

RAC Meeting Minutes (June 26, 2004)

Quarterly Meeting

Agency Updates:

Centers for Disease Control and Prevention (CDC)
Donald Sharp - nothing to report

Department of Defense Veterinary Services Agency (VSA) and U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM)
Brandolyn Thran

- CHPPM is conducting inhalation risk assessments, mostly chemical related, to look at human health effects on what people are being exposed to.
- Conducting a microbial inhalation risk assessment, determining dose-response using anthrax.
- Conducting a relative risk ranking of different microbial pathogens, e.g., influenza, leprosy, tuberculosis.

EPA Office of Water (OW)
Steven Schaub

- Have permission by EPA to develop microbial risk assessment guidance to be used across all EPA offices. Request continued participation and input from other RAC members, specifically FDA and FSIS.
- EPA Office of Research and Development presented to OMB a proposal for guidance.
- EPA/OW is moving ahead on their Microbial Risk Assessment Framework. Hired an AAAS Fellow who will help flush out the protocol in water-based media.
- The agency is in the process of including microbial pathogens into the Integrated Risk Information System (IRIS).
- EPA is developing new ambient water quality criteria; the present chemically derived criteria are not suitable for microbial pathogens.

FDA Center for Food Safety and Applied Nutrition (CFSAN)
Marianne Miliotis

- RA project/ Framework from selecting and conducting RAs. Selection and Disposition complete. CFSAN Management Council approved recommendations on the following:
 1. *Listeria monocytogenes* in smoked finfish - conduct a product pathway risk assessment
 2. *Listeria monocytogenes* in fresh-cut vegetables - develop a risk profile
 3. Hepatitis A virus - develop a risk profile
 4. Norovirus - develop a risk profile
 5. BSE - Harvard
 6. Allergen risk profile
- *Vibrio parahaemolyticus* Risk Assessment - Reviewed and now being revised for final review and clearance.
- Produce safety from production to consumption: an action plan to minimize foodborne illness associated with fresh produce

The FDA is planning a public meeting to obtain information from stakeholders concerning key elements of FDA's new produce safety action plan entitled ``Produce Safety From Production

to Consumption: An Action Plan to Minimize Foodborne Illness Associated With Fresh Produce." Will be held in College Park , MD , on Tuesday, June 29, 2004 , from 1 p.m. to 4 p.m.

FDA Center for Veterinary Medicine (CVM)
Mary Bartholomew

- 2 Risk Assessments have been revised and close to completion:
 - *Enterococcus faecium*
 - draft risk assessment on the human food safety and target animal safety of cloned food-producing animals
- An antimicrobial Risk Assessment meeting is being planned in co-sponsorship with SRA and JIFSAN - Tentative dates: Sept 28 th and 29 th , 2004

FDA National Center for Toxicological Research
Angelo Turturro

- Continuation of research in three areas
 - Identification of pathogens using PCR and other rapid methods
 - Identification of pathogens using Nuclear Magnetic Resonance (NMR) and Mass Spectroscopy (MS)
 - Secondary transmission with *Cryptosporidium*

NCTR is currently getting together a flyer and list of publications to show what they are doing.

FDA Office of the Commissioner (OC)
Kara Morgan

- Meeting planned with all FDA Centers (and agencies?) to share information and resources on their progress with Peer Review.

USDA Agricultural Research Services
Andy Hwang

- Two publications by Tom Oscar
 - A quantitative risk assessment model for *Salmonella* and whole chickens. J. Food Microbiol. 93:231-247, 2004.
 - Simulation model for enumeration of Salmonella on chicken as a function of PCR detection time score and sample size: implications for risk assessment. J. Food Protect. 67:1201-1208, 2004.
- Current studies
 - Andy Hwang completed the study on the behavior of *Listeria monocytogenes* in seafood salad stored under aerobic and vacuum atmospheres at refrigerated and abuse temperatures.
 - A manuscript has been submitted to the Intern. J. Food Microbiol.
 - The study will be presented at the IFT Annual Meeting and Food Expo.
 - An EXCEL spreadsheet of the predictive model has been developed; input parameters include: mayonnaise (pH 3.7-5.1); packaging (aerobic and vacuum); storage temperature (4 ° C - 12 ° C). Output information includes: lag phase duration (h); growth rate (log cfu/h); growth chart
- A food safety research workshop was held June 2 nd -3 rd , 2004 at ARS-ERRC-USDA. Future research ideas discussed include:
 - Techniques for chemical analysis of residue in food
 - Pathogen detection
 - Molecular interventions (genomics/Proteomics)
 - Produce interventions

- Meat and poultry interventions
- Processing technologies
- Predictive microbiology

Bob Buchanan (FDA/CFSAN) and Lynda Kelley (USDA/FSIS) presented research needs and participated in future research ideas discussions.

USDA Cooperative State Research Education, and Extension Service (CSREES)
Mary Torrence

- Researcher conducting a risk assessment on "Risk Factor Analysis in *Salmonella* and *Campylobacter* in flock from farm to plant"

Margaret Venuto

- Competitive research proposal panels have met and reviewed the submitted proposals

USDA Economic Research Services (ERS)
Tanya Roberts

- ERS has several new publications on Economics of Food Safety (see ERS web site: www.ers.usda.gov/Emphases/SafeFood/ for food safety briefing rooms and publications).
- Continuing work on the Economics of Performance Standards (Elise Golan)
- Continuing analyses of HACCP survey data (Mike Ollinger)
- Tanya Roberts is
 - Collaborating with Stan Bailey, USDA/ARS on the "Economics of Salmonella in Broilers" and went to Denmark and Sweden to see methods used to obtain low levels (<1% in broiler flocks). We are developing Scenarios for the USA to consider and will be presenting at IAFP.
 - Working on the economics of new rapid pathogen testing and would welcome input from other RAC members this summer.
 - Interested in talking with RAC members about collaborating on a book, perhaps titled: "FOOD SAFETY: The Economics of Public Policies, Private Strategies, and Pathogen Risk Assessments."

USDA Food Safety and Inspection Services (FSIS)
Carl Schroeder

- New employee: The Risk Assessment Division has hired Sylvia Kreindel. Dr. Kreindel will join the group shortly.
- New detailees
 - LCDR Nathan Quiring is on detail for about 1 year with the Risk Assessment Division, plus 2 new scientists also on detail for up to 1 year: David Labarre as a modeler and Gerald Zirnstein as a microbiologist.
 - Advertisement for Risk Assessment Division Director has been closed.
 - Advertisement for Scientific Advisor for Risk Assessment position is still open. Carol Maczka, former Scientific Advisor for Risk Assessment, is now Assistant Administrator for the Office of Food Security and Emergency Preparedness.
 - Risk Assessment activities
 - *C. perfringens* RA is currently being peer reviewed.
 - *Salmonella* Enteritidis in eggs risk assessment is currently being peer reviewed by external peer reviewers and by FDA and CDC
 - *Salmonella* in meat and poultry risk assessment is currently being peer reviewed.
 - Work is ongoing to revise the *E. coli* O157:H7 risk assessment.

- Verification sampling assessment for the new *Listeria* rule is nearing completion.

Mike Kasnia

- FSIS has contracted, in cooperation with APHIS, a BSE Risk Assessment (RA) update, from Harvard School of Public Health. This work is to update the previously conducted RA in the following ways:
 - Make structural model modifications to generate a new baseline to reflect current regulatory policies before December 2003.
 - Evaluate of the USDA/FDA mitigations post December 2003.
 - Evaluate the recommendations of the International Review Subcommittee.
- Additionally, the BSE Team is in the process of determining if there is a need for a further North American risk assessment.

Janell Kause

- **USDA BSE Risk Analysis** . Janell Kause was selected by the FSIS Acting Administrator to provide risk analysis support in USDA's response to public comments and in response to comments by the Ranchers Cattlemen Action Legal Fund on the APHIS BSE risk analysis. This detail also involved risk analysts from the USDA Office of Risk Assessment and Cost Benefit Analysis and APHIS.

USDA Office of Risk Assessment and Cost Benefit Analysis (ORACBA)

Michael McElvaine

- Extremely busy with BSE in collaboration with FSIS and APHIS

Workgroup Updates:

Data Gaps Analysis Work Group

The Data Gaps workgroup is drafting an announcement to publicize "Data Gaps for Selected Microbial Risk Assessments," a list of research needs in recent microbial risk assessments that is available on the RAC website. The purpose of this announcement is to invite food safety researchers and risk assessors to rank the data gaps to identify research priority.

Dose-Response Work Group

With Peg Coleman 's departure Neal Golden is now the work group lead. A couple of issues were discussed during a conference call meeting:

1. Facilitate development of a *Campylobacter jejuni* human feeding trial for the improvement of dose-response data addressing needs of risk assessment. I.e., add to vaccine study specific needs, which include strain and host variability and low dose-response data.
2. Develop a manuscript to incorporate additional mechanistic data into DR to better describe variability in host, pathogen and environment. Tentatively, manuscript would address difficulties with current dose-response approach of risk assessment and identify specific examples from previous risk assessments of how a more mechanistic approach to dose-response could better facilitate risk analysis. Example pathogens could then be used to demonstrate how dose-response data could be improved using published or unpublished data. Such organisms may include: *B. anthracis* , *Campylobacter* , *Cryptosporidium* , *Helicobacter* , or *Salmonella* .

Peer Review

The discussion paper currently contains most of its content and is being revised by the work group this month.

Data Information and Quality Work Group

A questionnaire was sent out to all the RAC member agencies to assess current practices for ensuring data quality in risk assessments. Results of questionnaire are pending based on responses received.

Symposium on Data Quality is planned for the annual SRA meeting, December, 2004.

Risk-Risk Work Group

The RRWG solicited input from the policy council and heard back that there is no reason to limit the scope of our workgroup to any specific risk-risk issues/questions (i.e. not just chemical vs. microbial risks). The scope of the workgroup should be framed from input we receive from RAC member agencies.

In order to get input from RAC member agencies, it was decided that we should invite representatives from member agencies to speak at upcoming RAC meetings. This will hopefully allow us to (a) learn about important risk-risk issues that member agencies have previously dealt with, and, (b) ask the speakers how the risk-risk workgroup can help their agencies and whether there are specific needs or questions the agencies have regarding risk-risk issues.

We may still want to go ahead with a symposium of speakers, but we should wait until we hear from different agency experts. This could be in the form of a public meeting, if that's what the workgroup decides.

We are still operating with the goal of creating a discussion paper, but, again, we should hold off until we learn what member agencies' needs are.

Potential speakers for upcoming RAC meetings have been identified. The workgroup is still working on expanding the list of potential speakers.

Data Utility Work Group

MARK YOUR CALENDARS! The Data Utility Work Group has set the date for a symposium to address data utility and sampling issues. The symposium will be held on 21 September 04, noon - 5 p.m. at the College Park Aviation Museum. The symposium will be free, however pre-registration will be required. The objective of this symposium is two-fold:

1. To provide presentations describing how risk assessors and risk managers have utilized available data to support decision making.
2. To provide presentations describing how researchers have designed data collection strategies with the intention of data being relevant for risk assessment and decision making (risk management).

The audience of the symposium will be **government employees** who are researchers, risk assessors, or risk managers. The will focus on food as the media, with an introduction and closing comments presentation as well. A summary of the meeting on the RAC website with clear delineation of major considerations that were identified during meeting will be posted on the JIFSAN Food Safety Risk Analysis Clearinghouse.

The business part of the meeting concluded with discussions on the RAC Annual Plan for FY05.

Presentation

"Economic Incentives for Food Safety Innovation: Case Studies in the U.S. Meat Industry" by

Tanya Roberts , USDA/ERS.

In attendance

Mary Bartholomew
John Cicmanec*
Sharon Edelson Mammel
Neal Golden
Andy Hwang
Mike Kasnia
Wesley Long
Michael McElvaine
Cristina McLaughlin
Marianne Miliotis
Kara Morgan*
Clark Nardinelli
Nathan Qiring
Angie Ritzert
Tanya Roberts
Steve Schaub*
Carl Schroeder
Donald Sharp*
Brandolyn Thran
Mary Torrence
Angelo Turturro
Margaret Venuto*