Risk Assessment Coordination Team (RACT): Projects Completed or Underway

Office of Food Defense, Communication & Emergency Response

Risk assessments enable development of food-safety strategies crucial to the public-health and disease-prevention mission of FDA's Center for Food Safety and Applied Nutrition (CFSAN). We strategically plan, manage, conduct, coordinate, and evaluate food-safety risk assessments and related research, and develop novel risk-assessment tools. For each project, we bring together multidisciplinary teams of experts, including external collaborators and our own specialists. We also play a major role in setting the direction of the risk-assessment field through leadership and participation in the national and global risk-assessment communities. Our products include risk profiles, quantitative risk assessments, decision-analysis tools, research and data collection, technical review, collaboration, outreach, and communications.

✓ Checkmark indicates completed project

<u>Risk Assessments</u>: Evaluate relative effectiveness of control strategies to reduce or prevent foodborne illnesses. Serve as tools for informed policy decisions and for use by public-health officials, the food industry, and others.

- ✓ Listeria in RTE Foods Risk Assessment (2003)
- ✓ Vibrio in Raw Oysters Risk Assessment (2005)
- ✓ Domestic Priorities List for Fieldwork Planning (2007)
- ✓ Produce Risk-Ranking Tool (2009)
- ✓ Highly Pathogenic Avian Influenza in Poultry & Eggs (w/ FSIS & APHIS) (2010)
- iRISK, a comparative risk assessment tool
- Listeria in Soft-ripened Cheese (w/ Canada)
- Listeria in Hot- and Cold-Smoked Finfish
- Listeria Cross-contamination in Retail Delis (w/ FSIS)
- Drug Residues in Milk (w/ CVM)
- On-farm produce risk model, QPRAM
- Updated Listeria in RTE Foods (w/FSIS)
- Norovirus in Shellfish (w/Canada)

<u>Collaborations</u>: Work with others to leverage resources, to improve the utility and capability of risk assessments.

- Scientific Assessment and Evaluation Contract (RTI): Support development of farm-to-table risk tools.
- GIS Modeling and Risk Assessment Tools: (IAG w/ NASA, ARS, APHIS): Development of model to characterize and predict contamination of produce with enteric pathogens.
- The Interagency Risk Assessment Consortium (IRAC): enhance communication and coordination among Federal agencies and conduct of scientific research to facilitate risk assessments.
- JIFSAN Steering Committee: facilitate education efforts on risk assessment, including content for www.foodrisk.org, an information hub for the greater riskassessment community.
- Peer Review Contract (Versar, Inc.): independent external peer review of scientific information & risk assessments.
- Wildlife and livestock database (w/ APHIS).

Risk Profiles: Comprehensive review of scientific data and information to identify& evaluate potential control and prevention options.

- Hepatitis A Virus in Produce
- Transmission of Norovirus
- Listeria in Fresh Produce
- Pathogens in Raw-Milk Cheese
- Pathogens and Filth in Spices

<u>Decision-Analysis Tools</u>: Systematically incorporate not only scientific, but also social factors, to help ensure policy decisions are both scientifically sound and practical.

- ✓ FY11 Microbiological Sampling Strategic Plan
- ✓ FY12 Microbiological Sampling Strategic Plan
- ✓ FY11 targeted inspections of egg farms
- Data-driven system for prioritizing risks (w/ RTI)

Research & Data Collection: Provide information and data for planned or ongoing risk profiles and assessments, including development of new tools and methods.

- Retail and Home Cold Temperature Data (EcoSure): Data on cold temperature storage of food by retail and consumers; exclusive post on www.foodrisk.org.
- ✓ Retail Worker Observational Pilot Study (w/ JIFSAN/UMD): Study to explore food employees' compliance with FDA recommendations; provide data for the *Listeria* retail risk assessment.
- ✓ Library of 50 commodities & 20 hazards for iRISK.
- ✓ Evaluate risk of invasive listeriosis for susceptible populations, using FoodNet data (w/CDC).
- ✓ Market Basket Survey Phase I Prevalence and levels of Listeria monocytogenes in ready-to-eat foods (IAG with USDA/ARS).
- Market Basket Survey Phase II (phase III & IV to follow).
- Field trials to determine pathogen transfer coefficients (w/ UC Davis).

<u>Related Initiatives</u>: These documents guide further development of risk-assessment projects.

- ✓ CFSAN's Risk Assessment Framework (2001)
- ✓ CFSAN's Risk Management Framework (2002)
- ✓ Inventory of risk ranking & prioritization tools (2009)
- ✓ Approaches to Establish Thresholds for Food Allergens and for Gluten in Food (2006)