Risk Assessment, Economic Analysis, and Foodborne Illness Regulations Conference

November 16, 2007
Economic Research Service, USDA
1800 M Street NW, Washington, DC

SPONSORED BY
Interagency Risk Assessment Consortium
www.foodrisk.org
While risk analysis traditionally separates risk assessment from benefit/cost analysis, incorporating economics into risk assessments can improve the selection of viable pathogen control options for policymakers in the public and private sectors. This conference explores how economists can make greater contributions to risk assessments, including new methods of valuing the public health protection benefits of pathogen control in the food supply-chain.

The objectives of the meeting are: To introduce the concept of integrating risk assessment and benefit/cost analysis; using this integration, to look at recent advances in valuation for food risks; to examine economic incentives in the public and private sectors and how they contribute to safer food; and to hear what policymakers and risk analysts in the public and private sectors think about economic incentives and the new economic valuation methodologies.

### Friday, November 16

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:30-8:30 am</td>
<td>Coffee, Registration. $15 payment for sandwiches and beverages</td>
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| 8:30-8:35 am | Welcome and Statement of Purpose  
   Kerry Dearfield, Food Safety and Inspection Service |
| 8:35-9:05 am | **Session 1: Interface Between Risk Assessment and Economics**  
   **Moderator:** Kerry Dearfield, Food Safety and Inspection Service |
| 8:35-9:05 am | Integrating Risk Assessment and Economics  
   Richard Williams, George Mason University |
| 9:05-9:35 am | Economic Valuation Methods: COI, VSL, WTP & QALY  
   Al McGartland, Environmental Protection Agency |
| 9:35-9:50 am | Common Misperceptions of Cost/Benefit Analysis for Public and Private Decision Making  
   Cristina McLaughlin, Food and Drug Administration |
| 10:00-10:15 pm | BREAK |
| 10:15-10:45 am | **Session 2: Food Safety Valuation Using the Willingness to Pay Method**  
   **Moderator:** Cristina McLaughlin, Food and Drug Administration |
| 10:15-10:45 am | New Willingness to Pay Estimates of the Demand for Food Safety  
   James Hammitt, Harvard University |
| 11:00-11:20 am | Using COI and WTP Methods to Estimate the Societal Costs of Foodborne Illness  
   Tanya Roberts, Economic Research Service |
| 11:20-11:50 am | **Discusant:** Joseph Cooper, Economic Research Service |
| 11:50-12:00 pm | Q&A from attendees (10 min) |
| 12:00-1:00 pm | LUNCH  
   ERS will be providing mixed sandwiches and beverages at a cost of $15 to attendees, due at the registration desk on the morning of the conference. |
| 1:00-1:20 pm | **Session 3: Food Safety Valuation Using the Quality Adjusted Life Years Method**  
   **Moderator:** Tanya Roberts, Economic Research Service |
| 1:00-1:20 pm | WTO & QALY Methods at FDA to Estimate the Societal Costs of Foodborne Illness  
   Angela Lasher, Food and Drug Administration |
| 1:20-1:35 pm | Using QALYs to Evaluate Chronic Sequelae: Case of Arthritis  
   David Zorn, Food and Drug Administration |
| 1:35-2:00 pm | **Discusant for all papers:** Dom Mancini, Office of Management and Budget |
| 2:00-2:15 pm | Q&A from attendees (10 min) |
| 2:15-2:30 pm | BREAK |
| 2:30-2:55 pm | **Session 4: Private Economic Incentives for Pathogen Control**  
   **Moderator:** Robert McDowell, Animal and Plant Health Inspection Service |
| 2:30-2:55 pm | Risk-Based Optimization of the Danish Swine Salmonella Control Program  
   Scott Hurd, Iowa State University |
| 2:55-3:05 pm | Economic Incentives in Mandatory vs. Voluntary Meat Food Safety Standards  
   Gary Weber, Gary Weber and Associates |
| 3:05-3:20 pm | **Discusant for all papers:** Mike Ollinger, Economic Research Service |
| 3:20-3:35 pm | Q&A from attendees (10 min) |
| 3:35-4:00 pm | BREAK |
| 4:00-4:30 pm | **Session 5: Roundtable: Role of Economics in Pathogen Control Regulations**  
   **Moderator and Speaker:** Jim Schaub, Office of Risk Assessment and Cost Benefit Analysis  
   Daniel Engeljohn, Food Safety Inspection Service  
   Robert Buchanan, Food and Drug Administration/CFSAN  
   Al McGartland, Environmental Protection Agency |
<p>| 4:30 pm | <strong>Q&amp;A from attendees (30 min)</strong> |
| 5:00 pm | Wrap-up Remarks: Kerry Dearfield, Food Safety and Inspection Service |</p>
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Robert L. Buchanan is a Senior Science Advisor for the Center for Food Safety and Applied Nutrition, DHHS Food and Drug Administration in College Park, Maryland. Dr. Buchanan received his B.S., M.S., M. Phil., and Ph.D. degrees in food science from Rutgers University, and post-doctoral training in mycotoxicology at the University of Georgia. Since then, he has gained 30 years of experience teaching and conducting research in food safety, first in academia, then with the USDA Agricultural Research Service, and most recently with the FDA. His scientific interests are diverse, and include extensive experience in predictive microbiology, quantitative microbial risk assessment, microbial physiology, mycotoxicology, and HACCP systems. Dr. Buchanan has published approximately 300 manuscripts, book chapters, and abstracts on a wide range of subjects related to food safety, and is one of the co-developers of the widely used USDA Pathogen Modeling Program. He also has an ongoing interest in the development of science-based public health policy. In addition to currently serving as the FDA CFSAN Senior Science Advisor, he has served as Deputy Administrator for Science with the USDA Food Safety and Inspection Service, and is the U.S. Delegate to the Codex Alimentarius Commission Committee on Food Hygiene. Dr. Buchanan serves on the editorial boards of several journals, and is a member of the International Commission on Microbiological Specification for Foods. He has also served as a member of the National Academy of Science’s Institute of Medicine Committee on Emerging Microbial Threats and the National Advisory Committee on Microbiological Criteria for Foods.

Joseph Cooper is a Senior Economist in the Market and Trade Economics Division of ERS, where he is conducting research on farm policy issues. From July 2005 to July 2006, he served as the Senior Economist in charge of agriculture and international economics from the University of California, Davis, and a B.S. from the University of California, Berkeley.

Kerry Dearfield is currently the Scientific Advisor for Risk Assessment in the USDA’s Food Safety and Inspection Service (FSIS). There in the Office of Public Health Science, he develops policies, guidance, and directions for the Federal Food Safety Program. He has published in Risk Analysis and Journal of Policy Analysis and Management and has addressed numerous international governments including the governments of the United Kingdom, South Korea, Yugoslavia, and Australia. Dr. Williams received his Ph.D. and M.A. in economics from Virginia Tech in Blacksburg, Virginia, and his B.S. in business administration from Old Dominion University in Norfolk, Virginia.

David J. Zorn is the Lead Economist in FDA’s Center for Food Safety & Applied Nutrition, Office of Regulations, Policy and Social Sciences. He supervises the development of economic and industrial information on products and corporations regulated by CFSA, and gives advice on the economic impact of present and proposed CFSA policies. Dr. Zorn earned his B.S. in Food Science from the University of Illinois, Urbana, and his Ph.D. in nutrition from Howard University in Washington, D.C.
Al McGartland is lead economist and the Director of the National Center for Environmental Economics (NCEE) at the U.S. Environmental Protection Agency. He is responsible for developing interdisciplinary risk and benefit assessment methods to be used in EPA’s regulatory analyses, and to assess the benefits and costs of environmental programs. Most recently, he has been focusing on improving methods for quantifying uncertainty in benefit-cost analysis. As the director of NCEE, he advises senior policy-making officials on the economics of environmental policies and helps translate research into applied policy contexts. The NCEE issues EPA’s Guidelines for Preparing Economic Analyses, conducts numerous cost-benefit analyses, and identifies strategies to best evaluate environmental economic issues. Dr. McGartland also supports numerous interagency initiatives, including projects on agriculture and environmental risks, benefits, and costs in China. Prior to his work at EPA, he reviewed environmental regulations and supporting analyses at the Office of Information and Regulatory Affairs in the Office of Management and Budget. He also served as the economic advisor to the Chairman at the Commodity Futures Trading Commission, and he was a vice president at Abt Associates, Inc., a public policy and economics consulting firm. He received his Ph.D. in economics from the University of Maryland. He has published in several journals; including the American Economic Review; the Canadian Journal of Economics; the Journal of Environmental Economics and Management; the medical journal, Lancet; and the Journal of Environmental Economics and Management. He also has contributed to numerous books and reports on environmental economic issues.

Cristina McLaughlin has been working as a CFSAN Economist since 1991. Most of her work at FDA involves analyzing costs and benefits of FDA regulations and also finding out new ways to design risk assessments or reviewing other risk assessment methodologies. As part of her current work, she included cost-benefit analyses to estimate the economic impact of foodborne illnesses in the United States. Additionally, she has been a member of the FDA’s Center of Science in the Public Interest (CSPI) Food Safety Seminar, where she has contributed to numerous publications and policy recommendations.

Mike Ollinger is an economist at ERS, where he has worked since graduating from Washington University in St. Louis in 1991. His recent research has focused on food safety, particularly as it relates to industry responses, FSIS regulation, and various structural change issues to industry responses and FSIS regulation, and various structural change issues.