



Food and Agriculture
Organization of the
United Nations



World Health
Organization



WORLD TRADE
ORGANIZATION



THE FUTURE OF FOOD SAFETY

Transforming knowledge into
action for people, economies
and the environment

by

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Thematic Session 1

The Burden of Foodborne Diseases and the Benefits of Investing in Safe Food

The public health burden of unsafe foods
A need for global commitment

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Foodborne diseases are a global public health problem

FERG 2015 - 31 hazards quantified

- 600 million illnesses – 91 million in Africa
- 420,000 deaths – 140,000 in Africa
- 33 million DALYs – 10 million in Africa
- Burden similar to AIDS/HIV, TB, malaria

FERG 2019 - 4 metals quantified

- 9 million DALYs – 2 million in Africa

Enteric (foodborne) infections are increasingly associated with stunting, affecting 155 million children globally

Many more hazards and outcomes are potentially important, but not currently quantifiable



Foodborne diseases are unequally distributed

Children under five years of age ...

... make up 9% of the world population

... suffer from 38% of all foodborne illnesses

... succumb to 30% of foodborne deaths

... bear 40% of global foodborne DALYs

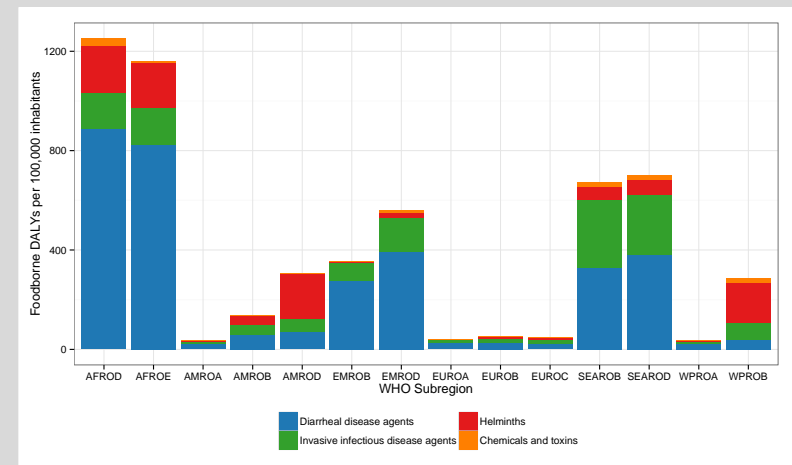
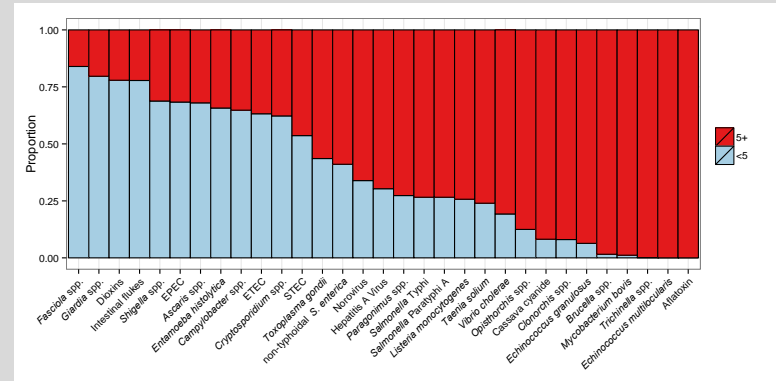
People living in the poorest areas of the world ...

... make up 41% of the world population

... suffer from 53% of all foodborne illnesses

... succumb to 75% of foodborne deaths

... bear 72% of global foodborne DALYs





Priorities need to be reconsidered

Different priorities in different regions

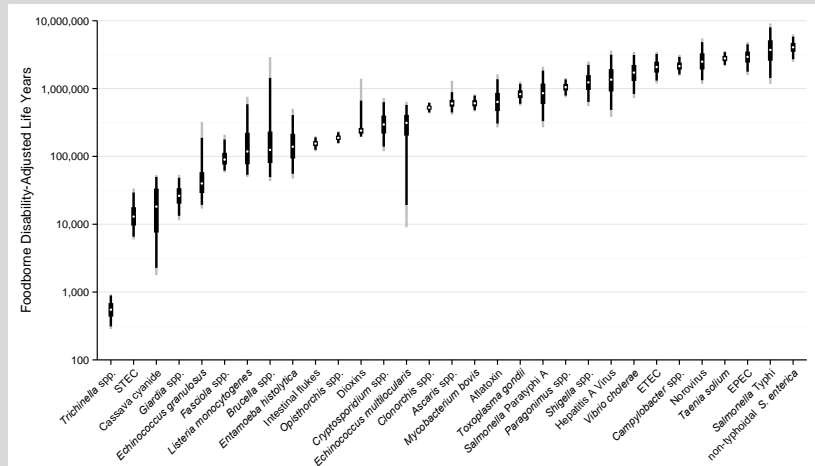
Burden of foodborne diseases in Africa:
10 million DALYs

Overwhelming share by enteric pathogenic bacteria:
7 million DALYs

Taenia solium: 1.5 million

[Lead: 1 million]

Aflatoxin: 0.1 million



Key enteropathogens in Africa

non-typhoidal Salmonella enterica: 2.2 million DALYs

enteropathogenic *Escherichia coli*: 1.2 million DALYs

enterotoxigenic *Escherichia coli*: 0.9 million DALYs

Vibrio cholerae: 1.0 million DALYs

Campylobacter spp.: 0.7 million DALYs



Foodborne diseases can and must be avoided

Burden of disease in high-income countries is 10x lower than the global average

Ability to invest in safe foods increases with income

How to implement successful intervention strategies in a culturally and economically appropriate way?

Multi-sectorial approaches – One Health strategy needed

Key to achieving Sustainable Development Goals: poverty reduction, food security, healthy lives