

Risk Assessment for Food Safety: Application to Microbial Foodborne Disease Data Needs

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Summary and Implications

This project is designed to develop a food safety data base to serve both as baseline information and for use in risk assessments and policy analysis related to food safety. The intent is to integrate existing data and information on sources of data in a way that will help researchers on microbial foodborne diseases gain easier access to data and information sources for risk assessment and policy related analysis

During the year, the major activities were development of a listing of internet resources for inclusion on the Food Safety Consortium homepage, identification of internet discussion groups, and work on issues related to building integrated data bases for risk assessment and policy related analysis.

We conducted and updated a review of information available through network and internet sources. The information was summarized, and the most relevant for general reference and to other food safety researchers were added to the Food Safety Consortium homepage. The listings and information about the sources is currently under review by USDA and other researchers and policy analysts. Other sites will be added. A second area of data development was in collaboration with on-going activities in USDA through internet discussion groups. USDA's Microbial Risk Modeling Group is developing a discussion group for *E.coli* O157:H7 researchers to discuss data and related issues. Adding internet discussion groups to the resource list is underway.

The final and on-going area of data compilation and research relates to data needs for the development of integrated data to assess risks across stages in the food chain. Researchers at the Economic Research Service are working on developing a fault tree model for *E.coli*. Iowa State University researchers have begun to develop a prototype model related to assessing risks from related pathogens in pork slaughter and processing. *Salmonella* and generic *E.coli* will be included, among other pathogens. The data system will be extended to transport and the status of hogs as they enter the slaughter facility. The modeling and data systems are designed for use in assessing risk reduction technologies and regulatory strategies. The data will be organized specifically to evaluate the effectiveness of HACCP systems in improving food safety outcomes.

References

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