

Introduction

Valuing the Health Benefits of Food Safety

A conference held September 14-15, 2000,
at the University of Maryland, College Park

Many Federal agencies conduct cost-benefit analyses of regulations that are intended to increase the safety of foods, including:

- The Food Safety and Inspection Service (FSIS), Department of Agriculture
- Economic Research Service (ERS), Department of Agriculture
- The Food and Drug Administration's Center for Food Safety and Applied Nutrition (CFSAN), Department of Health and Human Services
- Centers for Disease Control and Prevention (CDC), Department of Health and Human Services
- The Environmental Protection Agency (EPA).

The different agencies use many different methods to estimate the reductions in risk associated with their policies; they also use different methods to assign dollar values to the human health benefits from the reduced risk. Because each agency uses a different method, it is difficult to compare programs across agencies. If there were a consensus approach to assigning values to risk reductions and each agency used it, risk managers could compare the effects of different agencies' programs. Those comparisons would provide risk managers with information to help them choose food safety programs that reduce both food-borne illness and public costs.

The differences across agencies—and in some instances within agencies—in approaches to measuring health benefits make it difficult to compare the estimated benefits of different health and safety regulations. If there were a consensus approach to assigning values to risk reductions and each agency used it, risk managers could compare the health benefits of different regulations and programs. Those comparisons would provide risk managers with information to help them choose food safety (and other) programs that reduce both illness and public costs. One purpose of bringing together different agencies is to investigate methods that can be used by all agencies concerned with public health. What should economists be trying to measure when they assign values to reducing morbidity and postponing deaths? What methods should economists use to assign those values?

As a first step toward generating a common approach, several agencies sponsored a conference on valuing the health benefits of food safety. The conference was a first step toward forging a consensus across agencies on how to value improvements in food safety. Most of the issues discussed applied to general health and safety issues in addition to food safety. The topics

covered included:

- (1) valuing statistical lives;
- (2) valuing risk reductions for different hazards;
- (3) valuing risk reductions using different methods; and
- (4) valuing pain and suffering and lost productivity.

Conference sessions included formal presentations, comments, and both general and small-group discussions on current best practices for valuing the prevention of food-borne illnesses and death.

Although the general sessions and the breakout sessions identified many areas of disagreement on valuing health benefits, the sessions also gave economists from different agencies an opportunity to see how other agencies estimated health benefits. Participants from the Federal agencies, academia, and private organizations agreed that getting FSIS, CDC, ERS, EPA, and CFSAN together was a major step toward reaching consensus and improving the methods used by the various agencies. Conference participants also agreed that economists from the different agencies should continue to meet and work toward consensus on methods of valuing food safety.

This report includes the major papers presented at the conference, comments of discussants who provided written remarks, and summaries of discussion sessions.

Conference Agenda

Opening Remarks

- David R. Lineback, Director, Joint Institute for Food Safety & Applied Nutrition
- Richard Williams, Food and Drug Administration, Center for Food Safety and Applied Nutrition
- Al McGartland, U.S. Environmental Protection Agency, National Center for Environmental Economics
- Steve Crutchfield, U.S. Department of Agriculture, Economic Research Service

Valuing Statistical Lives--Moderated by Nicole Owens and Nathalie Simon, U.S. Environmental Protection Agency, National Center for Environmental Economics

- “Using Estimates of the Value of Statistical Life in Evaluating Regulatory Effects” by Donald Kenkel, Cornell University
- Comments by Maureen Cropper, World Bank and University of Maryland
- Comments by Chris Dockins, U.S. Environmental Protection Agency, National Center for Environmental Economics

Valuing Pain and Suffering and Lost Productivity--Moderated by Clark Nardinelli, Food and Drug Administration, Center for Food Safety and Applied Nutrition

- “Measuring the Pain, Suffering, and Functional Disability Associated with Foodborne Illness” by Josephine Mauskopf, Research Triangle Institute
- Comments by James Hammitt, Harvard School of Public Health
- Comments by Amber Jessup, Food and Drug Administration, Center for Food Safety and Applied Nutrition

Valuing Risk Reductions Using Different Valuation Methods--Moderated by Elise Golan, U.S. Department of Agriculture, Economic Research Service

- “Valuing Pathogenic Risk: Methods, Skill & Rationality” by Jason Shogren, University of Wyoming
- Comments by V. Kerry Smith, North Carolina State University
- Comments by Fred Kuchler, U.S. Department of Agriculture, Economic Research Service

Valuing Risk Reductions for Different Hazards--Moderated by Tammy Riggs, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

- “Benefits Transfer and the Value of Food safety” by Alan J. Krupnick, Resources for the Future
- Comments by Ian Savage, Northwestern University
- Comments by Carol Scotton, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

Reports from breakout sessions

- Report from breakout session on valuing statistical lives--David Widawsky, U.S. Environmental Protection Agency, Office of Prevention, Pesticides, and Toxic Substances
- Report from breakout session on valuing pain and suffering and lost productivity--Clark Nardinelli, Food and Drug Administration, Center for Food Safety and Applied Nutrition
- Report from breakout session on valuing risk reductions using different valuation methods--Jean Buzby, U.S. Department of Agriculture, Economic Research Service
- Report from breakout session on valuing risk reductions for different hazards--Tammy Riggs, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

Conference Summary

Clark Nardinelli, Food and Drug Administration, Center for Food Safety and Applied Nutrition