National Conversation on Public Health and Chemical Exposures
BREAKOUT SESSION TOPICS

Suggested Discussion Questions

Breakout group discussions are intended to provide insights that will inform the charges to expert work groups. The objective of the National Conversation is to take a broad view of the system in place to protect the public's health from harmful chemical exposures and then, within that context, to identify clear, achievable, action recommendations. As part of that analysis, each work group will answer the following questions for their issue area. Participants in the break out sessions at the conference to launch this conversation are invited to share their ideas as input into this process.

- *What are the major components of the nation's approach in this area?*
- *What have been the major successes in this area over the last 40 years?*
- *What are the major unmet needs?*
- *What solutions do you propose to help improve the system?*
- *What can be done quickly (1-2 years)?*
- *What recent or ongoing initiatives might impact this area?*
- *What resources (reports, participants, etc) do we need to use to adequately assess these questions?*

Work groups, in consultation with members of the project team, will also be responsible for suggesting questions to pose to members of the public through the citizen conversation tool-kit; and to the full range of National Conversation participants through the web-discussion platform and at public forums. The results of these deliberations will be provided to work groups for use in developing their recommendations.

Recommendations will focus on the role of NCEH/ATSDR and other federal agencies, while also addressing the role of non-federal partners (state and local agencies, NGOs, academia, the private sector). Work groups will prepare a report outlining their assessment and recommendations (Draft Report: March 2010; Final Report: July 2010). Work group reports will form the basis of the action agenda.

Break out session topics: background information

Monitoring: *collecting information on chemical use, exposure pathways, exposure levels, and health outcomes*

> The prevention and control of adverse health outcomes related to chemical exposures requires the ongoing collection, integration, analysis, and interpretation of data about chemical use, exposure, and associated health outcomes. Ongoing surveillance also

provides an opportunity to evaluate the effectiveness of intervention strategies. Many federal, state, and local government bodies currently collect relevant data.

Potential activities for the work group include analyzing current surveillance and data collection activities on chemical use, exposure, and associated health outcomes and recommending actions to fill data gaps, better utilize existing data, and improve coordination among the many organizations collecting relevant information. The group could also address monitoring of chemicals in both human tissues (biomonitoring) and environmental media, including soil, air, water, consumer products, and in key built environments (e.g. schools and homes). Further, the group could address options for better linking exposure information with health outcome data. The group could also work together with members of the chemical emergencies work group to develop recommendations related to monitoring acute events.

Scientific Understanding: *filling knowledge gaps on the health effects of chemicals*

Research related to many scientific disciplines is needed to fill large gaps in knowledge about the causes and consequences of human exposure to toxic chemicals. Recent scientific advances provide the opportunity to address gaps.

Potential activities for the proposed work group include reviewing recent efforts to address known gaps and shortcomings in toxicological research (e.g. EPA's Strategic Plan for Reviewing the Toxicity of Chemicals), epidemiological research (e.g. the National Children's Study), exposure science, and the compilation of toxicologic information. Based on this review, the group could offer suggestions for government, academic, and private sector research efforts. The group could also consider improvements related to the compilation of scientific information (e.g. ATSDR's ToxProfiles). Finally, the work group could consider strategies for filling knowledge gaps and addressing emerging priorities through increased coordination and changes in resource allocation.

Policies and Practices: *reducing harmful chemical exposures and adverse health outcomes, eliminating inequities, and spurring the development and use of safer alternatives*

Improved public health protection is possible through the cross-sector implementation of policies and practices that utilize the most current science and build on the success of innovative and effective interventions.

Potential activities for the proposed work group include identifying high priority actions for government agencies and/or industry to take to better prevent harmful chemical exposures and adverse health outcomes. The group could consider primary (e.g. safer chemical substitution), secondary (e.g. regulation and remediation), and tertiary (e.g. treatment of exposed individuals) prevention strategies. The use of risk assessment in decision-making could be an important focus of the policies and practices group. The group could review past and current policies and practices from government (local, state,

national, and international) and private industry. The group could also review current policy proposals, government and industry plans, academic research, and proposals from non-governmental organizations.

Chemical Emergencies: *preventing, preparing for, and responding to acute chemical incidents;*

Chemical exposure emergencies can be devastating in human, environmental, and economic terms. Safeguarding public health requires analyzing system vulnerabilities, reducing risks where appropriate, and developing effective emergency preparedness and response plans. While many government agencies have roles in emergency preparedness and response efforts related to chemical events, coordination among concerned parties has not been optimized. Further, there remain shortcomings, gaps, and redundancies in the chemical emergency preparedness system. This group could consider and make recommendations on issues such as chemical infrastructure security, monitoring of events, and the preparedness of local health care providers to care for victims in the event of a disaster.

Serving Communities: *addressing local chemical exposure concerns to promote environmental justice and improve health*

The public relies on federal, state, and local authorities to provide thorough, objective assessments of potential public health hazards associated with exposure to chemicals. Such exposures can occur through specific chemical exposure incidents (e.g. contamination of a groundwater supply), as well as through activities that are part of daily life (e.g. the use of consumer products and interactions with the built environment). When communities have concerns regarding hazardous chemical exposures, authorities must provide them with timely, unbiased analyses of the situation and guide appropriate protective and/or remedial measures. Successfully serving the needs of concerned communities requires access to needed data, trained and experienced staff, working relationships among diverse agencies, clear communication practices, and transparent and participatory decision-making processes.

Potential activities for the proposed work group include surveying current community level government practices to address chemical exposure concerns. Members could address how best to meet community needs given that definitive answers to questions arising from exposures sometimes do not exist. Further, recognizing that vulnerable populations often face a host of public health risks in addition to chemical exposures, members also could explore comprehensive approaches to promoting the health of communities that are dealing with chemical exposures. In addition, this group could consider strategies for involving the public in decision-making about chemical policies.

Education and Communication: *ensuring a well-informed public and a competent network of health care providers.*

Overall, professional capacity building and training in areas related to public health and chemical exposures remains limited and fragmentary. State and local public health agencies vary dramatically in their capacity to address chemical exposure concerns. In addition, public understanding of health issues associated with chemical use is limited, presenting a challenge in communicating information about chemical risks. Moreover, the public confronts a welter of disparate and sometimes inconsistent information from varied sources. A variety of disparate interpretations of risk communication exist and agencies apply that information differently. No agency has a well established research-based public education effort on chemical exposures.

Potential activities for the proposed working group include reviewing current governmental, non-profit and private sector education and communication efforts and examining strategies for building the capacity of environmental public health professionals (including physicians) to address chemical exposure issues. Based on this review, the group could recommend approaches to public communication that are suitable to audience needs, bolster understanding of priority chemical hazards, and prepare people to take protective actions where appropriate. The group could also identify research needs for developing communication programs to ensure that recommended outputs truly meet audience needs. This group's recommendations related to the translation and dissemination of scientific information could require close coordination with the scientific understanding work group. The group could also interface with the serving communities group to address the communication and information needs of affected communities.