

GForSS WEBINAR | in partnership with the Canadian Food Inspection Agency (CFIA) and the AFRAF Academy

Food Import Risk Analysis: The Canadian Experience

Introducing the Food Import Risk Explorer (FIRE)

27 July 2026 • 8:30 – 9:30 a.m. (Ottawa time) • Online live webinar

Programme — Minute-by-Minute Agenda

Time	Activity	Lead
08:30 – 08:31	Welcome animation / GForSS Webinar Instructions video	<i>Secretariat</i>
08:31 – 08:33	GForSS – Five Years of Impact video	<i>Secretariat</i>
08:33 – 08:36	Welcome and introduction of the webinar	Prof. Samuel Godefroy — President, GForSS (Master of Ceremonies)
08:36 – 08:38	AFRAF Academy introductory video	<i>Secretariat</i>
08:38 – 08:41	Opening remarks	Dr. Mamadou Ba — Director General, Food Safety and Quality Authority of The Gambia; Chair, FAO/WHO Coordinating Committee for Africa (CCAfrICA)
08:41 – 08:43	AFRAF introductory video	<i>Secretariat</i>
08:43 – 08:46	Welcome remarks (to be confirmed)	Dr. Tarek El-Houby — Chairman, AFRAF; Chairman, Egyptian National Food Safety Authority
08:46 – 08:49	Welcome remarks (to be confirmed)	Prof. Charles Aworh, Nigeria — Co-Senior Mentor, AFRAF Academy
08:49 – 08:50	Canadian Food Inspection Agency (CFIA) introductory video	<i>CFIA</i>
08:50 – 08:51	Introduction of the CFIA speakers and technical session	<i>Master of Ceremonies</i>
08:51 – 08:56	Canada's Risk-Based Approach to Food Import Oversight	Pamela MacDonald — Director General, Food Operations, CFIA
08:56 – 09:04	Overview of the Food Import Risk Explorer (FIRE) and its Policy Applications	Catherine Semple — Program and Policy Leader, CFIA
09:04 – 09:12	Technical Design of FIRE: Advanced Data Analytics and Risk Modelling	Ashwani Tiwari — Lead, Advanced Data Analytics & Risk Modelling, CFIA
09:12 – 09:15	Comparative Risk Assessment and the Scientific Foundations of FIRE	Greg Paoli — CEO & Principal Risk Scientist, Risk Sciences International Inc.
09:15 – 09:30	Questions & Answers (simultaneous interpretation in French and Arabic)	<i>Moderated by Prof. Samuel Godefroy with all speakers</i>

Speakers & Their Participation

Prof. Samuel Godefroy — *President, Global Food Regulatory Science Society (GForSS) — Master of Ceremonies*

Chairs the webinar, opens the session and moderates the Q&A, guiding participants through the programme and the technical discussion.

Dr. Mamadou Ba — *Director General, Food Safety and Quality Authority of The Gambia; Chair, FAO/WHO Coordinating Committee for Africa (CCAfrica)*

Delivers the opening remarks, situating the webinar within Africa's food safety coordination agenda.

Dr. Tarek El-Houby — *Chairman, AFRAF; Chairman, Egyptian National Food Safety Authority*

Offers welcome remarks on behalf of the African Food Regulatory Authorities Forum (AFRAF).

Prof. Charles Aworh — *Nigeria — Co-Senior Mentor, AFRAF Academy*

Provides welcome remarks reflecting the capacity-building mission of the AFRAF Academy.

Pamela MacDonald — *Director General, Food Operations, Canadian Food Inspection Agency (CFIA)*

Presents Canada's risk-based approach to food import oversight, framing the policy context for FIRE.

Catherine Semple — *Program and Policy Leader, CFIA*

Provides an overview of the Food Import Risk Explorer (FIRE) and its policy applications.

Ashwani Tiwari — *Lead, Advanced Data Analytics & Risk Modelling, CFIA*

Explains the technical design of FIRE, including its advanced data analytics and Bayesian risk modelling.

Greg Paoli — *CEO & Principal Risk Scientist, Risk Sciences International Inc.*

Discusses comparative risk assessment and the scientific foundations underpinning FIRE.

Notes

- Simultaneous interpretation into French and Arabic will be provided for the technical presentations.
- For the Q&A session, simultaneous interpretation into Arabic will be offered and successive interpretation into French will be provided.
- Opening and welcome remarks may be adjusted slightly depending on the confirmation of invited speakers.
- The Master of Ceremonies will encourage participants to submit questions throughout the presentations via the webinar chat to facilitate the Q&A session.
- All times are shown in Ottawa time (EDT).

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About the Webinar

Canada imports roughly \$69.4 billion in agri-food and seafood from more than 220 trading partners each year. Overseeing a supply chain this vast and varied demands a structured, risk-based approach that directs finite resources to where they matter most.

This webinar introduces the Food Import Risk Explorer (FIRE), CFIA's comparative risk model. FIRE expresses the health burden of imported-food hazards in Disability-Adjusted Life Years (DALYs) at the food–hazard–country-of-origin level — a single, transparent currency for ranking risks across the entire import system.

Its hybrid design pairs a bottom-up pathway — prevalence, exposure, dose–response, burden — with a top-down reconciliation against national foodborne-illness estimates, so each direction constrains the other. DALY-based quantitative risk assessment is the gold-standard class of method in FAO/WHO and EFSA guidance, and combining both directions is recognized as more robust than either alone.

FIRE's real edge is in the prevalence estimate itself: instead of raw positive counts — unstable at the low prevalences typical of surveillance — it uses Bayesian, hierarchical modelling that fuses priors from published literature and recall intelligence with CFIA sampling data, yielding sharper, more stable estimates with explicit uncertainty even where data are thin.

Worked examples show how FIRE outputs drive real decisions — prioritizing risk reviews, targeting inspections and sampling, and forecasting emerging risks — with a look ahead to chemical hazards, allergens, and AI-enabled automation. The Canadian experience offers practical, transferable lessons for regulators and risk assessors worldwide, particularly those heavily reliant on imported food.

What attendees will take away

- How a single health-burden metric (DALYs) makes risks comparable across food–hazard–country combinations.
- How a hybrid design and Bayesian, hierarchical prevalence estimation make comparative estimates more precise, transparent, and defensible.
- How model outputs translate directly into regulatory action — and where import risk analytics is heading.

Presenters: Pamela MacDonald, Ashwani Tiwari and Catherine Semple (CFIA), and Greg Paoli (Risk Sciences International).

Organised by the Global Food Regulatory Science Society (GFRSS), hosted by

