Data driven estimation of foodborne disease incidence in Ethiopia

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Background

• The surveillance of foodborne disease (FBD) remains a challenge worldwide, and available foodborne disease incidence estimates suffer from considerable uncertainty.
• This is particularly prominent in low- and middle-income countries, where the health burden of unsafe foods is also higher.
• Yet, accurate estimates of FBD incidence are crucial for prioritization and efficient allocation of public health resources.
• We designed an epidemiological framework for the estimation of FBD incidence.

Using Ethiopia as a pilot country, we illustrate the computation of estimates using data for the first 4 months of study

Methods

3 CROSS-SECTIONAL STUDIES (Oct 2021-Sept 2022)

Results (PRELIMINARY FINDINGS; 4 MONTHS)

Total target population 57.4M
% Diarrhea community 2%

Total diarrhea cases in target area

% healthcare-seeking 60%
% NO healthcare-seeking 40%

Total diarrhea seeking healthcare

% Salmonella (presumptive) 1%

Total Salmonella diarrhea 1/10000

% Campylobacter (presumptive) 4%

Total Campylobacter diarrhea 5/10000

% STEC (presumptive) 13%

Total ETEC diarrhea 15/10000

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