The Establishment-based Risk Assessment model for Renderers (ERA-Renderer) at a glance

All inedible rendering plants in Canada are required to obtain a permit to operate under the authority of the Health of Animals Regulations, and are in the scope of the Establishment-based Risk Assessment model for renderers (ERA-Renderer model). A scientific and transparent approach was followed in the development of the model, positioning the CFIA as global leader in feed safety. 6 steps were followed and will be described in peer-reviewed scientific papers.



Identification of Canadian experts

 A Scientific Advisory Committee (SAC) composed of 7 Canadian experts from academia (Université de Montréal, University of Manitoba, University of Saskatchewan), industry, and government (CFIA) was created to provide advice for the duration of the model development, and to work with a CFIA technical working group (CFIA and Université de Montréal).





Identification and selection of risk factors associated with feed safety

- Based on a scientific literature review and advice from the SAC, 32 feed safety-related risk factors were identified and selected to be included in this risk assessment model for rendering plants.
- 177 criteria for assessing each risk factor were defined based on common practices used in the Canadian rendering industry.
- Risk factors and criteria are grouped into 3 clusters: inherent risk factors, mitigation factors and compliance factors.





Assessment criteria weighting

- In June 2021, 20 Canadian experts participated in an expert elicitation to estimate the relative risk (RR) of the assessment criteria based on their expected impact on both animal and human health.
- The median RR value estimated by the experts for each criterion is being used to build this new risk assessment model.





Design of the ERA-Renderer model

 The risk assessment of a rendering plant is calculated based on its contribution to the national rendered products volume which is adjusted considering the presence or absence of the applicable assessment criteria and their impact (RR).





National data collection

- In fall 2021, a national data collection will be performed for all rendering plants in Canada.
- While providing results to conduct the performance assessment, this step will also enable the validation of the data collection tool and supporting documents.





Performance assessment of the model

- Using data collected during the national data collection, the outputs of the ERA-Renderer model will be assessed by correlating them with the results obtained from the assessment done by CFIA senior inspectors.
- Correlation obtained will confirm the applicability of the ERA-Renderer model. Refinements will be applied as needed.





Next steps

- The ERA-Renderer model results will be used to categorize rendering plants based on their level of feed safety risk and allocate inspection resources accordingly.
- The ERA-Renderer model is flexible and adaptable to be able to evolve, as risk change and new information becomes available, for example: innovative practices implemented by the rendering industry, new scientific knowledge, new risks such as emerging pathogens, trends in specific feed safety issues.