

MINUTES OF THE RISK COMMUNICATION ADVISORY COMMITTEE, FDA

FDA White Oak Campus, 10903 New Hampshire Ave.
Bldg. 31, Conference Center (rm. 1503)
Silver Spring, MD
Monday, August 15, and Tuesday, August 16, 2011

Executive Summary

The Risk Communication Committee (RCAC) met August 15 and 16, 2011. FDA welcomed the members of the committee and audience to the meeting. There was an Open Public Hearing each day, each with two speakers.

On August 15, Lee Zwanziger updated the Committee on FDA's progress on the Strategic Plan for Risk Communication (SPRC). She pointed to the meeting topics as examples of how FDA acts on the SPRC.

The Committee spent the first day on challenges of communicating about changing methodology in attribution of food borne illness. Three agencies are working together on the attribution project, called the Interagency Food Safety Analytics Collaboration (IFSAC). All three—CDC, the USDA's Food Safety Inspection Service (FSIS), and FDA—presented their work and their concerns. They are working with multiple methods, data streams, and sources of uncertainty, and they expect to work with multiple audiences as well. They shared one result of their analysis of the conceptual and communication product, a graphical representation of a three dimensional grid locating types of pathogens, foods, and points of contamination.

Members considered the three dimensional graphic, recognizing that it was complex but still a simplification of the problem. After they discussed it, members concluded that while the graphic has been and may continue to be helpful to the agencies in categorizing information and questions, it likely would not be helpful to communicate with the public. It is complex and abstract, but it is designed as a tool for managing the attribution problem internally, including identifying challenges for communication. How the agencies analyze the problem to be communicated is not, however, itself a message to communicate nor a method for communicating. Turning to the prepared discussion topics for the day, members stressed that with multiple audiences, communicators should prepare multiple types of messages. Communicators can use tiered communications to allow members of the audience to find the key messages quickly, and then as much further detail as they want. But learning what degree of detail audience members need and how to communicate most effectively with them needs testing and evaluation. Members complimented the collaborating agencies for considering communications early in the project.

On August 16, the Committee presented *Communicating Risks and Benefits: An Evidence-Based User's Guide*. All authors were invited to present summary remarks on their chapters; a series of short presentations followed. Later, Malcolm Bertoni thanked the committee, and presented certificates to the retiring members.

Participants

RCAC Members Present

Baruch Fischhoff, Ph.D., *Chair*
Craig Andrews, Ph.D.
Noel T. Brewer, Ph.D.
Mary L. Brown, Ph.D.
Christine M. Bruhn, Ph.D.
Nananda Col, M.D.
Jacob DeLaRosa, M.D. (August 15)
Angela Fagerlin, Ph.D.
Sokoya Finch, M.A.
Gavin Huntley-Fenner, Ph.D.
Kala Paul, M.D.
Valerie Reyna, Ph.D.
Gary Schwitzer

Industry Representative (August 15)

Andrew DeHont

Temporary Members (August 16)

Linda Neuhauser, Dr.P.H.
Betsy Sleath, Ph.D.

Designated Federal Officer

Lee L. Zwanziger, Ph.D.

Open Public Hearing Speakers, August 15, 2011

Cindy Roberts, Center for Science in the Public Interest
Andrew Benson, International Food Information Council

Open Public Hearing Speakers, August 16, 2011

Edward Morawetz
Andrew Benson, International Food Information Council

Presentations

Monday, August 15, 2011

FDA Welcome, Meeting Overview, and SPRC Update – Lee L. Zwanziger, Ph.D.
Overview of Meeting Topic– Jeff Farrar, D.V.M., M.P.H., Ph.D., and Patricia Griffin, M.D.
Overview of Attribution – Dana Cole, D.V.M., Ph.D.
Interagency food Safety Analytics Collaboration (IFSAC) – Neal Golden, Ph.D.
Challenges of Communicating – Kara Morgan, Ph.D.

Tuesday, August 16, 2011

Communicating Risks and Benefits: An Evidence-Based User's Guide,
Overview and Reflections – Baruch Fischhoff, Ph.D.

Summary advice from selected chapters –

Noel Brewer, Ph.D.

Angie Fagerlin, Ph.D.

Mary Brown, Ph.D.

Christine Bruhn, Ph.D.

Valerie Reyna, Ph.D.

Betsy Sleath, Ph.D., R.Ph.

Linda Neuhauser, Dr.P.H.

Kala Paul, M.D.

Craig Andrews, Ph.D.

Gavin Huntley-Fenner, Ph.D.

Nananda Col, M.D., M.P.P., M.P.H.,
FACP

Gary Schwitzer

Nancy Ostrove, Ph.D.

Lee Zwanziger, Ph.D.

Sokoya Finch, M.A.

Kala Paul, M.D.

Risk Communication Advisory Committee Meeting, August 15, 2011

Dr. Baruch Fischhoff called the meeting to order at 8:05 a.m., Monday, November August 15, 2011. The members introduced themselves. The designated federal officer (DFO) read the conflict of interest statement into the record. The statement noted that, based on the agenda and financial information reported by members, there was one waiver allowing full participation and no other potential conflicts of interest. All members were reminded to address conflicts of interest if any arose.

Summary of Presentations and Discussions, August 15, 2011

Please see the slides and transcript for further details.¹

FDA Welcome, Meeting Overview, and SPRC Update

Dr. Zwanziger updated the members on continuing work with the Strategic Plan for Risk Communication (SPRC), emphasizing as examples

- The ongoing interagency collaboration that is the current topic of the meeting
- Release of volume of literature reviews relevant to practical risk communication, the topic of the following day
- Facilitation of two-way communication and evaluation through a survey of meeting attendees, available both in print and online

Chair's Welcome

Dr. Fischhoff remarked that the committee has consistently said that communication should be evidence-based, in two ways:

- Communications should reflect communication science
- Communications should be developed and tested scientifically with users.

The agenda includes a good example of standard risk communication advice: the time to plan for communication of an emerging issue is just as soon as risk managers know the rough contours of the problem. He complimented the FDA, FSIS and CDC for bringing up the problem of changing methods in attribution early in their work, and welcomed Dr. Farrar to the podium.

Overview of Meeting Topic

Dr. Farrar thanked members for their attention to the problem. He explained that FDA needs accurate and timely attribution information to set priorities based on public health risk. FDA also wants to be transparent and to engage stakeholders. Collaboration between FDA, USDA, and CDC is a critical component of FDA's work on attribution. Collaboration also shows the complexity of the issue; for example, the three agencies began with different definitions of attribution itself. FDA hopes to communicate effectively that numerical estimates of food borne illness will change with improvements in the attribution process, and these changes may reflect actual changes in foodborne illness rates as well.

¹ Background materials, slides, transcripts and other meeting materials, are posted here: <http://www.fda.gov/AdvisoryCommittees/CommitteesMeetingMaterials/RiskCommunicationAdvisoryCommittee/ucm249108.htm>

Dr. Griffin arrived later in the morning due to travel delays. She also thanked the meeting participants. She highlighted the need for a communication strategy for attribution by showing how the situation is changing in several ways at once.

- The numbers of illnesses associated with different organisms have changed dramatically over ten years.
- Some of the change may be due to changing data sources and measurement methods.
- Additional change results from changes in the food production and processing chain.

Overview of Attribution

Dr. Cole introduced the topic of attribution and outlined communication challenges about attribution. Using a fictional example, she showed multiple questions, data sources, sources of uncertainty, and then multiple combinations of all of these. In addition, methods of measurement are changing as well.

“Attribution” is determining the proportion of illnesses that are foodborne and, more specifically, due to specific foods or food preparation settings. The goal is to reduce foodborne illness with specific actions. The multiple uncertainties mentioned make it difficult, however, to know whether a change in rate of illness is due to the action taken. Further, an illness-causing organism may be spread in ways other than food. When the CDC gets reports of illness, sometimes there is no information provided except the organism type, which makes it difficult or impossible to decide whether cases are linked to a common cause of infection. One or more cases with no further information are classified as *sporadic*, while a group of cases that can be linked together through other available information such as a shared food source are classified as an *outbreak*. The majority of reports received are sporadic, making attribution all the more challenging.

IFSAC is concerned about how to report information over time when the amount of foodborne illness observed could be changing due to many factors including the measurement methods themselves. As they worked on these problems, members of the IFSAC concluded that showing data on a pie chart did not go far enough. A pie chart could include attribution at one time and at one point in the chain of food production and consumption. They developed a three-dimensional grid, here called *the cube*, to organize more factors.² IFSAC members ask whether the cube or some other graphic can communicate their messages including change in many dimensions.

Questions and Discussion

Committee members asked several clarifying questions, then stressed the following.

- IFSAC should first determine who the audience is, then develop communications targeted for that audience.
- The cube, though it has been so useful to IFSAC for internal thinking, is likely not the graphic best suited to communicating with the public.
- More narrative may be helpful to connect with audience members, but any given narrative should be tested for unanticipated responses by the audience.

²See Slides 26 and 27 of Cole Presentation, at link below:
<http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/RiskCommunicationAdvisoryCommittee/UCM267569.pdf>

Interagency food Safety Analytics Collaboration (IFSAC)

Dr. Golden introduced the Interagency Food Safety Analytics Collaboration (IFSAC). IFSAC will improve coordination of responsibilities between the agencies, USDA's Food Safety Inspection Service, the CDC, and the FDA. Agencies need the collaboration because attribution is a critical factor in how they determine what to do, but currently it is based only on data from outbreaks. It would be better to use data from other sources as well, and to improve our methods; for example, current methods do not account for different degrees of uncertainty or confidence in data quality. Finally, the different agencies need to be able to confer using consistent terms, approaches and methods.

IFSAC has a steering committee with six members, two from each agency. A quorum is at least one representative from each agency. IFSAC also has a technical workgroup to carry out projects and proposals that are then taken up to the steering committee. Its members include the speakers at this meeting, who also serve as liaisons with the steering committee (Cole, Golden, and Morgan).

IFSAC's first project was to develop a shared list of attribution needs among the three agencies. Next, the work group developed proposals for meeting the short- and long-term needs, which were then evaluated by the steering committee for strategic coordination. Strategic plan objectives include improving attribution but also improving communication about that process. IFSAC has been considering communication channels like public meetings and federal register notices, and welcomes RCAC advice on communication channels and also on when to engage stakeholders.

Questions and Discussion

A member commented first that many people mistrust the apparent ambiguity when a population-level probability might apply to them each individually, though the actual outcome for each individual is still uncertain. That mistrust may translate to loss of confidence in IFSAC when they also express ambiguity in their attribution. Second, the agencies must somehow monitor for the truly unexpected events that may cause contamination. Dr. Cole agreed about the difficulties, especially as the CDC's surveillance is designed to detect illness, not contamination directly. Another member commended the collaborative effort, and asked how communication processes would be organized. Dr. Golden said that messages would be developed in IFSAC but then each agency would communicate using their own structures. The member continued, urging IFSAC to consider more communication with state agencies, and to remember that not all the public will have access to information posted on the internet. Finally, a member suggested that IFSAC investigate fellowships and other training for journalists, so that more of them are educated about food borne illness and attribution.

Challenges of Communicating

Dr. Morgan discussed communication challenges. She began with the question of the audience, noting that they suspect that the general public is less likely to be concerned with the changing methodology than more specialized groups such as foods industry and consumer advocacy groups. Similarly, IFSAC members have found the cube clarifying, and wonder if it might also be useful for interested stakeholders. They see that the cube may not be helpful to the general public.

She showed an example of a given attribution assessment changing under different methodologies, noting that when several methods are all in use, there can be several different numerical assessments. Such changes are particularly frustrating when people

are seeking information on changes over time. The data can be interpreted in different ways as well, so simply releasing all raw data would not eliminate confusion. In short, IFSAC wants to be

- as transparent as possible about their data and methods
- as up to date as possible with current science
- worthy of the public trust and confidence in their professional expertise

Another tension is the wish to communicate with openness and transparency about the inherent limitations of aspects of the system such as data collection, but not to seem to be shifting blame. For example, the amount of information on food borne illnesses varies among different states. Rates of illness are subject to many different influences and reporting is voluntary. Differences do not, therefore, necessarily show that some states are less committed or less funded for public health.

Finally, she referred committee members to the prepared discussion topics and asked them to consider what further role there might be for the cube.

Questions and Discussion

A member asked about the sorts and sources of complaints about changing attribution numbers, suggesting that perhaps IFSAC's premises may be unnecessarily defensive. Dr. Morgan replied that the word "complaint" is probably too strong, but that they do expect questions from interested stakeholders of different perspectives. A proactive approach therefore seems both prudent and transparent. A member discussed how different stakeholders such as industry sectors or consumer advocacy groups might be expected to raise questions about any numerical estimates. If so, then the existence of questioning might be independent of communication effectiveness.

Another member reported never having observed members of the public objecting to numbers changing due to advancing methods or observation tools. Rather, people know that ability to understand, approach, and analyze data can improve over time. People may understand change as improvement so it may not diminish confidence in the agencies. People do, however, complain about the overseeing agencies not providing information about outbreaks in time for people to take action to protect themselves. The IFSAC agencies might address that concern and build public confidence by giving more explanation of how outbreak data is collected and analyzed for attribution. For example, explain:

- Determining the source of an outbreak requires interviewing many patients.
- Infected people may not even fall ill until days after eating a contaminated food.
- Many days pass before it is even possible to narrow down possible sources.

Another important point to communicate is that investigations have to rule out foods that turn out not to be involved, so that neither producers nor consumers suffer from having a food blamed falsely. In other words, telling the story of outbreak detection and attribution may facilitate both understanding of risks, and confidence in the public health system.

Several members stressed at different points in the discussion that any materials developed should be pilot-tested.

Summary of Open Public Hearing Presentations, August 15, 2011

Please see the transcript for further details.³

There were two speakers in the Open Public Hearing.

- Cindy Roberts, Food Safety Research Associate, Center for Science in the Public Interest (CSPI), emphasized that CSPI
 - Supports improvements in food attribution methods and data collection
 - Considers food attribution data critical in designing risk-based interventions to control hazards
 - Often uses CDC's data and supports wider data availability⁴
- Andrew Benson, Vice President of International Relations for the International Food Information Council updated the Committee on the development of the International Center for Excellence in Risk Communication.

Committee Discussion

After the open public hearing, Dr. Fischhoff asked whether IFSAC had any particular questions in addition to the prepared discussion topics. They asked for advice about possible uses of the cube. Dr. Fischhoff replied that the cube seems to be an important management tool for internal communication. As such, it might benefit from a test of face validity with other employees of IFSAC agencies. Dr. Morgan explained that IFSAC intends to get input from interested stakeholders. They had envisioned using the cube to show the categories of information that are needed, and are lacking. That is, a cube for a real case would have a lot of zeros in place of data. Perhaps showing the real situation about missing data would help focus discussion of what should be highest priority. But the committee, including industry representative, found the cube both complex and vague. At the same time, IFSAC members pointed out, it is actually too simple, for example omitting the dimension of changing methodology. IFSAC members stressed that their objective is to communicate the overall state of the attribution process, not the risk of a particular food-pathogen pair.

Growth-Share Matrix

Dr. Fischhoff observed that the cube's valuable function was in helping the different agencies understand the structure of their problem in common terms and see where their definitions agreed and disagreed. It is not the only way to represent complex multidimensional problems and it does not readily show what the results are. It shows what investigators did, not what they found. Drs. Huntley-Fenner and Andrews suggested an alternative representation.

Drs. Huntley-Fenner and Andrews presented a growth-share matrix, a tool supporting strategic planning with limited resources.⁵ The graphic represents decision making, often about product lines, throughout the lifecycle of the products as they contribute to the company overall.

³ See note 1 above.

⁴ See the two CSPI slides listed here:

<http://www.fda.gov/AdvisoryCommittees/CommitteesMeetingMaterials/RiskCommunicationAdvisoryCommittee/ucm268506.htm>

⁵ See Growth Share Matrix examples,

<http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/RiskCommunicationAdvisoryCommittee/UCM268511.pdf>

The graphic is a two by two grid that is readily adaptable to other situations, like different foodborne illnesses, and the relative contribution of different foods or pathogens to the overall public health burden. While in a business plan the “best” quadrant might be a star product, in the public health arena that quadrant might be top priority for intervention. This graphic tool also is designed to incorporate change in relative priority over time.

One member commented that a key difference between the graphics is that the growth share matrix models decisions for action, where the cube is a tool to organize existing information by discrete categories.

Discussion Questions

Members took up the prepared discussion topics.

1. How to communicate clearly to multiple audiences (industry, media, public) about evolving methodology producing quantitative conclusions and simultaneously project a message of confidence and assurance that the estimates we are using now are the best science-based data-driven estimates that are available to inform decision making at this time

Members quickly concluded that different audiences need different messages; one size will not fit all.

2. How to learn what degree of detail is important to different audiences, such as the nature and status of the data available and the methods of analyzing it

Members observed that there is no way to avoid actually identifying the target audience and doing some kind of meeting with audience members to learn what they want. IFSAC pointed out that they do plan to hold public meetings and accept comments through the docket, but RCAC members replied that public meetings don't fill the same purpose, and don't bring in the same people. Members suggested possibly holding a sort of workshop featuring a focus group discussion. IFSAC also noted that while all the suggestions mentioned were attractive, they were also costly. The committee said, in that case, it would be more informative to substitute in-depth interviews for a formal public meeting.

3. How to explain the basis for our confidence in using the current method, as well as acknowledging the uncertainty

IFSAC said that they were not yet sure how confident they could be about the different methods; several researchers have published about multiple sources of uncertainty. Because they are trying to build communication into the process in an early stage, much about the process is still unclear. For example, even when experts systematically compare their conclusions with different methods, their results differ not only due to methods, but also according to the pathogen and food examined.

A member asked about using the U.S. Preventive Services Task Force reports as models for reporting degrees of confidence in data and recommendations. Dr. Morgan said that could be interesting but doing so would suggest need first for a study about

mental models for how IFAC agencies determine risk in foods. FDA does know that many people start from assumptions quite different from the FDA, for example, that all food products get premarket testing by FDA. In short, it seems that the public believes that the IFSAC agencies have a lot more data than they do, so there is a gap between what the public expects the agencies to be able to do and what is actually possible. Another member commented that in that case, communicators should state clearly what they do and do not know, and what they would recommend given that uncertainty, but always being straightforward and acknowledging the complexity of that decision. A member pointed out that another important message is that foodborne illness can result from contamination during preparation, outside governmental regulatory reach.

4. How to communicate clearly to multiple audiences when there may not be actionable steps to take for all audience members; rather, the key message for industry may be how to participate in improved food safety surveillance and reporting, but for the public, it is just to understand changing numbers as reflecting evolving methodology as well as evolving food safety

Members commented that different audiences likely need different types of communication. Rather than attempting to satisfy multiple needs with one communication, they suggested designing tiered communications so that audience members can find the amount of detail they need.

5. How to communicate both directly and working with media channels to communicate clearly to multiple audiences so that we appear as forthright as we intend to be, in brief, that numbers and methods are changing to reflect the improved methods available now, but not to cover up information or previous statements that were based on methods that are now outmoded but were the standard of their day

Several members observed that the public in general shows acceptance and enthusiasm for scientific change. Some members pointed out that the public can be confused by seemingly contradictory recommendations, and that interested stakeholders may be less accepting especially of methodological change with bad outcomes for themselves. On these points, members commended the IFSAC for thinking ahead and suggested preparing for such engagement by developing messages showing how, for example, a new method could have predicted better than could the old method (i.e., demonstrates better retrospective accuracy).

6. How to help stakeholders and interested parties navigate many diverse sets of attribution information being generated outside the federal agencies, and inspire trust in the government estimates even though they will not always be consistent with other estimates.

Members suggested

- Candid disclosure of the strength and the limits of the evidence works would likely help in both in the long and short term.
- Start communications from a template for public information releases, developed with some informal user testing.
- Develop a glossary for related terms like attributable risk, relative risk, and absolute risk to avoid creating an appearance of disagreement when people are

- just using terms differently. Other agencies such as AHRQ have already developed similar materials.
- Finally, the FDA may find communication support in academic risk assessment partners outside the government.
7. How to integrate communications concerns such as these throughout the initiative

Members commended the IFSAC for their early planning work. IFSAC requested more specifics about steps in developing the communication part of the initiative. Members also said the day's presentation so far demonstrated that the IFSAC members are good at explanation to audiences new to the topic. In addition, they suggested:

- Check with some members of the intended audience about what information they need, or what sort of questions are most disturbing certain audience segments. IFSAC could
- Develop standard templates or ways of giving messages that could then be used in multiple different ways.
- Seek advice from social scientists to help with a draft.
- Note that repeated testing with at least some members of the intended audience remains necessary.

Conclusions

Dr. Morgan asked a final question on behalf of the IFSAC. She explained that after the meeting, IFSAC members will outline their communication strategy, incorporating advice from the RCAC. It seems that RCAC advises a step-wise approach, really just a case of basic social science research:

- Ask people what they need and what they want to hear about
- Develop communication materials based on the initial feedback
- Test the materials to see if they are effective in communicating the intended message
- Implement the communications
- Ask people whether they are getting the information they need, based on the communication materials

Is that a fair summary of the committee's advice?

Dr. Fischhoff replied that this is the RCAC's point exactly. He thanked IFSAC for bringing such a good topic to the RCAC, and for providing the technical materials in advance to the members could prepare themselves. He complemented the materials and the presentations. Finally, on behalf of the RCAC, he urged the IFSAC members to come to the RCAC again, and wished every success in the meantime.

The meeting was adjourned at 4:50 p.m. for the evening.

Risk Communication Advisory Committee Meeting, August 16, 2011

Baruch Fischhoff called the meeting back to order at approximately 8 a.m., Tuesday, August 16, 2011. The DFO read a conflict of interest statement into the record, noting no potential for conflicts of interest with the day's topic. She also said that the meeting and presentation of the book, *Communicating Risks and Benefits: An Evidence-Based User's Guide*, represented the final public reporting to the full committee of the Editorial Subcommittee and the Practitioners' Perspectives Subcommittee. Dr. Fischhoff welcomed all attendees and RCAC members quickly reintroduced themselves.

Summary of Presentations and Discussion, August 16, 2011

Please see the slides and transcript for further details.⁶

Communicating Risks and Benefits: An Evidence-Based User's Guide Overview and Reflections

Dr. Fischhoff first introduced the volume, emphasizing its basis in evidence and its practicality, designed to make the fruits of risk communication science accessible to risk communicators with variable resources. The central chapters follow a common structure:

- First, a quick summary of what does the science say relevant to communicators,
- Next, what the science means for communicators in practice
- Evaluation strategies for a range of budgets, including none
- Suggestions for additional information resources

Summary advice from selected chapters was presented by the authors who were present.

Noel Brewer highlighted tailoring the risk communication to its goal, illustrating with an elevator warning.⁷

Angie Fagerlin summarized her and Ellen Peters' discussion on communicating numerical information, such as the types of graphic displays that most people find clearest.

Mary Brown and Christine Bruhn presented persuasive communication, which is more effective if developed specifically for and tested with the target audience.

Valerie Reyna discussed communication across the life span, noting that if the audience does not understand and remember information, then nothing has been communicated, and that people understand and remember in different ways as they mature.

Betsy Sleath gave an overview of research and research gaps about communication between health care professionals—physicians and pharmacists—and patients.

⁶ See note 1 above.

⁷ See slide here:

<http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/RiskCommunicationAdvisoryCommittee/UCM268533.pdf>

Linda Neuhauser and Kala Paul discussed readability, comprehension, and usability of information, including tools and techniques to help make information more accessible.

Craig Andrews summarized extensive research on warnings and disclosures, highlighting features that make warnings and disclosures more effective.

Gavin Huntley-Fenner discussed the value of human factors research in designing and testing messages to communicate the safety information of highest priority for the special needs of particular types of patients or consumers.

Nananda Col summarized research at the intersection of risk communication, decision aids, and shared decision making.

Gary Schwitzer described criteria and results of assessing journalism on coverage of news related to medicine and health.

Nancy Ostrove discussed the intersection of practical challenges of doing risk communication research at the FDA, along with challenges fundamental to the science itself.

Lee Zwanziger, Sokoya Finch, and Kala Paul described the chapter summarizing observations and accumulated wisdom of some of the members and former members of the committee who engage in practical risk communication.

Summary of Open Public Hearing Presentations, August 16, 2011

Please see the transcript for further details.⁸

There were two speakers in the Open Public Hearing.

- Edward Morawetz, whose son had died of a rare cancer after a combination treatment, spoke of gaps between the FDA's concerns about emerging safety problems and communication of the new information to patients and practitioners. He recommended ways to narrow the gap, a topic the RCAC was not prepared to comment on. Members expressed sympathy for his loss and asked the DFO to forward the information within FDA.
- Andrew Benson of the International Food Information Council urged greater attention to dissemination of the newly published book, and discussion of how to facilitate collaborative work on improving risk communication e.g. in health journalism.

FDA's Update and Certificates for Retiring Members

Malcolm Bertoni, Assistant Commissioner for Planning, presented an overview of RCAC milestones and updated on the status of the Committee. The RCAC is well-established, active, and continues to be busy. The FDA greatly values RCAC advice and comment. He emphasized that the founding of the RCAC and Risk Communication Staff owed a great deal to the vision of Nancy Ostrove.

⁸ See note 1 above.

Four members of the RCAC were scheduled to rotate off the committee at the end of September: Christine Bruhn, Jacob DeLaRosa, Sally Greenberg, and Chairman Baruch Fischhoff. Mr. Bertoni presented them with certificates, letters from the Commissioner, and the FDA's sincere thanks for their service.

Summary of RCAC's Final Comments and Discussion, August 16, 2011

The DFO reviewed where to find the online version of the newly released volume, *Communicating Risks and Benefits: An Evidence-Based User's Guide*.⁹ Members offered suggestions to one another and the FDA about making people aware of the book and how to get it.

The meeting was adjourned at 12:10 p.m.

I certify that I attended the August 15 and 16, 2011, meeting of the Risk Communication Advisory Committee and that the minutes reflect what transpired.

//s//
Lee L. Zwanziger, Ph.D.
Executive Secretary

//s//
Baruch Fischhoff, Ph.D.
Chair

⁹ Available on line at link below:
<http://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/ucm268078.htm>