

# Handbook to assess the burden of foodborne diseases

June 9, 2021

## In news

The World Health Organization (WHO) June 7, 2021 released a handbook to help assess the burden of foodborne diseases and locate data gaps to help strengthen health infrastructure.

## Background

The World Health Assembly had adopted a new resolution mandating WHO to monitor the global burden of foodborne and zoonotic diseases at national, regional and international level.

It had asked the WHO to report on the global burden of foodborne diseases with up-to-date estimates of global foodborne disease incidence, mortality and disease burden by 2025.

## About the handbook

- This handbook provides detailed guidance on assessing the burden of diseases caused by microbiological agents commonly transmitted through foods.
- It is particularly intended for use at national level, and gives a complete picture of the requirements, enabling factors, challenges and opportunities involved, and the steps in the process.
- It also aims to foster harmonization of methodologies for estimating foodborne disease burden across countries.
- The goal of a national burden of foodborne disease study is to rank and prioritize foodborne diseases based on their overall public health impact in the population.

The objectives of such a study are to:

- Estimate the burden of disease for selected foodborne hazards
- Develop a framework for routine updating of estimates and evaluation of trends and
- Provide a baseline against which food safety interventions can be evaluated.

### **Burden of foodborne disease study: Disability -Adjusted Life Year (DALY)**

- In this document, the **disability-adjusted life year (DALY) is proposed as the ultimate summary measure for quantifying the population health impact of foodborne diseases.**
- The DALY measures the healthy life-years lost as a result of diseases or risk factors.
- It combines information on morbidity, mortality and disability caused by diseases.
- While some countries may not yet have the resources or capacity to estimate DALYs, it should be an aspirational goal, and any step towards it – such as estimating incidence or mortality – is valuable.
- **A burden of foodborne disease study has six main elements:** planning; data preparation; calculations; attribution; interpretation; and dissemination.

### **WHO's Estimates of the global burden of foodborne diseases, a 2015 report on the impact of contaminated food on health and well-being**

- More than 600 million people, one in 10 in the world are affected by foodborne diseases every year.
- More than 120,000 children under five years die from consuming unsafe food; this comprises 30 per cent of the total foodborne deaths annually.
- Diarrhoeal diseases are responsible for more than half of the global burden of foodborne diseases, causing 550

million people to fall ill and 230,000 deaths every year.

- Children are at particular risk of foodborne diarrhoeal diseases, with 220 million falling ill and 96,000 dying every year, according to the report.
- Diarrhoea is often caused by eating raw or undercooked meat, eggs, fresh produce and dairy products contaminated by norovirus, Campylobacter, non-typhoidal Salmonella and pathogenic E coli.
- According to WHO estimates, WHO African and South-East Asia Regions have the highest burden of foodborne disease.