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# WHO ESTIMATES OF THE GLOBAL BURDEN OF FOODBORNE DISEASES



FOODBORNE DISEASE  
BURDEN EPIDEMIOLOGY  
REFERENCE GROUP  
2007-2015



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This report is a compilation of the main reports of the task forces of the Reference Group. Numerous persons contributed to or read the manuscript and provided comments, including several units in WHO headquarters and Regional Offices. The text was then edited to introduce conformity in language and style.

## FOREWORD

Foodborne diseases have been an issue for all societies since the beginning of humanity. The types, severity and impacts of these illnesses have changed through the ages and are still diverse across regions, countries and communities.

Yet there are some challenges common to all countries. Only a fraction of the people who become sick from food they have eaten seek medical care. Only a fraction of those cases are recognized as having been caused by a hazard in food, treated accordingly, reported to public health authorities and recorded in official disease statistics. Certain chronic diseases, such as cancer, kidney or liver failure, that result from contaminated food appear long after the ingestion of food and the causal link is never made for each case. This points to some of the challenges inherent in measuring the burden of foodborne diseases and the toll they take on lives and economies.

Up to now, the global burden of illness and deaths caused by foodborne disease has never been quantified. In order to fill this data vacuum, the World Health Organization (WHO), together with its partners, launched in 2006 the Initiative to Estimate the Global Burden of Foodborne Diseases. After an initial consultation, WHO in 2007 established a Foodborne Disease Burden Epidemiology Reference Group (FERG) to lead the

The objective of the initiative was not limited to providing estimates on the global burden of foodborne diseases for a defined list of causative agents of microbial, parasitic and chemical origin. The initiative also aimed at strengthening the capacity of countries to conduct assessments of the burden of foodborne disease, and encouraging them to use burden of foodborne disease estimates for cost-effectiveness analyses of prevention, intervention and control measures including implementation of food safety standards in an effort to improve national food safety systems.

Six taskforces were established under FERG, focusing on groups of hazards or aspects of the methodology. These taskforces commissioned systematic reviews and other studies to provide the data from which to calculate the burden estimates.

This report is an outcome of a decade of work by WHO, key partners and a number of dedicated individuals. Some additional findings, which cannot be integrated into this report, will be published and user-friendly online tools made available separately.

This report and related tools should enable governments and other stakeholders to draw public attention to this often under-estimated problem and mobilize political will and resources to combat foodborne diseases.

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