conclusions

9.1 Potential risk associated to the use of disposable gloves by Paul Hepburn (FDE)

Findings were presented on the potential risks associated with disposable gloves, focusing on microbiological and chemical risks from inherent glove materials rather than contamination from reuse. The review highlighted the inadequacies of current safety standards, and discussed concerns about occupational health, physical hazards, and contamination from manufacturing processes. EFSA will check whether this issue falls under its remit.

Points 8.1, 8.2, 8.3, and 8.4 were also included in the agenda of the 31st EREN meeting. Below, you will find the link to the complete version of the 31st EREN's web minutes.

https://www.efsa.europa.eu/sites/default/files/2024-06/-minutes_7.pdf

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Location: Venue: EFSA Premises, Parma
Meeting room MTG SEAT 00/M05
Parma & Hybrid

Participants

StaDG-ER Members

No.	Name	Organisation	Attending /Apologies
1	Lauren Tuchman	Association for Natural Medicine in Europe e.V (ANME)	Attending (online)
2	Mihai Ionita	Association of the European Self-Care Industry (AESGP)	Attending (online)
3	Birgit Roser	AVC Association of Veterinary Consultants	Attending (online)
4	Rimma Ishimbaeva	AVC Association of Veterinary Consultants	Attending (in person)
5	Miguel Angel Prieto Arranz	Cefic (European Chemical Industry Council)	Attending (online)
6	Gianluca Nurra	COCERAL AISBL	Attending (in person)
7	Jan Dahl	Copa and Cogeca	Attending (in person)
8	Ondina Afonso	EuroCommerce	Attending (online)
9	Hélène Collignon	European Biostimulant Industry Council (EBIC)	Attending (online)
10	Lea Pallaroni	European Compound Feed Manufacturers' Federation (FEFAC)	Attending (in person)
11	Arnaud Bouxin	European Compound Feed Manufacturers' Federation (FEFAC)	Attending (online)
12	Christian Bruun Kastrup	European Dairy Association (EDA)	Attending (online)

13	Christian Quinet	European Federation for Animal Health and Sanitary Security (FESASS)	Attending (online)
14	Nina McGrath	European Food Information Council (EUFIC)	Apologies
15	Lis Alban	European Livestock and Meat Trades Union (UECBV)	Attending (in person)
16	Maurizio Ferri	Federation of Veterinarians of Europe (FVE)	Attending (in person)
17	Patrick Coppens	Food Supplements Europe	Attending (online)
18	Paul Anthony Hepburn	FoodDrinkEurope	Attending (in person)
19	Laura Martín Oropesa	FoodServiceEurope	Attending (online)
20	Jeroen Meeussen	IBMA - International Biocontrol Manufacturers Association	Attending (online)
21	Christophe Derrien	International Platform of Insects for Food and Feed (IPIFF)	Attending (online)
22	Mandy Veillette	PETA Science Consortium International e.V.	Apologies
23	Kalila Hajjar	Primary Food Processors (PFP)	Apologies
24	Luigi Tozzi	SAFE Food Advocacy Europe (SAFE)	Attending (in person)
25	Bizhan Pourkomailian	Serving Europe	Attending (in person)
26	Stefan Ronsmans	Union of European Beverages Associations (UNESDA)	Attending (in person)

External speakers

Name	Organisation	Attending /Apologies
Nicola King	Institute of Environmental Science and Research (ESR), New Zealand	Attending (online)
Laurent Delooz	European Federation for Animal Health and Sanitary Security (FESASS)	Attending (online)
Dr Tim Harwood	Cawthron Institute (NZ)	Attending (online)
Dr Sarah Finch	AgResearch	Attending (online)
Marina Mukhamadieva	d-fine	Attending (online)

EFSA

Bernard Bottex, Raquel Garcia Matas, Aikaterini Vlachou, Milen Georgiev, Angelo Maggiore, Georgia Gkrintzali, Aurore Czerwiec, Clémentine Eynard (Knowledge, Innovation and Partnership Management Unit), Eric Barthelemy (FIP Unit), Anna Christodoulidou (FEEDCO Unit)

European Commission / EU representative

Sandrine Amsler, Eleni Gkana, Olga Goulaki, Panagiota Filippou from DG SANTE.

Observers

Nicola Colombo - Global Head of SGS DIGICOMPLY representing TIC Council Liaison

Apologies were received from:

	Name	Organisation
1	Sara García Figuera	European Biostimulant Industry Council (EBIC)
2	Nina McGrath	European Food Information Council (EUFIC)
3	Jérémy Belzunces	IBMA - International Biocontrol Manufacturers Association
4	Blanca Suarez	Nanotechnology Industries Association
5	Antoine D'haese	SAFE Food Advocacy Europe (SAFE)
6	Mandy Veillette	PETA Science Consortium International e.V.
7	Kalila Hajjar	Primary Food Processors (PFP)