

Call for experts on source attribution of foodborne disease hazards

20 September 2023

Note: This call for experts will remain open until the required number of participants is reached.

WHO is issuing an open call for experts who can contribute to develop estimates of the global burden of foodborne disease, in particular by participating in a structured expert elicitation study on the attribution of diseases to food and other pathways.

Introduction

WHO is actively working to update the global estimates of the burden of foodborne diseases, following a new resolution in 2020 (WHA73.5)¹. WHO technical advisory group, Foodborne Disease Burden Epidemiology Reference Group for 2021-2025², is supporting WHO on its estimation process, and in particular its Source Attribution Task Force (SATF) has a mandate to advise WHO on a methodology to attribute a source. For rolling out the actual global expert elicitation, a team under Dr Tina Nane, Associate Professor at the Delft University of Technology³, has been awarded to lead the study through the public bidding process⁴.

Background

The estimation of the global burden of foodborne disease is a stepwise process involving many different data from various sources.

First, systematic reviews and surveillance data will provide an estimate of the true incidence of disease caused by hazards that can be transmitted by food. Then, disease models are used to estimate the impacts of these diseases on mortality and disability-adjusted life years (DALYs). Foodborne hazards can be transmitted through a variety of foods, and determining their relative contribute for disease is crucial to inform food safety policies. Many foodborne hazards can also be transmitted by other pathways including water, soil, or direct contact with humans or animals. Therefore, source attribution is an essential next step in the estimation process. See

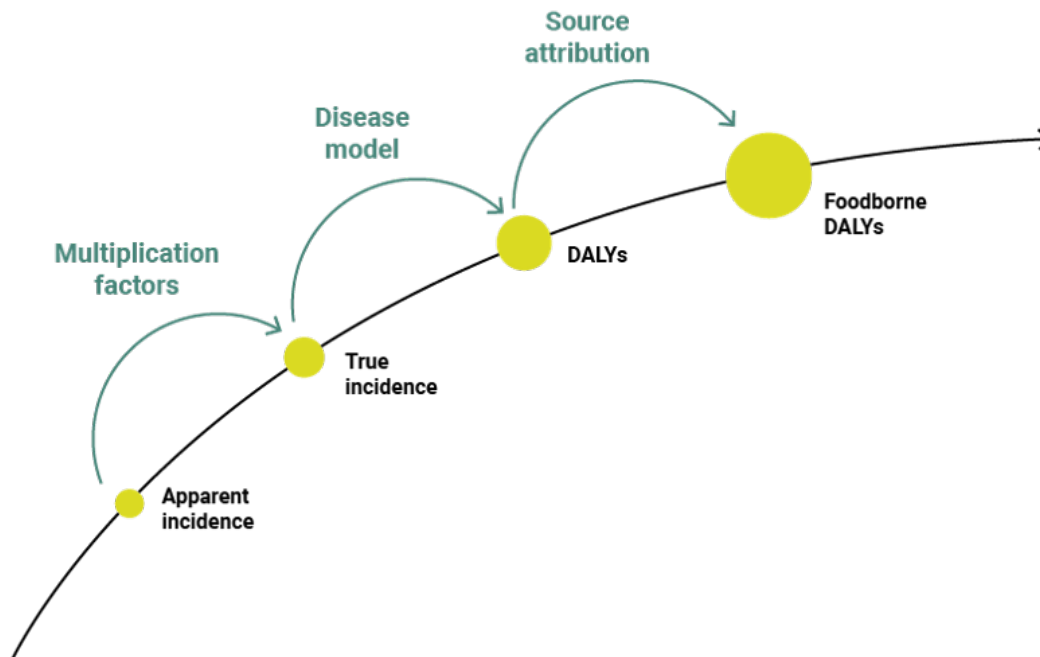
¹ https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_R5-en.pdf

² [https://www.who.int/groups/foodborne-disease-burden-epidemiology-reference-group-\(ferg\)](https://www.who.int/groups/foodborne-disease-burden-epidemiology-reference-group-(ferg))

³ <https://www.tudelft.nl/health/rising-stars-stories/rising-stars-profielen/tina-nane>

⁴ <https://cdn.who.int/media/docs/default-source/foodborne-diseases/ferg/ferg-satf-001-tor.pdf>

Chapter 5 of WHO publication, ‘Estimating the burden of foodborne diseases: A practical handbook for countries’⁵ for more details on the burden estimation method.



Structured expert judgement as a method for source attribution

What is structured expert judgment?

Structured expert judgement is a structured elicitation of scientific judgment from a group of subject matter experts, using a questionnaire or structured interview. The method that has been chosen for this project will include a set of questions that is used to objectively measure each expert’s ability to quantify uncertainty when they are providing expert judgments. This will allow WHO to determine how confident we are in the scientific judgments provided. Methods for eliciting professional judgments have been developed since the emergence of risk assessment as a central tool for informing environmental, engineering, health and safety decisions since the mid-1970s. Expert elicitations are not an alternative to data or primary research where it is available. Instead, they are a transparent and scientifically rigorous alternative to use of individual researchers’ judgments in scientific modeling. The expert elicitation will be used by the research teams to identify the proportion of specific diseases, where no data or primary research exists, that is attributable to specific foods. See Annex 2 of the WHO publication, ‘Estimating the burden of foodborne diseases: A practical handbook for countries’ to read more details on source attribution methods.

⁵ <https://www.who.int/publications/i/item/9789240012264>

How will the Structured Expert Judgment study work?

When experts are selected to participate in the study, they will be invited for an one-on-one interview through a web-based conferencing system, which will last approximately two hours. Before the interview, they will be asked to study a background document, in which available information related to the elicitation questions is summarized. Participating experts will also have access to videos and other training materials that will introduce the study, and the method used to elicit their uncertainty assessments. During the interview they will be requested to answer a first set of questions and send the study team the results by email before the interview has concluded. After the interview, participating experts will complete a second questionnaire at their own pace, which shall be returned within two weeks. Filling in the questionnaire may take an additional two hours. It will not be required to answer any questions that are outside of their expertise.

The outcomes of the global expert elicitation studies previously conducted have been published elsewhere.^{6,7,8}

How will the results of the expert elicitation be used?

The structured expert judgement is a critical part of burden estimation process. WHO plans to publicize the final estimates of the global, regional and national burden of foodborne disease by 2025, and associated economic burden of foodborne diseases when appropriate. The results of the expert elicitation study are planned to be part of the WHO publications and accompanying scientific publications and an online dashboard. Once completed, the results shall assist Member States to guide policy decisions at the national level based on sound evidence, and to improve resource allocations for preventing foodborne diseases.

Call for Experts

WHO is globally seeking experts who have expertise in food safety or other related fields such as water, environment and hygiene, to participate in the global expert elicitation study. All applicants should meet the following general criteria:

- Advanced university degree in food science, public health, veterinary public health, microbiology, zoonoses, epidemiology, water and sanitation or any other related fields;
- At least five years of professional experience in epidemiology, risk assessment and/or ecology of hazards that can be transmitted by foods;
- A record of scientific publications in peer-reviewed journals or other proof of relevant expertise;

Selection of experts

⁶ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0145839>

⁷ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0183641>

⁸ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0149817>

Applicants' curricula vitae (CV) will be reviewed based on the criteria listed above by a selection panel consisting of at least three WHO staffs and other relevant individuals. All qualified applicants will be notified and invited to participate in the study. Unsuccessful candidates will not be further notified.

Appointment of experts

Selected experts will be invited to contribute to the study only in their individual scientific capacity. An expert will not represent the government of the country of which he or she is a citizen or the institution with which he or she is associated. The experts designated will not receive any remuneration, however, their contributions will be acknowledged in reports and scientific papers resulting from the study.

Applications

Interested applicants should complete the online application survey as indicated below, including uploading their curriculum vitae (CV). The CV should include a description of education, relevant work experience, evidence of national or international expertise on the topic, including a list of peer-reviewed publications relevant to the factors indicated above (please do not include reprints in your submission unless specifically requested at a later date).

Before participating in any related activity, all the selected experts will be required to declare any potential interests associated with the topic of this study. Once experts are shortlisted, they will be asked to fill in the DOI form to indicate, in writing, all interests (financial and intellectual) on their part or that of their spouse that may affect, or be perceived to affect, their scientific independence as experts, including one or more of the following conditions: employment (past or present) by any commercial enterprise or private or civil sector association; receipt of research or other study grants from such enterprises or associations; shareholdings in commercial enterprises active in fields related to food safety.

Identification of interest does not necessarily indicate a conflict nor automatically exclude an individual from participation. For example, as an expert, it is expected that many, if not all, will be employed in some capacity related to the subject matter. These declarations must be completed and evaluated before a formal invitation will be issued. Declaration documents will be retained by the WHO Secretariat and a summary of declarations will be included in the report of the work. In addition, a confidentiality undertaking must also be completed prior to the appointment to ensure proper handling of dossiers and proprietary information.

Deadline

Selection of participants will begin on 1 August 2023 **and will remain open until the required number of experts is reached**. Please submit nominations and CVs at your earliest convenience.

Submissions in response to the call for experts should be sent through the following online application system:

<https://extranet.who.int/dataformv3/index.php/884626?lang=en>

Contact:

WHO secretariat

Department of Nutrition and Food Safety

Monitoring Nutrition and Food Safety Unit

Email: fbd-burden@who.int