

**Interagency Risk Assessment Consortium
Technical Quarterly Summer Meeting
June 14, 2007**

Technical Meeting 9:00 am – 11:00 pm

Introductions

5 Minute Updates

Department of Defense

US Army Center for Health Promotion and Preventive Medicine (CHPPM)

Brandolyn Thran

- A technical guide for conducting microbial risk assessments on inhalation pathogens is under development
- The focus of the CHPPM risk assessment group is dose-response modeling; CHPPM is working with the EPA National Homeland Security Center (NHSC) and National Biodefense Analysis and Countermeasures Center (NBACC) to develop an information system in ACCESS-based data system that is capturing dose-response data from the 1950's and 1960's. They are developing new models for extrapolating from animal studies to humans. This will be presented at the annual meeting of the Society for Risk Analysis (SRA) in December, 2007.

Environmental Protection Agency

Office of Pesticide Programs

Deborah Smegal

- Quantitative risk assessments on pesticides are conducted weekly
- On occasion, comprehensive assessments are conducted with other countries on new and existing pesticides (i.e., joint reviews)
- Deborah can be a conduit for helping us understand pesticides, including antimicrobial pesticides; EPA/OPP has a mechanism for obtaining data through the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
- The focus is on the chemical side of RA
- EPA/OPP is planning to collaborate with FDA on packaging
- Deborah is part of a group of 150 scientists including toxicologists, chemists, and exposure assessors that evaluate dietary and residential/occupational exposure for pesticides.

Food and Drug Administration

Center for Food Safety and Applied Nutrition (FDA/CFSAN)

Marianne Miliotis

- A proposal for an SRA Symposium on “Developing risk profiles: different approaches, formats, and uses”, was submitted to the SRA and is pending acceptance. The symposium will describe the different approaches taken by CODEX, USDA/FSIS, FDA/CFSAN, and the New Zealand Food Safety Authority.
- The draft risk profiles on HAV and NV are being finalized
- A site visit to produce processing plant in Las Vegas and hopefully growing fields in CA will take place some time in mid August
- Marianne will be presenting on Risk Profiles and co-convening at the “Epidemiological and Risk Assessment” technical session at IAFP.
- The JIFSAN workshop on “Tools for Prioritizing Food Safety Concerns” was a huge success! Presentations on FDA, USDA, and industry perspective, EPA’s experience, RFF framework, and FDA-IFT prototype framework. Four different breakout groups all charged to address the same questions – all came up with similar approaches! Proceedings of the meeting are available on the JIFSAN web site: http://www.jifsan.umd.edu/tools_2007.htm

Wesley Long

- Wes is working with the University of Maryland (UMD) to develop a Food Defense curriculum for graduate and non graduate courses. It will have an industry focus. A workshop was held in April to determine the industry needs in terms of training and education. Robert Griffin (USDA/APHIS), LeeAnn Jackson (FDA/CFSAN) and Perfecto Santiago (USDA/FSIS) participated in the workshop. There is early indication that industry’s interest is on the broader concept of food protection. The term “Food Protection” incorporates food quality, food safety and food defense.
- CFSAN will release the CARVER+Shock software soon. The tool will help industry assess vulnerability.
- The JIFSAN summer integrated program (SIP) on Risk Analysis began June 11, 2007. It was sold out in mid-March. The SIP has added an implementation component to the curriculum. An execution coach hosted lunchtime discussions and provided individual coaching to address expectations and obstacles the students might confront once they went back to their offices. Students developed action plans before completing the Program.
- A proposal for an SRA Symposium on “Preparing the Food Industry to Prevent Terrorist Acts: A View of the Risk Communication Challenges from the Government, Industry and Academic Perspectives” was submitted to the SRA and is pending acceptance.

Sherri Dennis

- Site visits – CFSAN’s Staff College has supported, through a Professional Development Fund, site visits so that risk assessors have an opportunity to obtain a better understanding first hand different food production processes.

- SRA Program Committee - Sherri was on the Program committee for the 2007 SRA meeting. It appears to be a strong, interesting, and diverse program with many great sessions.
- The melamine risk assessment – the technical document is posted on the FDA website. This was an example of conducting a rapid risk assessment in an emergency situation, with data continuously coming in as the risk assessment was being developed. It was a multi agency cooperative effort. The risk assessment was presented to the FDA Science Board June 14, 2007.
- A new dataset on home refrigerator temperatures and consumer behavior patterns, including storage practices for different types of food will be posted soon on foodrisk.org

John Hicks

- The draft technical document of the risk assessment on *Listeria monocytogenes* in smoked finfish is almost ready for internal review.
- The draft risk profile on *L. monocytogenes* is in the process of being finalized
 - The team is looking into drafting a framework for ecological niche modeling to better understand, identify and reduce risks associated with fresh produce and fresh-cut products.

Steven Gendel

- Improvements continue to be made to the foodrisk.org site.
 - “Exclusives” are being added as they are identified;; e.g., the tomato safety initiative workshop to identify research needs; this supplements the produce safety initiative
 - The site is being rearranged to make it more user-friendly
- The joint CSL/JIFSAN workshop on Nanotechnology took place June 26-28, 2007.
- The joint CFSAN/HC (Health Canada) risk assessment on *Listeria* in soft ripened cheese - first draft of the model is under development. The team is filling in data in the boxes of the model. The draft should be ready towards the end of the calendar year.

National Center for Toxicological Research (FDA/NCTR)

James Chen

- Risk assessment research activities on acrylamide
 - Dan Doerge (FDA/NCTR), who had worked with Sara Henry (FDA/CFSAN) on a WHO document on acrylamide, and John Young (FDA/NCTR) have developed a pharmacokinetic model of acrylamide and its 3 metabolites. This model was published in 2007. The model estimates the internal doses and effective doses from the applied doses. The results will be used to estimate human risk based on animal data.

- An NCTR scientist has reviewed an EPA IRIS documentation on acrylamide.
- NCTR has been conducting an animal chronic bioassay for acrylamide under an interagency agreement with the National Toxicological Group.
- James Chen is participating in an Institute of Medicine (IOM) workshop on dose-response modeling of nutrients.
- On the microbiological side, Dr. Nayak is continuing work on food safety research; he has developed two biochips for identifying antibiotic resistance and virulence genes in *Salmonella* Serovars. Dr. Nayak and his post-doc, Dr Wen Zou, each presented a poster at the annual meeting of the American Society for Microbiology in May, 2007.
- Carl Cerniglia (FDA/NCTR) presented on “The Effect of Veterinary Antimicrobial Agents in Food on the Human Intestinal Microbiota” at the FDA Science Seminar Symposium, June 19, 2007.

United States Department of Agriculture
Animal and Plant Health Inspection Service
 David Oryang

- The World Organization for Animal Health (OIE) has formally classified the United States as a controlled risk country for bovine spongiform encephalopathy (BSE). In October 2006 APHIS submitted documents to OIE for review. APHIS appreciates OIE’s leadership. The international classification can be used to open international trade. U.S. standards can be aligned with international standards. For more details, visit:
http://www.usda.gov/wps/portal/!ut/p/s.7.0.A/7.0.1OB/.cmd/ad/.ar/sa.retrievecontent/c/6.2.1UH/.ce/7.2.5JM/.p/5.2.4TQ/.d/1/th/J.2.9D/s.7.0.A/7.0.1OB?PC.7.2.5JM_contentid=2007%2F05%2F0149.xml&PC.7.2.5JM_parentnav=LATEST_RELEASES&PC.7.2.5JM_navid=NEWS_RELEASE#7.2.5JM
- The human health risk assessment on melamine contamination was updated. They found a 10-fold increase in risk for the original estimate because of test sensitivity. Swine were still considered “safe”. Testing confirmed that meat from swine fed rations supplemented with pet food scraps containing melamine and related compounds is safe for human consumption, prompting the U.S. Department of Agriculture (USDA) to allow swine held on farms to be released and approved for processing. For more details, visit:
<http://www.usda.gov/wps/portal/!ut/p/s.7.0.A/7.0.1OB?contentidonly=true&contentid=2007/05/0144.xml>
- On May 31, 2007, APHIS published an interim rule establishing regulations to prohibit or restrict the importation of ash nursery stock and other propagative plant material from Canada to prevent the artificial spread of emerald ash borer (EAB), a destructive wood-boring insect that attacks and kills ash trees, into noninfested areas of the United States. Emerald ash borer is important in the U.S.

and Canada. To prevent emerald ash borer, which is wiping out the ash trees, some states have also been quarantined. For more details, visit:

<http://www.aphis.usda.gov/newsroom/content/2007/05/ashprodct.shtml>

- On June 1, 2007, the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), in coordination with the U.S. Department of Homeland Security's Customs and Border Protection (CBP), began enforcing inspection and user fee requirements for all commercial trucks and loaded railroad cars entering the United States from Canada. Inspection and user fee for service from APHIS for trucks from Canada was initiated at borders June 1, 2007 in an effort to inspect cargo vehicles, etc. coming from Canada. These inspections are necessary to further prevent the introduction of plant and animal pests and diseases into the United States via conventional pathways or through bioterrorism. Recent inspections along the U.S.-Canada border resulted in numerous interceptions of prohibited fruits and vegetables, originating from regions other than Canada. These products pose a risk of introducing plant pests into the United States. APHIS is also concerned about agricultural and other products originating in Canada that could serve as host material for pests and diseases if left uninspected. For more details, visit:

<http://www.aphis.usda.gov/newsroom/content/2007/05/canfee3.shtml>

Richard Fite

- APHIS published rules to allow importation of mangoes from India and some berries from Uruguay. Done quickly this time.
- Two rules are under development:
 - To clear the Canadian border allowing cattle products into the U.S. from Canada.
 - Proposed rule to allow citrus from Florida to be shipped to 47 other non citrus producing states. .Both rules are very sensitive.

Eric Grant

- Eric is working on the global positioning system(GPS) track systems;
 - a group of APHIS employees is going to a GPS user conference next week
 - there was some discussion of the CFSAN Risk Assessment Coordination team getting together with the APHIS and other member agency GPS folk (see update by Sherri Dennis).

Food Safety and Inspection Service

Carl Schroeder

- Food Attribution Models
 - Under the auspices of FOODNET, FSIS is trying to adopt the Danish attribution model for salmonellosis in FSIS-regulated foods; e.g., what

percentage salmonellosis is attributed to beef? What percentage salmonellosis is attributed to poultry?

- A manuscript has been drafted through a FoodNet group. It will be presented at the Council of State and Territorial Epidemiologists meeting in Atlantic City later this year. Tracey Aires from CDC will present the CDC outbreak attribution model. Carl to talk about Bayesian and stochastic modeling.
- Carl hopes to present to the Interagency Risk Assessment Consortium soon.

Office of Risk and Cost Benefit Analysis

Michael McElvaine – ORACBA

- ORACBA is looking closely at the Avian Influenza Risk Assessment
- ORACBA is working with APHIS on plant protection
- There are no major rules currently being reviewed by ORACBA.

Work Group Updates

Data Gaps Analysis

The Data Gaps Analysis Work group has achieved its goal of listing risk assessment data gaps and getting this list on foodrisk.org. It was decided to put the work group on a back burner for now until more risk assessments have been published. This way, IRAC representatives will be able to join another work group without taking too much time out for IRAC activities.

Data Utility

The draft discussion paper based on the workshop in 2004 and SRA symposium in 2005 has been sent to the IRAC representatives and to the respective agencies for review.

Nutrition Risk Assessment

The Nutrition Risk Assessment Work Group will meet again in September to follow up on next steps discussed at the March 22 IRAC meeting.

Presentations on Agency Risk Assessments: 11:00 am – 12:30 pm

11:00 – 11:45 am: Highly Pathogenic Avian Influenza Virus Risk Assessment for Poultry and Eggs by Neal Golden and Wayne Schlosser, USDA/FSIS.

11:45 am – 12:30 pm: Quantitative Risk Assessment on *Listeria monocytogenes* in Smoked Finfish by Dick Whiting and Clark Carrington, FDA/CFSAN.

In attendance (* participated by phone)

James Chen, FDA/NCTR

Sherri Dennis, FDA/CFSAN

Richard Fite, USDA/APHIS

Steven Gendel, FDA/CFSAN

Eric Grant, USDA/APHIS

John Hicks, FDA/CFSAN

Katherine Hollinger, FDA/OC/OWH

Janell Kause, USDA/FSIS

Wesley Long, FDA/CFSAN

Al Mansur, UMD Student Intern at FDA/CFSAN

*Michael McElvaine, USDA/ORACBA

Marianne Miliotis, FDA/CFSAN

David Oryang, USDA/APHIS

*Stephen Schaub, EPA/OW

*Carl Schroeder, USDA/FSIS

Amy Shalom, USDA/APHIS

Deborah Smegal, EPA/OPP

Brandolyn Thran, DOD/CHPPM

Richard Whiting, FDA/CFSAN

Plus many others from USDA/APHIS and USDA/FSIS attended the presentation part of the meeting.