

WHO Initiative to Estimate the Global Burden of Foodborne Diseases

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Abstract

Background The public health impact of foodborne diseases globally is unknown. The WHO Initiative to Estimate the Global Burden of Foodborne Diseases was launched out of the need to fill this data gap. It is anticipated that this effort will enable policy makers and other stakeholders to set appropriate, evidence-informed priorities in the area of food safety.

Methods The Initiative aims to provide estimates on the global burden of foodborne diseases by age, sex, and region; strengthen country capacity for conducting burden of foodborne disease assessments in parallel with food safety policy analyses; increase awareness and commitment among Member States for the implementation of food safety policy and standards; and encourage countries to use burden of foodborne disease estimates for cost-effectiveness analyses of prevention, intervention, and control measures. To estimate the global burden (expressed in disability-adjusted life-years), the Foodborne Disease Burden Epidemiology Reference Group (FERG) focused on the contamination of food with enteric and parasitic pathogens, chemicals, and toxins.

Findings Study findings will provide the technical background and challenges of assessing the burden of foodborne diseases, based on national and international studies. Systematic reviews to support estimates of the incidence and mortality of food-related diseases are being completed. Results will be used to update and refine global burden estimates for relevant food-related hazards, in the context of other international burden of disease studies. It is recognised that exposure to such hazards may also occur through other pathways including the environment (eg, water, air) and by direct transmission (eg, human-to-human and animal-to-human). Structured expert elicitation will be used to provide the basis for attribution of incidence and burden to food, and estimation of the most important food sources.

Interpretation Estimating the global burden of foodborne diseases is highly complex because of the diversity of hazards that can be transmitted by food, the multitude of health outcomes they cause, and complex transmission pathways. WHO is planning to present a global estimate for the first time in 2014.

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Contributors

All authors are current or former members of the FERG Core Group, and contributed to the development of methodology and overseeing systematic reviews. AH drafted the abstract and all authors read and approved the abstract.

Conflicts of interest

We declare that we have no conflicts of interest.

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