



CFIA experts, in collaboration with members of academia, as well as, representatives from the Public Health Agency of Canada and Health Canada participated in the development. This Scientific Advisory Committee (SAC) provided advice and leadership, and worked along with a CFIA technical working group.

A scientific and transparent approach was followed in the development of the model; positioning the CFIA as global leader in food safety. Six steps were followed and are/will be described in peer-reviewed scientific papers.



- The Scientific Advisory Committee (SAC) was established (2012/2013)
- Members of the SAC visited countries (France, Belgium, the Netherlands, Australia and New Zealand) to learn about their risk-based food safety systems (2013). A workshop also occurred in Ottawa (2014) with other countries, such as the United States, Ireland and United Kingdom
- This exercise found that none of the assessed systems were developed in a systematic manner and no other country has done a formal validation of their model

## Benchmarking

01



- Identification of 155 risk factors from literature and expert advice
- Consultation with 75 experts from academia, industry, and government to evaluate the most significant factors affecting the food safety risk of an establishment (2013)
- A limited list of risk factors and criteria for assessment was defined considering data sources, auditability and measurability
- Articles available for reference: 1) [Identification of Risk Factors](#) 2) [Selection of Risk Factors](#)

## Identification and Selection of Factors Associated with Food Safety Risk

02



- Determination of risk factors' relative weights by consultation with experts (2014)
- Article available for reference: [Quantification of Risk Factors](#)

## Risk Factor Weighting

03



- Consultation with 49 experts on the source attribution for 31 pathogen-food commodity combinations at the sub-product level (2016)
- Article available for reference : [Source Attribution at the Sub-product Level](#)
- Algorithm development

## Source Attribution at the Sub-product Level and Design of the ERA Model

04



- The model generated the first risk assessment results for a sample of meat and dairy establishments. It was followed by pilots in all the other food commodities (2014-2018)
- Data collection tools and supporting documents were validated
- Helped ensure the model can be applied across all food commodities

## Test the Model with Pilot Projects

05



- Using data collected during the pilot projects, the outputs of the model were assessed by correlating them with the results obtained from the assessment of senior CFIA inspectors
- This performance assessment helped refine criteria for the final model

## Performance Assessment of the Model

06



- Apply refinements as needed. The ERA model is flexible and adaptable to be able to evolve, as new risk and information becomes available, for example new processing technologies, new scientific knowledge, new pathogens, trends in specific food safety issues, etc.

## Next Steps