



CANADIAN SUPPLY CHAIN FOOD SAFETY COALITION

COALITION CANADIENNE DE LA FILIÈRE ALIMENTAIRE POUR LA SALUBRITÉ DES ALIMENTS

Risk Management Toolkit Workshop Report

February 10 & 11, 2021

Executive Summary

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CSCFSC Risk Management Toolkit Workshop Report - Executive Summary

On February 10th and 11th, 2021, the Canadian Supply Chain Food Safety Coalition (CSCFSC) convened a two-day virtual Risk Management Toolkit Workshop.

Ongoing commitment to food safety

The CSCFSC and its members have been and continue to be actively engaged in the modernization of Canada's food safety regulatory regime including early engagement in the drafting of the Safe Food for Canadians Act (starting in 2010) and Regulations (starting in 2012).

Workshop Sponsors and Steering Committee

The Workshop was made possible through financial support from the following ***Workshop Sponsors***:

- Canadian Federation of Agriculture
- Canadian National Millers Association
- Canadian Poultry & Egg Processors Council
- Canadian Produce Marketing Association
- Food, Health and Consumer Products of Canada
- Maple Leaf Foods

And, through the engagement of the following ***Workshop Steering Committee Members***:

- Canadian Hatching Egg Producers
- Canadian National Millers Association
- Canadian Poultry & Egg Processors Council
- Canadian Produce Marketing Association
- CropLife Canada
- Food, Health and Consumer Products of Canada
- Food Processors of Canada
- Maple Leaf Foods
- Canadian Food Inspection Agency (CFIA)
- Health Canada (HC)
- Public Health Agency of Canada (PHAC)
- Canadian Research Institute for Food Safety (CRIFS)/University of Guelph
- Canadian Supply Chain Food Safety Coalition

NOTE: For more comprehensive details, please see the CSCFSC Risk Management Toolkit Workshop Report.

Workshop Participants

Participants included invited domestic and international speakers, members of the CSCFSC and their respective members, as well as representatives from government and academia. In total, approximately 90 stakeholders from over 60 industry, government, and academic organizations participating over the 2-day Workshop.

Workshop Objectives

With the coming into force of the Safe Food for Canadians Act and Regulations (SFCA/SFCR), Canada has begun the transition to a less prescriptive, more outcome-based regulatory environment. While this presents welcomed opportunities for new and innovative approaches and processes, it also raises questions and uncertainties regarding what constitutes appropriate risk management activities for the delivery of safe food, including the nature and the amount of evidence and/or data required to support that required food safety outcomes are indeed being met, or exceeded, as part of a comprehensive risk management strategy.

In this context, six objectives were identified for the CSCFSC Risk Management Toolkit Workshop:

1. Review the concepts of risk management and the current international toolkit developed by Codex Alimentarius, including food safety objectives, performance objectives, performance criterion, etc. and their use along the supply chain to control hazards (biological, chemical or physical);
2. Review other “tools” related to risk management and risk communication (e.g. 3rd party certifications, labelling, cooking instructions, consumer education/behavioural change) that can be utilized;
3. Review how the use of these concepts has been adopted by various international jurisdictions (e.g. UK, US);
4. Discuss what the format and criteria should be for a transparent Canadian policy statement and procedural document on the use of these concepts in Canada’s evolving outcome-based safety system (e.g. when certain tools should be used, how they should be used, what the scientific and practical criteria should be for their use, what the consultation and decision-making processes should be);
5. Define additional work that may be required to further the dialogue;
6. Publish a Workshop Report, that if appropriate, includes recommendations

Workshop Overview

The Workshop:

- focused on knowledge sharing around risk management concepts, particularly how the different tools in the Codex risk management “toolkit” are being utilized in international and Canadian contexts from a government, academia, and industry perspective.
- fostered open discussions around transparency and explored best-practices and lessons-learned relating to an outcome-based food safety system including such topics as data sharing, consultation and decision-making processes, and, the identification of gaps.
- created opportunities for participants representing various interests to identify mitigation strategies and to make recommendations in regard to potential ways to address the identified gaps.

Workshop Day 1: Knowledge Sharing Presentations

Introduction to the Risk Management Toolkit and its role in Codex

Dr. Jeff Farber (Adjunct Professor, Dept of Food Science, University of Guelph) set the stage for the Workshop by providing participants with a common starting point in regard to the Codex Alimentarius Commission (CAC), the evolution of the Risk Management Toolkit and the terminologies used including: Traditional (Product Criterion, Process Criterion, Microbiological Criterion); Risk-based Microbial Management metrics (Food Safety Objectives (FSO), Performance Objectives (PO), Performance Criteria (PC)); Risk Analysis (Risk assessment + Risk management + Risk communication); determination of Appropriate Level of Protection (ALOPs) by national competent authorities; FSO Principles; PO Principles; and respective government and industry responsibilities.

UK FSA Approach to using the Risk Management Toolkit

Rebecca Sudworth (Director of Policy, UK Food Standards Agency) provided an overview of the UK Risk Analysis Process starting with an introduction to the Food Standards Agency (FSA). It was noted that: transparency is a guiding principle for the FSA and is key to maintaining public confidence; FSA Board meetings are open to the public; the risk assessment process is science and evidence based; and that the role of FSA independent Scientific Advisory Committees has been expanded and new experts and new groups have been added.

USDA-FSIS Approach to using the Risk Management Toolkit

Dr. Michelle Catlin (International Coordination Executive, USDA-FSIS) provided participants with an overview of the USDA-FSIS and its Risk Management Process including the setting of Healthy People goals HP2020/2030 (similar to ALOPs). It was noted that: HP2020/2030 (ALOPs) provide national public health objectives/goals; transparency provides all stakeholders with information and also provides an incentive for industry; and that guidance documents are designed to meet needs of small and very small as well as larger establishments.

Canada's Outcome-based Safe Food for Canadians Regulations

Tammy Switucha (Executive Director, Food Safety and Consumer Protection Directorate, CFIA) provided an overview of Canada's shift to a more outcome-based food safety framework and its alignment with Codex principles. This shift includes: the Modernized Regulatory Toolkit (i.e. Safe Food for Canadians Act and Regulations (SFCA and SFCR)); the CFIA Integrated Risk Management Framework, and, the CFIA Program Management Framework. An overview of CFIA Risk Communication and industry's responsibility for managing risks under the SFCR was also provided. It was noted that both industry and government have a role to play in a successful outcome-based system.

PHAC FoodNet Canada as a Risk Management Tool

Andrea Nesbitt (Acting Manager for Enteric Disease Surveillance, Foodborne Disease and Antimicrobial Resistance Surveillance Division, PHAC) provided an overview of PHAC's FoodNet Canada and its use as a Risk Management Tool including: the ability to identify and prioritize risks; engagement with Federal/Provincial/Territorial (F/P/T) governments and industry food safety partners on where to target risk mitigation and prevention activities; the use(s) of surveillance data; and the assessment of the effectiveness of food safety activities and public health measures. It was also noted that surveillance involves collaboration with public health at all levels of government, provincial agriculture and environment, industry and other stakeholders.

An Academic Perspective

Dr. Elizabeth Bihn (Produce Safety Alliance and Institute for Food Safety at Cornell University) provided an overview of the Produce Safety Alliance (PSA) including its role, observations/learnings and challenges in helping produce growers meet the requirements of the U.S. Food Safety Modernization Act (FSMA). It was

noted that in general, “people want to do the right thing” but need to know what the right things are and how to do them and that reducing risks prevents illnesses, saves lives, and creates economic opportunities.

An Industry Perspective - Produce

Scott Wright (Ph.D., Head Grower & Interim G.M. - Whole Leaf - The Star Group) provided an overview of the Star Group and a produce industry perspective on outcome-based food safety regulations and risk management, including: the importance of starting from a position of compliance; the need to determine reasonable goals that include risk mitigation strategies that are based on science; and, that government will not tell industry how to be compliant.

An Industry Perspective - Meat

Christian Fuchs (Director, FSQA Poultry, Maple Leaf Foods) provided participants with an overview of Maple Leaf Foods (MLF) and the MLF Fresh Poultry Pathogen Journey including MLF’s commitment to make their products safe and to share information on best-practices and precautions against foodborne illnesses that will ensure food safety while preparing, cooking, and storing food. The importance of Risk Analysis, defining of goals and establishment of a monitoring program with metrics to measure improvement or risk reduction was also noted.

Workshop Day 2: Case Studies

Case Study 1: Risk Management Case Study 1 (Microbial): Frozen Ready-to-Cook (Raw) Breaded Chicken Products

Erica Charlton (Technical Director, Canadian Poultry & Egg Processors Council) and Isabelle Laberge (Acting Senior Director, Food Safety Division, Food Safety and Consumer Protection Directorate, CFIA) provided participants with an example of government-industry engagement and the resulting voluntary and ultimately regulatory actions implemented to address salmonellosis outbreaks associated with Frozen Ready-to-Cook (Raw) Breaded Chicken Products (FRBCP) from 2015 to 2019. The use of PHAC FoodNet Canada data and the attempts at consumer risk communication and messaging (e.g. social media and labelling) were noted. This case study highlighted that where all practical labelling measures and reasonable efforts to enhance consumer awareness and/or practices fail to reduce incidence of foodborne illness, other interventions can be expected.

Case Study 2: Risk Management Case Study 2 (Chemical - Mycotoxin): Use of the FSO Approach

Dr. Marta Taniwaki (Instituto de Tecnologia de Alimentos, São Paulo (ITAL)) provided an overview of the application of FSO to mycotoxins, Brazilian regulations for six mycotoxins in 20 food categories, and, specific examples of phased in regulatory requirements related to: Fumonisin in maize; Ochratoxin A (OTA) in coffee, dried fruits and wine; Aflatoxins in peanuts. The importance of research, transparency and time were noted including that it took more than 30 years for Brazil to have regulations for the six mycotoxins. The work of the Codex Committee on Contaminants in Foods (CCCF) and its contribution to food safety and fair trade were also highlighted.

Case Study 3: Risk Management Case Study 3 (Chemical - Allergen)

Michael Abbott (Section Head, Food Allergy and Intolerance Assessment Section, Chemical Health Hazard Assessment Division, Food Directorate, Health Canada) provided a background on food allergies and Celiac Disease in the Canadian population and Canadian food allergen labelling requirements followed by details in regard to: what makes food allergens different from other hazards; health risk assessments (HRAs) for allergens including: Hazard Assessment; Exposure Assessment / Likelihood of Consumption; Risk Characterization; Levels of Health Risk and Risk Mitigation. Examples of HRAs and risk mitigation in typical scenarios were also provided.

Workshop Recommendations and Next Steps

Recommendation 1: Increase focus on collaboration, transparency, information and data sharing as tools to enhance Risk Management

Examples/Rationale:

- (a) Utilize the approach taken during the development of the SFCA/SFCR for all policy and regulatory initiatives (i.e. early engagement; opportunity for Stakeholder review pre-Canada Gazette Part I, etc.). This was proven to be successful and valuable approach for stakeholders resulting in a relatively smooth implementation. A similar approach should also be considered when developing guidance documents.
- (b) Establish within the Health Portfolio (CFIA/HC/PHAC) an effective, ongoing industry advisory forum or committee on food safety policy, regulations and guidance including regular scans of global initiatives (i.e. a permanent and expanded version of the CFIA Ad Hoc Industry Advisory Committee). A permanent Committee such as this would be of value to both government and industry and aid in enhancing and keeping the Canadian food safety system current. A permanent committee could work collaboratively in regard to: the potential formation of topic specific Scientific Advisory Committee(s) (e.g. potential use of the UK FSA approach as a model); data sharing models to increase sharing of industry generated and/or funded data; development and/or review of targeted guidance materials (e.g. Micro/Small/Medium Sized Enterprises (MSMEs) and larger companies; sector specific; etc.); expanded communication/transparency with all stakeholders including MSMEs and consumers; improved searchability of the government website to more easily and consistently locate information and provide awareness of updated information; etc..
- (c) Reinstate annual (or more frequent) CFIA/HC Stakeholder Engagement meetings and expand to include PHAC (e.g. FoodNet Canada) and government research updates as well as regulatory updates. This would ensure that a broader stakeholder group is aware of PHAC initiatives, research and regulatory activities on a more consistent basis and in a more consistent manner while providing an opportunity for stakeholders to provide input, seek clarity, etc.
- (d) Establish common public / private sector competencies for food safety inspectors, food safety auditors and other personnel, related training opportunities and career-based competence recognition systems/frameworks to ensure effective implementation of the new food safety regulatory regime, industry best practices, etc. Increased cooperation and communication between government and all stakeholders along the supply chain continues to be needed in order to ensure mutual and consistent understanding, interpretation, application and /or enforcement of the less prescriptive, more outcome-based regulations. It has been said that food safety is a partnership. The development of mutually agreed to competencies, use of common training materials and the opportunity for joint training sessions would aid in providing clarity, perspective, recognition and acceptance of respective roles and responsibilities in the delivery of food safety and also contribute to competitiveness and innovation.

Recommendation 2: Increase focus on sharing, visibility, awareness and expansion of PHAC FoodNet Canada activities as a Risk Management Tool

Examples/Rationale:

- (a) Enhance communication in regard to PHAC FoodNet Canada activities (e.g. through annual or more frequent CFIA/HC/PHAC Stakeholder Engagement Meetings as well as thorough other communication vehicles that encompass both industry and consumers). It is important to note that a number of Workshop Participants were not aware of the work undertaken by PHAC in this area.

- (b) Expand PHAC FoodNet Canada surveillance and reporting activities to include other food commodities and allergen/allergic reactions.
- (c) Expand the number and/or population focus of PHAC FoodNet Canada sentinel sites beyond the current 4 sites (i.e. currently located in British Columbia, Alberta, Ontario and Quebec). Expansion could include: a sentinel site in each province/territory/region; a focus on indigenous populations.

Recommendation 3: Further clarify and communicate inspector and industry roles and responsibilities in an outcome-based regulatory regime

Examples/Rationale:

- (a) Enhance guidance in regard to validation (i.e. provide clarity in regard to what data, how much data and from what sources).
- (b) Provide increased clarity in regard to what the options are when an inspector and a company (or sector) disagree in regard to validation studies/data.

Recommendation 4: Renew investment in consistent consumer education/messaging and increase awareness of consumer role in the food safety continuum

Examples/Rationale:

- (a) Enhance proactive, consistent, science-based food safety messaging to consumers. Such messaging should include not only the food safety basics (clean, separate, cook, chill) but also convey that there is no such thing as “zero risk” as well as the important role of consumers in the food safety continuum. In many instances the consumer is the final critical control point (CPP) (i.e. food safety is: in their hands; in the decisions they make). Messaging could be more proactively delivered via websites, through social media, or other means).
- (b) Develop standardized, science-based food safety curriculum and encourage its use in schools starting at the primary level and continuing. School aged children have been key drivers in societal changes such as recycling and reduction of smokers in the population.
- (c) Enhance the availability of food handler certification in high schools. At some point all individuals will be preparing food for themselves and/or others. Food handler certification, similar to Child Care courses, is a public good.
- (d) Engage with cookbook/recipe providers and cooking show hosts to incorporate accurate, science-based food safety information (e.g. including links to published government information). Cookbook/recipe providers and cooking show hosts have the potential to impact significant numbers of consumers and it is imperative that accurate information be perpetuated in order to minimize risk.

Recommendation 5: Focus on enhanced collaboration and sharing of information in order to be prepared for potential emerging issues

Examples/Rationale:

- (a) Increase and formalize the sharing of food safety risk intelligence information between all stakeholders (i.e. government (AAFC, CFIA, CI-PSC, HC, PHAC), industry and academia).
- (b) Conduct table-top exercise(s) where learnings from COVID-19 (even though not a food safety issue) can be shared and expanded on in regard to potential emerging food safety risks.
- (c) Develop best practices for use at the time of an emerging food safety issue.

Next Steps

The CSCFSC will pursue further discussions with CSCFSC Members and the Health Portfolio (CFIA/HC/PHAC) in regard to potential implementation and prioritization of the Recommendations.