

**NATIONAL CONVERSATION ON PUBLIC HEALTH AND CHEMICAL EXPOSURES
EDUCATION AND COMMUNICATION WORK GROUP**

**Meeting No. 6 Summary
In-person: Rockville, MD
April 21-22, 2010**

Meeting Objectives:

- Review and discuss Public and Health Professionals subgroups' work
- Make progress on subgroup sections of *National Conversation on Public Health and Chemical Exposures Education and Communication work group* report
- Discuss ideas for preliminary recommendations based on the work that has been done thus far and develop initial drafts for review
- Develop work plans for the subgroups and the *Education and Communication* work group as a whole in order to develop the draft work group report for presentation to the *National Conversation on Public Health and Chemical Exposures Leadership Council (Leadership Council)* by August 2010
- Decide on next steps and assignments

Upcoming Meeting	When and Where	Suggested Agenda Items
Education and Communication work group call (Meeting No. 7)	May 10, 2010 1:30 p.m.–2:30 p.m., Eastern Standard Time (EDT)	<ul style="list-style-type: none"> ○ Check in on next steps from April meeting; determine deadlines ○ Subgroup updates and questions for the full <i>Education and Communication Work Group</i>

I. Action Items

Member Tasks	Who	By
1. Confirm the next steps for public subgroup	Diana Degen	May 10, 2010
2. Draft content on cross-cutting educational issues	Alison Cohen and Stephanie Chalupka	May 10, 2010
3. Contact the Cochrane Collaborative regarding credibility of sources	Leyla McCurdy	May 10, 2010
4. Write up bidirectional communication success story	John Linc Stine	May 10, 2010
5. Revise clinical diagnostics recommendation in <i>National Conversation on Public Health and Chemical Exposures Education and Communication Work Group Health Professionals Subgroup</i> report; contact 2 public health schools regarding competencies	Amy Liebman	May 10, 2010
6. Confirm next steps for Health Professionals Subgroup	Bob Washam	May 10, 2010

Member Tasks	Who	By
7. Contact NEHA, National Association of County and City Health Officials (NACCHO), and Association of State and Territorial Health Officials (ASTHO) to learn about competencies for state and local public health workers	Bob Washam	May 10, 2010

Leadership Team Tasks	Who	By
8. Check if Union of Concerned Scientists has any information on credibility or scientific integrity that might be useful to the work group	Kathy Rest	May 10, 2010
9. Propose language for addressing issues of credibility and scientific integrity; share with group	Jenny Van Skiver	May 10, 2010
10. Provide an example of a recommendation that meets the criteria listed in work group report template	Jenny Van Skiver	May 10, 2010

II. Call Summary

[April 21, 2010]

Welcome, Agenda Review, and Introductions

Education and Communication work group chair Kathleen Rest welcomed members to the meeting and thanked them for their contributions. Rest said that the Education and Communication work group is where it needs to be based on the *National Conversation on Public Health and Chemical Exposures* [process map](#). Rest encouraged the work group to review its [charge](#) and ensure that it has what it needs to meet each of the points outlined therein. Juliana Birkhoff, RESOLVE, reviewed the agenda and led introductions.

Updates from Other National Conversation Input Processes Relevant to the Work Group

Jenny Van Skiver, NCEH/ATSDR staff, provided updates on external processes for input.

Association of State and Territorial Health Officials

ASTHO assessed state environmental health directors' needs. They solicited information on state level challenges in dealing with public health and chemical exposure issues. ASTHO also convened state health and environmental officials to discuss these issues in person on March 16, 2010 in San Antonio, Texas. Van Skiver urged members to review ASTHO's full [report](#) and [Education and Communication work group-specific suggestions](#). The report includes the following suggestions:

- Evaluate communication efforts
- Train communication specialists and health educators in environmental health

- Incorporate environmental health topics into standards for science classes
- Better educate state agency staff and professional groups

National Association of County and City Health Officials

NACCHO held 2 in-person meetings to discuss local health officials' needs and suggestions about public health and chemical exposures. Van Skiver asked members to review NACCHO's March 8, 2010 Oakland, California [meeting summary](#) and its April 8, 2010 Columbus, Ohio [meeting summary](#).

Participants at the Oakland, California meeting raised the following points:

- Both public and health professionals need to know about potential routes of exposure.
- Federal efforts to provide health and chemical exposure information to the broader public should be expanded.
- Local health departments need help finding information; if informed they can be a better resource to the public.

In Columbus, Ohio, participants discussed these points:

- The medical community should try to gather more data.
- Develop educational or promotional materials for the public about safer alternatives.
- The workforce for dealing with chemical exposures and health at the local level is minimal.

April 5–7, 2010 Web Dialogue

Van Skiver shared comments from the Web dialogue. Some of the education and communication issues include:

- Need for Americans to be educated on health effects of every chemical for which a significant body of scientific literature exists
- Disclosure of potentially harmful chemicals in consumer products
- Need for improved information for medical communities and the general public on multiple chemical sensitivity and allergic reactions to fragrances
- Need for an effort to incorporate better toxicology training into medical school curricula, possibly led by the American College of Medical Toxicology
- Need for easy to read information on chemicals in places where people are already going for information (e.g., Internet, popular magazines)

Members should review the full list of [relevant comments](#) on the project management site.

Update from the Public Subgroup

Diana Degen, chair of the *National Conversation on Public Health and Chemical Exposures* Education and Communication Work Group Public Subgroup, summarized her subgroup's discussions and progress. Degen's presentation is available [here](#).

Discussion

Rest suggested that the subgroup consider re-integrating some of the content cut from the previous version of its report. The group could refer to the bidirectional learning report for additional content.

A member suggested that the Education and Communication work group follow EPA's current Environmental Justice Showcase Communities effort and consider it is a possible program to recommend to other government agencies.

A member urged the work group to keep access issues in mind. Access issues include computer and Internet access, as well as access to in-person meetings. The work group report should acknowledge access issues. Access is also something the *National Conversation* project staff should consider as it provides opportunities for public input.

A member said that the report should formally acknowledge social determinants of health and cumulative risk.

Definition of the Public

Rest asked for the group to clarify the differences between the report's two lists of target groups. She noted the importance of "amplifiers" – those who can help provide information to larger audiences, such as the media and educators. A member suggested that in addition to focusing on affected, concerned, and special needs populations, the subgroup should address communication to persons unaware that they are or may be impacted by harmful chemical exposures.

A member said that it is important to remember the "public at large" and questioned whether it dilutes the group's efforts to focus on the public in addition to the knowingly and unknowingly affected public. Another member acknowledged that it was challenging to address the entire United States population instead of targeted populations. She recommended that the work group prioritize populations, focusing on things that are actionable while not losing track of other populations.

A member emphasized that harmful chemical exposures might be one of many significant health challenges facing people. We must recognize that these issues might not be of high priority to the people at the greatest risk. Another member agreed, but cautioned that the work group should not assume that people in high-risk populations do not view chemical exposures as important or that they do not want to learn more about the issues.

A member offered a definition of the "public" from the National Resource Council for the group's consideration. See http://books.nap.edu/openbook.php?record_id=12434&page=15.

Credibility and Trust

The work group discussed sources of information about chemical exposures and health. Members agreed that the report needs more language around how the public deems information as "credible" versus "non-credible." A member suggested Paul Slovic's work as resource, noting his credibility equation of "Credibility=Trust+Expertise."

Demonstration of Shared Web space

Van Skiver provided an overview of the *National Conversation* project management site (www.nationalconversation-projectsite.org) over lunch. Members should contact Van Skiver (jvanskiver@cdc.gov) for additional guidance.

Update from the Health Professionals Subgroup

Bob Washam, Health Professionals Subgroup chair, presented the issues that this subgroup is considering. Washam's presentation is available [here](#).

Discussion

A member suggested that students could be advocates to incorporate environmental health curricula into nursing and professional schools.

Subgroup members added that the target audiences and approach addresses educational settings, practice settings, and resources and tools.

Members discussed the role of organizations such as the American Medical Association and the American Academy of Pediatrics. A member suggested that we need to encourage the professional organizations to include relevant questions on board exams.

A member suggested that the report should address ways that education and training might be tailored to specific geographies.

Van Skiver reviewed the National Conversation Operating Procedures' definition of "chemical":

- For the purposes of the *National Conversation* project, "chemical" is defined broadly to include industrial and naturally occurring chemicals regardless of their source, including biologically produced chemical substances. *National Conversation* participants are encouraged to consider emerging chemical exposure issues, such as those presented by engineered nanoparticles. The project will not address human health risks posed by radioactive properties of chemicals. (http://www.nationalconversation-projectsite.org/all/system/files/Natl_Conv_Operating_Procedures_1.pdf)

Van Skiver also confirmed that the project is not focusing on specific chemicals for the regulatory prioritization, but that the group may refer to specific chemicals as models or examples.

A member suggested that effective environmental health curricula should be place-based, student-centered, and standards-aligned.

A member said it is important to make health professionals aware of emerging concerns.

A member suggested that how community health workers communicate about chronic diseases with the public may hold lessons for communicating about public health and chemical exposures.

Rest noted that the group still needed to address the non-clinician part of the charge.

Overall Reflections on and Discussion of the Subgroups' Work

Rest noted that each of the six work groups has its own issue areas. If the Education and Communication work group wants to talk about issues that fall into another work group's scope, they should focus on how those issues relate to education and communication. Rest also noted that the final work group report would have only 12 recommendations, so the group should begin to think about prioritizing.

The work group needs to focus more on health professionals' diversity and the ability of health professionals to meet the needs of vulnerable and diverse populations. Several members emphasized accessibility and usability of information.

Addressing Industry's Role

A member said that the work group should address information coming from industry and trade associations in its report.

Rest agreed that the work group does need to acknowledge industry as a source of information about public health and chemical exposures. She noted that, due to the breadth of its task and the lack of an industry representative on the group, the work group had made a conscious decision to exclude industry efforts, inventories, and discussions.

A member said that it might not be appropriate for the work group, without representation from industry, to make recommendations about industry's communication activities. Another member said that they would like to make recommendations to industry (e.g., that industry should provide clinical tools and knowledge to health providers).

A member suggested that the group focus on the important issues and themes, such as transparency, and be "staunch but parsimonious."

Subgroup Breakout Sessions

Public Subgroup

Degen reported to the full work group. The Public Subgroup used its time considering how to reorganize its draft report. They discussed:

- trust, and how to build it into their vision of a successful system, using public participation as a guiding principle for gaining trust;
- institutionalizing public participation processes when possible and establishing mechanisms to hold government agencies accountable;
- what agencies and scientific research organizations need to understand about communities; and
- framing recommendations in terms of challenges.

Health Professionals Subgroup

Health Professionals Subgroup chair Washam reported to the full work group that the subgroup reviewed its existing draft and recommendations and discussed:

- issues that need to be added to their report, such as the definition of their target audiences and content about the broader range of health professionals;
- models for consideration, such as health professional training on lead and smoking and Pediatric Environmental Health Specialty Unit training;
- how to approach health professionals beyond doctors and nurses and how to make recommendations for people working at local health departments, the Centers for Disease Control and Prevention, and others without specific licensing and certification requirements; and
- how to work with the Public Subgroup on pipeline and credibility issues.

[April 22, 2010]

Ad Hoc Breakout Sessions to Review Cross-Cutting Issues

Credibility

Members in this breakout session discussed making decisions in the face of scientific uncertainty. They considered diverse health and chemical exposure information and how to use information to make public health decisions. Their initial recommendations included developing guidelines to help decision makers decide what information is credible and useful.

Breakout session participants identified the following items as necessary to make effective decisions:

- Data transparency
- Conflict of interest policy
- Principles to inform guidelines
- Scientific integrity
- Community trust

The participants noted that credibility needs to be defined, and that issues of credibility and scientific uncertainty need to be acknowledged in the early sections of the report. Van Skiver agreed to draft a section introducing these issues for inclusion in the report.

A member expressed concern about directing its recommendation about the importance of credible information to the Agency for Toxic Substances and Disease Registry (ATSDR) and concern about whether the recommendation would be adopted due to perceptions of the agency's poor record on scientific integrity and credibility.

Environmental Literacy and Pipeline Issues

The members in this breakout session discussed what life-long learning about public health and chemical exposures might look like. Their session resulted in two recommendations:

- Develop and publicize a repository for 21st century environmental health curricula for kindergarten to grade 12 and undergraduate students to build environmental health literacy, numeracy, and foundations for careers to create the next generation of informed citizens and practitioners through curricula that are standards-aligned, place-based, and student-centered. Make it accessible from the places where educators are already seeking this information.
 - Standards-aligned: For kindergarten to grade 12 students, environmental health curricula should be developed in alignment with science, civics, and social studies standards in collaboration with the U.S. Department of Education. For higher education (including, but not necessarily limited to, the fields of medicine, nursing, and public health), educational institutions and certifying associations should develop professional competencies. These professional competencies should include ethics. Standards and professional competencies should be assessed in certification and licensure exams, and could also be considered in accreditation processes.
 - Place-based: Curricula should consider local geographic and community relevance to account for and relate to diverse communities.
 - Student-centered: Student-centered teaching is a pedagogically effective best practice that increases student enthusiasm for the content matter and can allow for experiential knowledge and application of concepts. This approach also reinforces and operationalizes the multi-directional learning approach.

- Develop time-intensive opportunities and fellowships that increase both education and practical experience to prepare persons for careers in environmental health.

The members will further develop the recommendations and share with the full work group. The participants also discussed framing environmental health literacy as part of being a good citizen.

Subgroup Breakout Sessions

The subgroups met to discuss revisions to their recommendations and reports and then reported to the full Education and Communication work group.

Health Professionals Subgroup

The Health Professionals Subgroup is still working on identifying recommendations for health professionals in addition to doctors and nurses. The members have committed to doing research on the competencies of the public health workforce at the state and local levels to help them make recommendations.

Public Subgroup

The Public Subgroup suggested the following:

- Broad incorporation of the bidirectional communication approach, which could be encouraged by making a transparency plan required for federal funding.
- Cross-agency collaboration.
- Expanding communication methods to include social media as well as traditional media.
- Creating a single portal of information on chemicals, linking to federal agencies.
- Raise environmental health literacy.
- Consider accessibility of information for special needs populations.

The subgroup presented a [diagram](#) depicting their definition of the public.

Next Steps and Assignments

Subgroups will continue developing sections II, III, and IV of the report. The full Education and Communication work group will have a progress check-in by telephone on May 10.

The members are asked to complete and post edited versions of their reports by May 27, in preparation for the work group's June 3 conference call.

Final drafts are due July 29, in preparation for the work group's third in-person meeting on Thursday, August 5 in the Washington, D.C. area. The work group will present its report to the Leadership Council following the August 5 meeting.

III. Participation

Members Present

Sophie Balk, Children's Hospital at Montefiore, Albert Einstein College of Medicine
Alan Bookman, New Jersey Department of Environmental Protection
Stephanie Chalupka, Worcester State College
Alison Cohen, Brown University
Diana Degen, The Cadmus Group, Inc.
Elizabeth Grossman, freelance journalist
Marc Kusnitz, U.S. Food and Drug Administration
Yanna Lambrinidou, Parents for Nontoxic Alternatives
Mary Lamielle, National Center for Environmental Health Strategies
Amy Liebman, Migrant Clinicians Network
Leyla McCurdy, National Environmental Education Foundation
Karen Miller, Huntington Breast Cancer Coalition/Prevention Is The Cure, Inc.
John Stine, Minnesota Department of Health
John Sullivan, University of Texas Medical Branch /NIEHS Center in Environmental Toxicology
Robert Washam, Martin County Health Department

Regrets

Rosemary Ahtuanguak, Inupiat Community of the Arctic Slope
Julia Brody, Silent Spring Institute
Peter Dooley, Laborsafe
Jeffrey Jenkins, Oregon State University
Lena Jones, Jackson Roadmap to Health Equity Project
Jerome Paulson, Mid-Atlantic Center for Children's Health & the Environment
Anne Rolfes, Louisiana Bucket Brigade
Matthew Stefanak, Mahoning County District Board of Health
Philip Wexler, National Institutes of Health, National Library of Medicine
Lina Younes, U.S. Environmental Protection Agency

Facilitation and Staff Team Members Present

Kathleen Rest, Union of Concerned Scientists, *chair*
Juliana Birkhoff, RESOLVE *facilitator*
Jana Telfer, NCEH/ATSDR *senior liaison*
Jenny Van Skiver, NCEH/ATSDR *staff*