

Peer Review Plan

Preliminary Title: Making Sense of Recent Cost-of-Foodborne-Illness Estimates

Type of Report (ERR, EIB, EB) EIB

Agency: Economic Research Service [X] Influential Scientific Information
USDA [] Highly Influential Scientific Assessment

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Subject of Review:

Estimates of the cost of foodborne illness play an important role in guiding Federal efforts to prevent foodborne illness in the United States. In 2000, ERS researchers estimated the cost of illness for 5 major pathogens to be \$6.9 billion per year (Crutchfield and Roberts 2000). In 2012, two new sets of estimates have been published. Hoffmann et al. (2012) estimate that 14 major pathogens in the U.S. cause \$14 billion in cost of illness. Scharff (2010, 2012) has published estimates of the cost of foodborne illness in the U.S. that range from \$51 billion to \$152 billion. The large differences between these estimates have the potential to lead to confusion. This report reviews and compares these cost-of-illness estimates with a focus on analyzing the factors that drive differences between them. This analysis is a synthesis and comparison of four prior cost-of-foodborne-illness studies (Crutchfield and Roberts 2000, Scharff 2010, Scharff 2012, and Hoffmann et al. 2012) and two sets of foodborne illness disease estimates from CDC (Mead et al. 1999 and Scallan et al 2011a, 2011b). The analysis compares published results and also recalculates mean results from them to allow for more direct comparison across studies. It examines the role of differences in scope, underlying disease incidence estimates, valuation methodology and uncertainty for overall estimates of disease burden and for relative rankings of pathogens. Rank correlation coefficients are used to evaluate the significance of differences in rankings and uncertainty bounds provided by each study were used to evaluate the significance of uncertainty for the interpretation of differences in cost estimates.

Purpose of Review: The purpose of the review is to ensure the high-quality of the economic analysis, transparent explanation of methods, objective interpretation of results, and effective communication to the intended audience.

Type of Review: [] Panel Review [X] Individual Reviewers

[] Alternative Process (Briefly Explain):

Timing of Review (Est.): Start: 07/06/12 End: 04/16/13 Completed: 04/16/13

Number of Reviewers: [] 3 or fewer [X] 4 to 10 [] More than 10

Primary Disciplines/Types of Expertise Needed for Review: Economists

Reviewers selected by: [X] Agency [] Designated Outside Organization

Organization's Name:

