

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

**Meeting No. 9 Summary
Teleconference
August 3, 2010**

Call Objectives:

- Review new proposed recommendations and determine what to include in the report
- Review introductory sections of the draft report
- Discuss recommendation language
- Plan next steps to ensure the report is finished by August 31, 2010

Upcoming Meeting	When and Where	Suggested Agenda Items
<i>National Conversation on Public Health and Chemical Exposures Scientific Understanding Work Group (Scientific Understanding Work Group) call</i>	October, 2010 Time and date TBD	Finalize work group report

I. Action Items

Wrap Up and Next Steps for Work Group	By Whom	By When
1. Send e-mail detailing the Scientific Understanding Work Group's next steps	Gail Bingham	August 4, 2010
2. Revise "current status" section of work group report	Jean Harry and Steve Lester	Week of August 9, 2010
3. Revise recommendation on institutional controls at Superfund sites	Doris Cellarius	Week of August 9, 2010
4. Revise mold and pesticides recommendation	Lisa Nagy	Week of August 9, 2010
5. Revise wording of theme three in the introduction	Steve Lester and Frank Bove	Week of August 9, 2010
6. Revise "evaluating public health impacts" section	Jean Harry and Steve Lester	Week of August 9, 2010
7. Write a sentence about behavioral science in the recommendation about individual susceptibility	Wade Hill	Week of August 9, 2010

8. Revise the recommendation about vulnerability characteristics	George Alexeeff, Ms. Cellarius, Susan Hanson, Mr. Lester, and Cherri Baysinger	Week of August 9, 2010
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II. Call Summary

Welcome and agenda review

Kevin Teichman, U.S. Environmental Protection Agency (EPA) and chair of the Scientific Understanding Work Group, opened the meeting by thanking the group for all of their work to date. Gail Bingham, RESOLVE facilitator, reviewed the agenda, noting that the group would review the 2 recommendations that were not discussed on the last work group call, review the 2 new proposed recommendations, and finally review a proposed recommendation from the *National Conversation on Public Health and Chemical Exposures* Monitoring Work Group. Bingham suggested the Scientific Understanding Work Group discuss the recommendations qualitatively as there will be a chance to offer editorial comments after the call.

Review new proposed recommendations

Evaluate short- and long-term effectiveness of institutional controls at Superfund, Brownfield, and Resource Conservation and Recovery Act sites.

Doris Cellarius, Work Group member, gave an overview of this recommendation and said that several members of the *National Conversation on Public Health and Chemical Exposures* Scientific Understanding Work Group Communities Subgroup (Communities Subgroup) consider this an important recommendation. She noted that numerous groups have studied institutional controls (e.g., erecting fences or implementing deed restrictions on land use) at contaminated sites and it has failed many times in protecting people from exposures to harmful chemicals. The Communities Subgroup hopes the group will recommend requiring permanent treatment of hazardous waste.

Dr. Teichman noted that instead of recommending a preferred policy approach, the group should focus on the science needed to enable the selection of the most appropriate policy approach. He said that cost is often the reason that institutional controls are used at hazardous waste sites instead of remediation. He suggested the group consider focusing the recommendation on determining less expensive ways to treat waste so that this option becomes more feasible. The group also determined that it wanted the recommendation to include a focus on assessing the true health effects at contaminated sites, including health care costs of those affected by chemical exposures.

The group agreed to revise the recommendation to focus it on research assessing the true health effects of contaminated sites and improved remediation methods that may be less expensive. The group may also include suggestions on how these studies could be funded. Ms. Cellarius agreed to revise this recommendation as per the group's discussion.

Research and identify solutions to the obstacles preventing states from adopting and implementing the Massachusetts Toxic Use Reduction model.

Frank Bove, Agency for Toxic Substances and Disease Registry (ATSDR), gave an overview of this recommendation and noted that discussion of this topic is timely because debate is

underway in the U.S. Senate about inherently safer technologies for companies using hazardous waste. Dr. Bove also shared that ATSDR is working with certain states via the National Toxic Substance Incidents Program to promote safer technologies and reduce the use of hazardous substances.

A member expressed that the group should not specifically recommend modeling future programs on the Massachusetts Toxics Use Reduction model because research needs can vary state-to-state. Other members agreed. Another work group member expressed concern that this recommendation overlaps into policy instead of focusing on science. The group noted that some issues discussed in this recommendation are addressed in other recommendations and suggested that this recommendation could be combined with another (e.g., the recommendation on databases or alternatives assessment). The group agreed to integrate this suggestion into the recommendation that addresses data gaps.

Mold and pesticides recommendation

Lisa Nagy, Preventive and Environmental Health Alliance, shared her draft recommendation on mold and pesticides. Dr. Nagy noted that research in these areas is important so that we can better elucidate any connections between exposure to these contaminants and disease (e.g., autism, neurological disorders, and multiple sclerosis). In addition, implementing such a recommendation would help eliminate the stigma associated with studying these topics. She recommended that a few pilot studies on exposure to mold and pesticides be conducted.

Some Scientific Understanding Work Group members did not support grouping mold and pesticides together in one recommendation. A work group member stated that we should look at a range of potential health effects that are related to mold, in addition to autism. Other work group members said that they did not think that a few pilot studies would be sufficient to link exposure to either mold or pesticides to any health outcomes. One member recommended that the group try to include evaluation of mold exposures in various assessments that are being conducted around the country. Another idea was to conduct a small study to identify the most relevant biomarkers for mold exposure.

A work group member suggested encompassing both mold and pesticide exposures under the rubric of indoor air quality. The group agreed to expand the focus to indoor air quality while specifically including reference to both mold and pesticides. Dr. Nagy agreed to revise this recommendation based on the group's discussion and send it to the group for comment.

Biomonitoring recommendation from the Monitoring work group

The work group discussed 2 recommendations that originated from the *National Conversation on Public Health and Chemical Exposures* Monitoring Work Group (Monitoring Work Group). First, the Monitoring Work Group asked the Scientific Understanding Work Group to consider ways to collect biomonitoring data on animals via biofluid measurements. Second, the Monitoring Work Group recommended that the Scientific Understanding Work Group consider ways to improve monitoring and biomonitoring instruments. The work group decided to try to weave these ideas into existing recommendations. For example, the idea about collecting animal biofluids could be incorporated into the recommendation focused on technologies.

Review introductory sections of the draft report

Introduction

Group members reviewed the introductory sections of the report and agreed that they liked the idea of highlighting the main themes near the beginning of the report but suggested changing

some of the wording. Steve Lester, Center for Health, Environment, and Justice, and Dr. Bove agreed to work on language for the third theme. The third theme is currently worded “Increase community involvement in scientific research and decision making, including fully engaging residents in affected communities and ensuring that questions important to the public are being answered,” and send it back out to the work group for review. The members talked about how to balance discussion about risk assessment and the precautionary principle, currently expressed in the fourth theme as “Develop the scientific knowledge needed for decision making, including making significant improvements in risk assessment as a tool to inform both deterministic and precautionary approaches to risk management.”

Current status

Ms. Bingham asked the group to review and comment on the “current status” section of the draft report. A member shared that the status of the methods that are currently used to evaluate health problems and issues in communities is missing. Another member questioned if the use of words like “*in silico*” or “*in vitro*” would be clear to a general audience. The group agreed that such terms should either be defined or replaced.

Another work group member shared that she believes that the section on toxicity testing does not reflect the current status substantively enough, that this section needs to establish the questions regarding toxicity testing instead of stating that toxicity testing is moving towards using *in vitro* methods. The group discussed ways to reorder the topics discussed in this section to ensure a better flow, decided to include more about the precautionary principle, and agreed that “evaluating public health impacts” would be a good title for this section. Jean Harry, National Institute of Environmental Health Sciences, and Mr. Lester agreed to collaborate on revising this section and send their new version for review during the week of August 9, 2010.

Comments on language for recommendations

Improve understanding of individual susceptibilities to chemical exposures

Wade Hill, Alliance of Nurses for Healthy Environments, noted that the behavioral perspective is missing from this recommendation. He agreed to write a draft sentence and forward it to the group for consideration.

Identify and define vulnerability characteristics of communities in terms of both structure and function, and their influence on increasing the susceptibility to environmental chemical exposures.

A work group member expressed interest in expanding this recommendation to include the need to gather data on actual exposures to vulnerable communities, in addition to the social science research already proposed. She expressed that the third paragraph of this recommendation should include a statement that communities need to be involved in specific risk characterization and risk management. Another group member suggested that the recommendation specify that the vulnerability characteristics of a community be taken into account in study designs and into ultimate risk management decisions. The group agreed to these suggested revisions. Ms. Cellarius and Susan Hanson, Shoshone-Bannock Tribe, agreed to revise the recommendation with the assistance of Mr. Lester and Cherri Baysinger, Missouri Department of Health and Senior Services.

Wrap-Up and Next Steps

Ms. Bingham agreed to send an e-mail listing the next steps that were agreed to on the phone call. She asked work group members to send their comments on this document by the end of the week. Ms. Bingham will send a revised version of the work group report for editorial comments by all work group members by August 16, 2010.

Kim DeFeo, National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR), and Pete Fargo, EPA, will integrate the editorial comments received into the work group report. All editorial comments will be integrated unless a suggested change alters the meaning of the content or comments are in conflict. All conflicts will be sent to Dr. Teichman and Ed Murray, NCEH/ATSDR, to resolve. On August 23, 2010, a draft of the work group report's conclusion will be sent to the entire work group for review. Once the draft work group report is complete, it will be sent to the *National Conversation on Public Health and Chemical Exposures* Leadership Council and will be posted online for public comment for 2 weeks.

III. Participation

Members Present:

- George Alexeeff, California EPA
- Cheri Baysinger, Missouri Department of Health and Senior Services
- Nancy Beck, Physicians Committee for Responsible Medicine
- Frank Bove, Agency for Toxic Substances and Disease Registry
- Doris Cellarius, community activist
- Susan Hanson, Shoshone-Bannock Tribe
- Jean Harry, National Institute of Environmental Health Sciences
- Bob Hamilton, Amway Corporation
- Rebecca Head, Monroe County Health Department (MI)
- 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
- Melissa Perry, Harvard University
- Rich Sedlack, The Soap and Detergent Association
- Margaret Shield, Local Hazardous Waste Management Program, King County

Regrets:

- Mark Buczek, Supresta- retired
- Jeff Jacobs, American College of Occupational and Environmental Medicine
- Kristi Jacobs, Food and Drug Administration
- Claudia Miller, University of Texas Health Science Center at San Antonio
- Frank Mirer, Hunter College Urban Public Health Program
- Richard Niemeier, National Institute for Occupational Safety and Health
- Stuart Schmitz, Iowa Department of Public Health
- Russell White, American Petroleum Institute

Facilitation and Staff Team Members Present:

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