

**NATIONAL CONVERSATION ON PUBLIC HEALTH AND CHEMICAL EXPOSURES
MONITORING WORK GROUP**

**Meeting Summary
In-person
November 16, 2009**

Meeting Objectives:

- Finalize Work Group charge
- Discuss major topic areas covered by Work Group charge
- Discuss key issues in each of the major topic areas
- Develop and organize a plan for completing the Work Group's charge
- Decide on next steps and assignments

Upcoming Meeting/Call	When	Suggested Agenda Items
Chair, Staff, and Sub-Group Leads	December 2009	<ul style="list-style-type: none"> • Work plan • Identify needs (staffing, other) to move draft sub-group reports forward
Sub-Group calls	Early January 2010	<ul style="list-style-type: none"> • Progress check
Full Work Group Call	TBD	<ul style="list-style-type: none"> • Review sub-group draft reports • Progress check

I. Action Items

National Conversation Update	Who	Completed by
1. Generate questions for public engagement activities	Full work group	Early January 2010
Work Group Report Generation Process	Who	Completed by
1. Develop a glossary of terms used by each sub-group	Members in each sub-group	Early January 2010
2. Assimilate November 16, 2009 meeting notes with June 26, 2009 meeting notes	Sub-group leaders - <ul style="list-style-type: none"> • <i>Chemical Use and Exposure Pathways:</i> Dan Goldstein • <i>Exposure Levels:</i> Megan Latshaw • <i>Health Outcomes:</i> TBD 	Next sub-group call (Early January 2010)

3. Develop an initial sub-group draft report in bullet format	Each sub-group	Next sub-group call (Early January 2010)
4. Provide guidance on report and recommendation structure	Work Group Leadership and Staff	Following December 11, 2009 Leadership Council meeting

II. Call Summary

Welcome, Introductions, and Agenda Review

Following welcoming remarks by Dr. John Balbus, work group chair, and Kathy Grant, RESOLVE facilitator, the group completed introductions and reviewed the agenda.

National Conversation Update

Jenny Van Skiver, NCEH/ATSDR project staff, reviewed the “National Conversation on Public Health and Chemical Exposures: Milestones” document, identifying the Leadership Council, work groups, and the public as key project participants. Jenny explained that work groups will each issue reports to the Leadership Council, and the Leadership Council will issue the final action agenda. Work group reports will be included in the final action agenda as appendices. Interested members of the public will be involved in the project through several public engagement mechanisms: a community conversation toolkit, web-based discussions, and public meetings. The work groups should contribute potential questions for the public involvement activities, and public input will be fed into the work group process. The project timeline has been extended to April 2011.

Jenny emphasized the following work group milestones:

- April – June 2010: Work groups to hold second in person meetings
- June 2010: Work groups to issue draft reports
- July – September 2010: Work groups to hold third in person meetings
- September 2010: Work groups to issue final reports to Leadership Council

Monitoring Work Group Charge

The version of the work group charge presented at this meeting reflected revisions made after the initial work group call on October 5, 2009. When reviewing the general work group charge, Dr. Balbus confirmed that past successes would be considered in the work group’s discussion for the purposes of identifying lessons learned. He also explained that while recommending short-term solutions is a priority, the work group can also identify longer term solutions and then outline the path to achieving them.

Members discussed the intended meaning of the term “chemical use” in the charge. Dr. Balbus confirmed that “chemical use” is broadly defined, extending far beyond chemical manufacture and consumer use of products to any use that impacts public health.

Several members suggested that the italicized one-line description of the work group be modified to clearly explain the group's charge to non-members. The italicized description was modified to read as follows: "facilitating the collection, analysis and interpretation of information on chemicals, including their sources, uses, exposures, and associated health outcomes."

Likewise, the first full sentence of the charge was modified to read as follows: "The prevention and control of adverse health outcomes related to chemical exposures requires the ongoing collection, integration, analysis, and interpretation of data about chemicals, including their sources, uses, exposures, and associated health outcomes."

Members agreed that with the incorporation of the aforementioned revisions the charge is ready to present to the Leadership Council.

Work Group Report Generation Process

Audience

Dr. Balbus asked for members' thoughts on the report generation process. He confirmed that the report's audience will be all of the possible actors, both within and outside of government, who could respond to the recommendations. The report should be readable by the public but should include enough technical detail for recommendations to be implementable by potential actors.

Recommendations

When members inquired about the wording of recommendations, NCEH/ATSDR staff stated that outlining recommendations and then identifying potential actor(s) that might be appropriate implementers of each recommendation has been under discussion by the project team. Dr. Balbus raised the question of whether the work group has standing to call on specific agencies to implement its recommendations, but noted that the recommendations can be written in a way that will clearly suggest which organizations or agencies might be able to act on them. Several members supported the proposal to issue recommendations without identifying potential actors by name while others expressed a preference for identifying potential actors by name.¹

Structure

Dr. Balbus suggested that the work group operate under sub-groups addressing the group's major charge topics. The report will be approximately 20-50 pages, structured by sub-group topic. Within each sub-group section, the report will provide relevant definitions and will follow three of the general work group charge questions (e.g. What have been some of the major successes in this area? What are the major unmet needs and significant limitations? What solutions do you propose to help improve the system?). Dr. Balbus proposed that recommendations should be included in the text of sub-group section reports as well as in a single overarching list. The inventory of existing databases will be included as an appendix. Neither a target nor maximum number of recommendations for inclusion in the report has been set at this point.

Implementation

¹ The National Conversation Leadership Council addressed the question of identifying potential actors for recommendations at its December 11, 2009 meeting. The Leadership Council decided that specific actors may be named, both in work group reports and in the Leadership Council's action agenda.

A member asked whether the project included a process for tracking the implementation of action agenda recommendations. Dr. Balbus stated that an evaluation of the outcomes of the action agenda has not been identified as part of the process, but this is something that could be brought to the Leadership Council for consideration.

Major Topic Areas

Dr. Balbus identified four potential sub-group topic areas as follows:

- Use: information collected on the generation, application, and in some cases emission and disposal of chemicals
- Exposure Pathways: information generated by modeling or measuring concentrations of chemicals (or related pollutants) in environmental media or sources of human exposure (e.g. dust, food, consumer products)
- Exposure Levels: information generated by measuring chemicals, their metabolites or other markers of exposure in fluids or tissues of living organisms (to the extent it is relevant to humans).
- Health Outcomes: Information generated by actively or passively collecting data on clinical events and personal health and illness experiences, e.g. vital records, reported illness, health surveys, etc.

Members felt that there was significant overlap between the “chemical use” and “exposure pathways” categories, so the first two topic areas were combined into one sub-group for the purposes of the breakout discussions. Following the meeting, the sub-group will assess whether to maintain the three sub-groups or to operate under four sub-groups.

Members identified the need to work from common definitions for words that appear in the charge and sub-group tasks. Members would like to have a glossary of terms.

Cross-Cutting Issues

Dr. Balbus identified several issues as cross-cutting. Each of the groups should plan to address the following issues:

- Serving communities: Members expressed a strong interest in addressing the needs of communities and vulnerable populations. Members expressed interest in holding a joint conference call with the National Conversation Serving Communities work group to identify opportunities for joint efforts.
- Privacy concerns- this is especially relevant to the consideration of biomonitoring and health outcome data
- Integration- this includes technical details of data systems being able to be aggregated as well as integration of data across media and along the “continuum” from chemical use and release through exposures to health outcomes.
- Having the right data- are we collecting data in a way that supports public health improvement?

Sub-Groups

Each of the three breakout groups (chemical use and exposure pathways, exposure levels, and health outcomes) reported back to the group on key issues discussed.

Chemical Use and Exposure Pathways Sub-Group

Dr. Balbus led this sub-group during the meeting; Dan Goldstein will serve as this sub-group's lead moving forward.

Successes

- National Air Toxics Assessment - linking air quality with proactive interventions
- USGS study of waterway contaminants

Unmet Needs

- Use of Confidential Business Information
- Use of existing data for public health purposes (e.g. identifying potential hot spots)
- More routine collection and interpretation of environmental monitoring data
- Simpler system for monitoring multiple media than the current system in which media are split up across different agencies
- Better connection between monitoring efforts and public health
- State and local monitoring and enforcement (e.g. pesticides)
- Systematic characterization of indoor environmental systems; workplace

Possible Solutions

- Revisit occupational use and exposure
- Expand National Health and Nutrition Examination Survey (NHANES) geospatially
- Protect the National Children's Study for environmental health purposes
- Develop a systematic method for mining existing data
- Develop a clearinghouse for data; use GIS as an organizing tool

Member Reactions

A member concurred with the sub-group's identification of indoor environment issues as a focus, and another member noted that we aren't even aware of everything that belongs in the inventory.

Exposure Levels Sub-Group

Megan Latshaw will serve as this sub-group's lead.

Components

- Federal – CDC's National Biomonitoring Program, occupational studies, non-human studies (i.e. fish)
- State – three federally funded (NY, WA, CA); others as legislated or able (MN, WI, et al.)
- Local – CDC helps as requested (does about 50 cash studies a year)
- International – WHO, Germany, Canada (good for comparison to US)

Successes

- National Exposure Report
- Removal of lead from gas, toys, paint

Final Document

- Perfluorinated chemicals found in humans despite not being found in water (DuPont worked with public health agency in OH)
- Stockholm Convention was ratified much quicker due to biomonitoring data
- DDT levels have gone down (as evidenced by non-human biomonitoring)
- Improvements in risk assessment (i.e. National Academies of Sciences report on methylmercury)
- Provides information on toxicologically important windows of exposure (Bisphenol A is more potent during the first month of life in animal studies)

Unmet Needs

- To review the many chemicals that have not yet been assessed
- Methods to measure many more chemicals (or their metabolite if they have one and we know what it is).
- Information on nanotechnology
- Help with interpreting the information.
- To better address community needs
 - Fenceline communities which share a border with a potential source of exposure (i.e. an incinerator)
 - Community-based participatory research
 - State and local biomonitoring capacity and capability
- An integrated federal approach
- Re-evaluation of the reference dose and how it is calculated.
- Prioritization of chemicals for future study.
- To specifically address vulnerable populations (pregnant women, fetuses, infants. . .)

Member Reactions

A member noted that data interpretation comes up frequently, particularly as labs are better able to detect chemicals at lower levels. Members offered the following additional topics for the sub-group's consideration:

- Alternative ways of measuring exposure
- Issues of geospatial resolution in data collection
- Lack of data for children under six years old, Native American population
- Quality assurance issues
- Matrices (sources of biological samples, such as blood, urine, saliva, etc.), and which are more versus less invasive
- Need for a central public health authority with federal scale resources responsible for targeted investigations at the local level

Health Outcomes Sub-Group

Mike McGeehin led this sub-group during the meeting; Jennifer Parker has been invited to serve as this sub-group's lead moving forward.

Components

- NHANES and other national surveys
- Disease registries for cancer and infectious diseases
- Poison control center data

Final Document

- Medical data – Medicare/Medicaid/billing data/Kaiser, etc.
- National Biostatistics (births/deaths)
- Lab data
- Environmental public health tracking
- National Children's Study

Successes

- See "Components" list above
- Real time data

Unmet Needs

- Community-level data
- Electronic medical records
- Increased participation rates for surveys (related to cell phone use)
- Interpretation – attribution; community feedback
- Data on vulnerable populations across communities: rural, Native American, homeless, migrant workers, etc.
- Denominators for statistical studies
- Interrelatedness among datasets, if you can get to that data
- To collect surveillance data on more diseases

Solutions

- Electronic medical records
- Revisiting HIPAA and confidentiality concerns in light of public need for monitoring and surveillance information and environmental health research
- Additional modules to collect information for vulnerable populations
- Pilot projects for communities – bottom up approach
- NHANES
- Add new diseases to surveillance list (e.g. autoimmune diseases)

Member Reactions

Members identified the following issues as additional topics the sub-group might choose to consider:

- How few health outcomes have actually been linked to environmental exposures
- Limitations of epidemiology in identifying which environmental factors are leading to outcomes.
- Need more surveillance at the state level for diseases people are concerned might be related to environmental insults
- Chemical sensitivities
- Community level health – What should be done about communities experiencing increased rates of disease outcomes, environmentally focused or not?
- Using federal systems to identify and prioritize vulnerable communities

Discussion: Work Plan

Dr. Balbus asked that sub-group leaders review and assimilate notes from this meeting and the June 26, 2009 National Conversation kick-off meeting. Sub-groups should begin

drafting sub-group reports, which should be in a bulleted format as a basis for the next sub-group calls, to be held in December. He stated that the sub-groups will hold one or two calls to flesh out and draft their initial reports before the full work group holds its next call. Sub-groups are not exclusive; members can participate in more than one sub-group. Sub-group leaders agreed to share sub-group conference call and meeting information with the full group so that any interested members may join.

Dr. Balbus encouraged members to continue populating the work group's catalog of relevant databases. Jenny Van Skiver will maintain and update this list.

Wrap-Up and Adjourn

Dr. Balbus and Kathy Grant thanked members for their participation and adjourned the meeting.

III. Participation

Members Present

Herb Buxton, U.S. Geological Survey

Alison Edwards, U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition

Jay Feldman, Beyond Pesticides

Roy Fortmann, U.S. Environmental Protection Agency

Charlotte L. Keys, Jesus' People Against Pollution

Megan Latshaw, Association of Public Health Laboratories

Sam LeFevre, Utah Department of Health

Dean Lillquist, U.S. Occupational Safety and Health Administration

David Marker, Westat

John Osterloh, U.S. Centers of Disease Control and Prevention, National Center for Environmental Health

Jennifer Parker, U.S. Centers of Disease Control and Prevention, National Center for Health Statistics

Sharyle Patton, Commonweal

Karen Pierce, Bayview Hunters Point Community Advocates

Martha Stanbury, Michigan Department of Community Health

Trey Thomas, Consumer Product Safety Commission

Richard Van Frank, Improving Kids' Environment

Steve Whittaker, Public Health - Seattle & King County

Alan Woolf, Children's Hospital, Boston

Rosemary Zaleski, ExxonMobil Biomedical Sciences, Inc.

Regrets

Henry Anderson, Wisconsin Division of Public Health

Jose Emilio Esteban, US Department of Agriculture, Food Safety and Inspection Service

Daniel Goldstein, Monsanto

Nancy John, Cherokee Nation

Susan Kegley, Pesticide Research Institute

Paul Lioy, Robert Wood Johnson Medical School/University of Medicine and Dentistry New Jersey

Richard Matheny, Farmington Valley Health District

Ruthann Rudel, Silent Spring Institute

Michael Wilson, University of California, Berkeley

Facilitation & Staff Team Members Present

John Balbus, chair

Kathy Grant, RESOLVE facilitator

Michael McGeehin, NCEH/ATSDR senior liaison

Montrece Ransom, NCEH/ATSDR staff

Jenny Van Skiver, NCEH/ATSDR staff