

**NATIONAL CONVERSATION ON PUBLIC HEALTH AND CHEMICAL EXPOSURES  
SCIENTIFIC UNDERSTANDING WORK GROUP**

**Meeting No. 6 Summary  
Teleconference  
May 27, 2010**

**Meeting Objectives:**

- Review draft recommendations and decide which are ready to begin drafting

<b>Upcoming Meeting</b>	<b>When and Where</b>	<b>Suggested Agenda Items</b>
Full <i>National Conversation on Public Health and Chemical Exposures</i> Scientific Understanding Work Group (Scientific Understanding Work Group) call	June 17, 2010 1:30 p.m.–3:30 p.m. EST Conference line	Discuss the second half of the group’s draft recommendations.

**I. Action Items**

<b>Decide Next Steps, Assignments, and Milestones</b>	<b>By Whom</b>	<b>By When</b>
1. Volunteer for drafting groups	Interested work group members contact Gail Bingham	ASAP
2. Draft recommendations	Drafting teams	July 6, 2010

**II. Meeting Summary**

**Review Agenda and Materials for Call**

Kevin Teichman, Scientific Understanding Work Group chair and U.S. Environmental Protection Agency (EPA) staff member, welcomed everyone to the call, and Gail Bingham, RESOLVE facilitator, reviewed the agenda. She explained that the objectives of this call were 1) to sort the group’s draft recommendations into three categories: a “ready to start drafting” category, an “in the mix category” for recommendations that warrant further discussion, and a “for the future” category for good recommendations that likely would not make the cut into the top 12; and 2) to discuss as many of the “in the mix” recommendations as possible to determine either if they could be strengthened to go into the drafting category or if they were not likely to be recommended.

Dr. Teichman reminded the group that it can put forward only 12 recommendations and urged everyone to stay focused on topics specific to scientific understanding. He will share any ideas more relevant to other work groups with those particular work groups.

Ms. Bingham shared that 15 members sent in their scores on the prioritization matrix (Dr. Teichman was not one of them). One member expressed concern that only half the members participated. Dr. Teichman reminded the group that the matrix exercise was only for initial sorting and that the group would decide which recommendations should be drafted. On an upcoming call the group would then determine which recommendations should be put forward to the *National Conversation on Public Health and Chemical Exposures* Leadership Council (Leadership Council).

Another member expressed concern that respondents scored recommendations without fully understanding each recommendation. Ms. Bingham responded that the Scientific Understanding Work Group received a copy of each subgroup report along with the matrix so that members had the opportunity to refer to the subgroup reports for more detailed information. Also discussed was the fact that the group discussed some of these recommendations at its last meeting.

Ms. Bingham agreed that making informed decisions is important and stressed that this system allows the group to have more time to discuss those recommendations that persons are most uncertain about including.

Dr. Teichman assured the group that he will represent its will before the Leadership Council and asked the group to move forward with this process.

### **Review Preliminary Sorting of Recommendations**

Ms. Bingham explained that scores given to the recommendations varied widely, but that large breaks did not occur between clusters. The group decided to review each recommendation briefly so the members could better understand each one before the drafting step and determine if some could be combined with others. Discussion began with the recommendation receiving the largest number of votes. Volunteers will be sought to redraft each one prior to decisions on the July 12 call about what to include in the work group report.

**Recommendation No. 2 (Develop scientific criteria to promote development of safer chemicals):** Jean Harry gave an overview of this recommendation and stressed the importance of developing new criteria to promote alternative assessments and promote the development of safer chemicals, including refining methodologies for evaluating safer chemicals, requiring alternative assessments for chemicals identified as hazardous, and researching green chemistry strategies.

**Recommendation No. 15 (Improve knowledge of existing databases):** Mark Buczek shared that this recommendation aims to better organize current information and make it more easily accessible. He mentioned that the *National Conversation on Public Health and Chemical Exposures* Monitoring Work Group is developing a similar recommendation.

**Recommendation No. 1 (Develop scientific criteria for triggering the precautionary approach):** Steve Lester shared that the goal of this recommendation is to provide the scientific information necessary to implement the precautionary principle. The group discussed different perspectives and concerns about how the precautionary principle could be implemented. Teichman noted that while he believes the *National Conversation on Public Health and Chemical Exposures* Policies and Practices Work Group will proffer a recommendation on the

precautionary principle, the role of the Scientific Understanding Work Group is to understand how to apply science to facilitate its implementation.

Dr. Teichman suggested that the group drafting this recommendation consider this question: “If you were the EPA administrator, what scientific information would you want to be able to decide if the precautionary approach is right for a certain situation?”

**Recommendation No. 7 (Improve scientific research on effects of chemical exposure by better involving communities):** Doris Cellarius discussed this recommendation. One member expressed concern that this recommendation focuses on improving risk-based decision-making, and he thinks we should be moving away from this model. He suggested dropping the risk-based language. The Scientific Understanding Work Group will discuss how to characterize improvements to risk assessment on a future call. This recommendation will be combined with recommendation No. 10.

**Recommendation No. 4 (Fill data gaps in scientific knowledge of health effects of chemical exposure to prioritize chemicals of concern):** Dr. Teichman asked whether the intent of this recommendation is to do more toxicological work in order to fill these gaps. Some members thought this might be too big a task to accomplish. One member suggested that the group specifically state that in this recommendation “chemicals” refer to chemical mixtures and biological contaminants; other members agreed. Also discussed was the need for the recommendation to be more actionable (i.e., how should we prioritize which chemicals to research?) Another member suggested that the recommendation be to prioritize health endpoints of most interest and to look at it from that perspective rather than just learning more about chemicals themselves. Suggestions were made to consider neurological health effects and other critical health endpoints such as ADHD and autism in this recommendation.

**Recommendation No. 3 (EPA and states should develop approaches for assessing cumulative exposure health impacts):** Mr. Lester introduced this recommendation, noting that currently we do not have good ways of evaluating cumulative risk and asking how can we better understand both nonchemical and nonchemical stressors. The members disagreed about whether to consider nonchemical stressors, although the importance of both chemical and nonchemical stressors was acknowledged.

**Recommendation No. 11 (Identify vulnerability characteristics of communities in structure and function, which increase susceptibility to chemical exposure):** Ms. Cellarius reviewed this recommendation for the group and stressed the importance of learning what makes communities vulnerable to toxic exposures. Ms. Bingham asked the group for concrete actions that could help evaluate this problem. The answers included the need for agencies, such as the National Institutes of Health and EPA, to do research and the value of case studies, such as research on mold in relation to hurricanes and floods and studies on Superfund megasites.

**Recommendation No. 24 (Improve in-vitro screening programs, PBPK models, and endogenous biotransformation data relevant to human exposure):** Russ White gave a brief overview of this recommendation. One suggestion was to recommend that some calls for proposals require that research integrate some of these new methods into their approaches. The suggestion was made to combine this recommendation with recommendation No. 21. The group agreed.

**Recommendation No. 5 (Improve technical aspects of risk assessment analysis):** One member expressed concern about including this recommendation because it could result in the continued use of risk assessment in ways some consider harmful. He also noted that other groups are focusing on how risk assessment can be improved. The members shared various views for and against this idea. The group agreed to combine this recommendation with recommendations 23 and 20, table this discussion, and continue it on the next phone call.

**Recommendation No. 6 (Revise the ATSDR Public Health Assessment guidance manual):** Frank Bove shared that ATSDR Public Health Assessments (PHAs) had received criticism for years. He believes that ATSDR should set up a working group or advisory panel to bring in those affected by the agency's PHAs (e.g., community, researchers) as well as those who have done health assessments because the process needs revision; others agreed that this is an important recommendation. One member asked that "ill individuals" and "environmental medicine physicians and researchers" be included in describing the members of any advisory panels. A suggestion was made to combine recommendations 6 and 9; the group agreed.

### **Decide Next Steps, Assignments, and Milestones**

Ms. Bingham concluded the call by summarizing the next steps. She noted that Dr. Teichman's staff will reformat the recommendations into the common template. Ms. Bingham will solicit volunteers (groups of 2–3 persons) to review and revise each recommendation, consistent with the work group's intent. Once they have been reformatted, these recommendations will be sent to the drafting teams for revisions. The goal is to have robust drafts before the July 12 conference call.

Ms. Bingham noted the next call is scheduled for June 17, 2010 from 1:30 p.m.–3:30 p.m. EST. During this call, the group will discuss the remaining recommendations.

## **III. Participation**

### **Members Present**

Cherri Baysinger, Missouri Department of Health and Senior Services  
Nancy Beck, Physicians Committee for Responsible Medicine  
Frank Bove, Agency for Toxic Substances and Disease Registry  
Mark Buczek, Suprestra (Retired)  
Doris Cellarius, citizen  
Bob Hamilton, Amway Corporation  
Jean Harry, National Institute of Environmental Health Sciences  
Wade Hill, Alliance of Nurses for Healthy Environments  
Stephen Lester, Center for Health, Environment, and Justice  
Fred Miller, National Institute of Environmental Health Sciences  
Lisa Nagy, The Preventive and Environmental Health Alliance  
Richard Niemeier, National Institute for Occupational Safety and Health  
Melissa Perry, Harvard University  
Megan Schwarzman, University of California, Berkeley  
Stuart Schmitz, Iowa Department of Public Health  
Russell White, American Petroleum Institute

### **Regrets**

George Alexeeff, California EPA  
Richard Becker, American Chemistry Council  
Janice Chambers, Mississippi State University

*Final Document*

Jeff Fisher, University of Georgia  
Susan Hanson, Shoshone-Bannock Tribe  
Rebecca Head, Monroe County Health Department  
Jeff Jacobs, American College of Occupational and Environmental Medicine  
Kristi Jacobs, Food and Drug Administration  
Jim Klaunig, Indiana University Center for Environmental Health  
Claudia Miller, University of Texas Health Science Center at San Antonio  
Frank Mirer, Hunter College Urban Public Health Program  
Deirdre Murphy, U.S. Environmental Protection Agency  
Rich Sedlack, The Soap and Detergent Association  
Margaret Shield, Local Hazardous Waste Management Program, King County

**Facilitation and Staff Team Members Present**

Kevin Teichman, Chair, EPA  
Ed Murray, ATSDR  
Gail Bingham, RESOLVE facilitator  
Kim DeFeo, NCEH/ATSDR staff