NATIONAL CONVERSATION ON PUBLIC HEALTH AND CHEMICAL EXPOSURES
POLICIES AND PRACTICES
Meeting No. 4 Summary
Conference Call
March 16, 2010

Objectives:

- Provide updates and discuss subgroup activity and deliberations to date
- Discuss how to enhance use of the shared collaborative work space and development of draft report
- Determine goals and outcomes for the April 8–9 *National Conversation of Public Health and Chemical Exposures Policies and Practices Work Group (Policies and Practices Work Group)* meeting
- Determine preparation for the April 8–9 *Policies and Practices Work Group* meeting
- Decide on next steps and assignments

Upcoming Meeting/Call	When and Where	Suggested Agenda Items
Fifth work group meeting (Washington, D.C.)	• April 8, 10 a.m.– 5 p.m. and April 9, 9 a.m.– 2 p.m, Eastern Standard Time (EST) • Place-TBD	• Review and discuss subgroups' work products • Working session to draft recommendations and segments of the *Policies and Practices Work Group* final report • Discuss results of NACCHO forums, ASTHO needs assessment and first web dialogue • Discuss the principles developed by the subgroups • Review and discuss common case studies and examples • Discuss criterion for prioritizing recommendations

I. Action Items

***National Conversation* Updates and Use of Collaborative Work Space**	**Who**	**Completed by**
Consider ways to encourage usage of the shared collaborative webspace	Montrece Ransom and Abby Dilley	April 8, 2010
Primary Prevention Subgroup	**Who**	**Completed by**
Share the current draft of the matrix with the full *Policies and Practices Work Group*	Nick Ashford	March 20, 2010 *(completed)*
Continue fleshing out recommendations and developing work products	Full subgroup	April 8, 2010
Secondary Prevention Subgroup	**Who**	**Completed by**
Continue fleshing out recommendations and developing work products	Full subgroup	April 8, 2010

Tertiary Prevention Subgroup	**Who**	**Completed by**
Continue fleshing out recommendations and developing work products	Full subgroup	April 8, 2010
Goals, Outcomes, and Preparation for the April 8–9 meeting	**Who**	**Completed by**
Develop the chromium case study for use across all subgroups	Ashford	April 8, 2010
Develop the flame retardants case study for use across all subgroups	Brenda Afzal and Lynn Bergeson	April 8, 2010
Develop the lead case study for use across all subgroups	TDB	TBD
Schedule a meeting with the subgroup co-leads prior to the meeting	Dilley	Individual Calls Held
Draft and circulate agenda for April 8–9 meeting	Dilley	April 3
Explore ways to ensure cross-fertilization with Monitoring, Scientific Understanding, and Serving Communities work groups	Ransom and Dilley	April 8

II. Meeting Summary

1) Welcome, Introductions, and Agenda Review

Dick Jackson, the *Policies and Practices Work Group* chair, opened the meeting with welcoming comments. Montrece Ransom, National Center for Environmental Health (NCEH)/Agency for Toxic Substances and Disease Registry (ATSDR) staff to the *Policies and Practices Work Group* introduced its newest member, Sascha Chaney, NCEH/ATSDR chief of staff. Abby Dilley, the *Policies and Practices Work Group* facilitator, led called the role then reviewed and finalized the meeting agenda, which is attached as Appendix A.

2) *National Conversation* Updates and Use of Collaborative Space

Ms. Ransom provided general updates on the *National Conversation of Public Health and Chemical Exposures (National Conversation)*, and advised that the *Policies and Practices Work Group* charge, as revised based upon subgroup member suggestions, will be submitted to the *National Conversation of Public Health and Chemical Exposures Leadership Council (Leadership Council)* during its next teleconference on April 14, 2010. This revised *Policies and Practices Work Group* charge is attached as Appendix B.

Ms. Ransom also provided an update on the *Leadership Council's* membership protocol and operating procedures, which were finalized on January 29, 2010. In particular, she shared information on the absence policy, reflected in the following excerpt from the Operating Procedures:

> *Each work group member is expected to make a good faith effort to participate in all meetings and conference calls. No alternates will be appointed. If a member misses 4 calls or meetings following the adoption of these protocols, this will be considered a resignation from the work group unless the member has contributed substantially in other ways and special arrangements have been made with the chair.*

3) Update from Subgroups

Primary Prevention

Nick Ashford, co-leader of the *National Conversation of Public Health and Chemical Exposures Policies and Practices Work Group Primary Prevention Subgroup (Primary Prevention Subgroup)* began this discussion with a review of the subgroup's matrix and accompanying overarching operating principles. Dr. Ashford stated the matrix sets the framework for the development of 12 paragraphs describing the identified interventions in primary prevention, with a narrative or preface explaining why each intervention is a primary prevention tool. The *Policies and Practices Work Group* members requested, and Dr. Ashford agreed, that he will share the matrix with the full work group, but will do so via e-mail as an attachment, rather than using the shared Web space. The matrix, which was updated as of March 16, is attached as Appendix C. Dr. Ashford also suggested that the *National Conversation of Public Health and Chemical Exposures Policies and Practices Work Group Secondary Prevention Subgroup (Secondary Prevention Subgroup) and National Conversation of Public Health and Chemical Exposures Policies and Practices Work Group Tertiary Prevention Subgroup* (*Tertiary Prevention Subgroup*) members might benefit from looking at previous versions of the matrix because columns that have been deleted might actually be relevant to their work.

Cal Baier Anderson, a *Primary Prevention Subgroup* member, noted that issues have emerged during subgroup deliberations that might fall within the purview of other subgroups. An example includes a consumer's "right to know" about the ingredients in products. She noted that considering these issues might be helpful to the *Primary Prevention Subgroup*, but they might be more appropriately explored by another subgroup. Anderson asked that the full *Policies and Practices Work Group* consider opportunities to coordinate, build, and support each others' work.

As the *Primary Prevention Subgroup* reviewed the matrix, the *Policies and Practices Work Group* members suggested that a common example or case study might be used across all subgroups to identify needs and potential interventions through each layer of prevention. It was also recommended that the *Primary Prevention Subgroup* consider adding a principle reflecting incentives for actions on the part of business and industry that advance safer technologies.

Secondary Prevention

Brenda Afzal, one of the subgroup co-leaders, opened up the discussion about their work thus far by noting that the *Secondary Prevention Subgroup* has met twice. The first call was dedicated to reviewing and understanding the subgroup charge, parameters, and tasks. The group has also discussed the use of case examples to help identify needs, as a story is often better than words and because many of the issues are very technical in nature. The group has divided up the tasks necessary to meet the *Secondary Prevention Subgroup* goals, and has identified environmental justice and Toxic Substances Control Act reform as two of the focus areas. The *Primary Prevention Subgroup* plans to identify problems and consider why they exist. Secondly, the group will identify solutions, interventions, and best practices.

Lynn Bergeson, the other co-leader for the *Secondary Prevention Subgroup*, noted that the subgroup has also decided to look at jurisdictions outside the United States for examples of policies that are working to protect the public from chemical exposures. This group will also work toward determining what resources are used in governmental chemical decision making. This information, including information that was collected from the U.S. Environmental Protection Agency on this matter, will be included in the final subgroup report.

Tertiary Prevention

Kristen Hill provided an update of the *Tertiary Prevention Subgroup*. Hill mentioned that her co-lead, John McLeod, is in Thailand, and that there remains a sense of confusion and difficulty within the *Tertiary Prevention Subgroup* as to how best to move forward with their particular focus. However, subgroup members are moving forward. The *Tertiary Prevention Subgroup* has developed a matrix, and their approach has been inductive and has many ideas. The matrix, as updated on March 16, is attached as Appendix D. The goal of the *Tertiary Prevention Subgroup* is to flesh this matrix out, and then align these ideas with the subgroup's principles. Doug Farquhar, a *Tertiary Prevention Subgroup* member, noted that the current list of principles is aspirational and reflects where the group would like to go.

A discussion was held on adding an additional column that could illustrate problematic practices to the *Tertiary Prevention Subgroup* matrix, barriers to effective practices, etc. An example could include the fragmentation of data. The *Tertiary Prevention Subgroup* also mentioned the importance of providing recommendations in a positive way. The way information and recommendations are characterized is key to the receptivity of the recommendations to be presented in the final *Policies and Practices Work Group* report.

Gail Shibley, a *Tertiary Prevention Subgroup* member, noted that the *Policies and Practices Work Group* members should work to connect the Essential Public Health Services to any principles that are developed, and then come up with related examples and recommendations. Anne Rabe noted that focusing on the congressional reports on ATSDR is important, with the thought that this might make the recommendations more relevant. It was also shared that the group should consider the interrelationship among ATSDR, EPA, and the National Institute of Environmental Health Sciences. According to Catherine Dodd, the leadership of these agencies seeks greater coordination and linkage. Dr.Jackson acknowledged Dr. Dodd's views. and added that the public sees only one government and does not make distinctions between agencies. As such, this linkage is important and should be considered as we move forward.

Questions and Discussion:

<u>Principles</u>
Policies and Practices Work Group members noted that several of the principles developed by the *Primary Prevention Subgroup* members might be applicable to other subgroups. Other comments on the principles include:

- Environmental justice and vulnerable populations should be reflected
- Consider adding depth to the principles with language (a paragraph descriptor)
- Consider tweaking them for applicability across subgroups

Policies and Practices Work Group members discussed the idea of using some time at the April 8–9 in-person meeting to discuss the principles that the *Primary Prevention Subgroup* members have developed, how best to integrate the Essential Public Health Services, and how they might be applicable to other subgroups.

<u>Using Case Examples Across Subgroups</u>
It was suggested that each subgroup consider using common case studies, which illustrate the issues and concerns raised in each layer of prevention. Examples of such issues and case studies offered include:

- Chromium—to be developed by Ashford
- Flame retardants—to be developed by Arlene Blum and Lynn Bergeson
- Lead

Use of the Shared Webspace
The *Policies and Practices Work Group* members discussed the uneven use of the shared, collaborative Web space: http://www.nationalconversation-projectsite.org/. At least one subgroup co-leader has polled members and has found that not many are using it. Another has found that it becomes easier with use. The members are finding that learning a new system for a time-limited project is not particularly effective. Dr. Jackson acknowledged the need for the site as a repository for materials and a way of allowing *Policies and Practices Work Group* members and others involved in the *National Conversation* to see the work products of other groups. Ransom and Dilley will consider ways to increase usage and assist members in accessing and using the site.

Criteria for prioritizing recommendations
The *Policies and Practices Work Group* members also discussed the need to set priorities among all of the recommendations that the subgroups have developed. There were suggestions for ordering the recommendations based on area of impact. Others suggested waiting until the subgroups have developed their work products to think about this step. This item has been reserved for discussion at the April 8–9 in-person meeting.

4) **Goals, Outcomes, and Preparation for April 8–9**

The *Policies and Practices Work Group* members discussed potential agenda items for the April 8–9, in–person meeting. Ms. Dilley noted that she will schedule a 30-minute meeting with the subgroup co-leads prior to the meeting, and will circulate a draft meeting agenda soon. Agenda items include:

- Discuss the applicability of the principles developed by the *Primary Prevention Subgroup* to other subgroups
- Review the common examples that can be used across subgroups
- Discuss criterion for prioritization and honing of recommendations

Questions and Discussion:

Cross-fertilization with other work groups
The *Policies and Practices Work Group* members expressed a feeling of isolation from what the other work groups are doing and suggested that we look for opportunities to hear from and provide feedback to the Serving Communities, Monitoring, and Scientific Understanding work groups, in particular, to ensure that the thoughts and ideas of the *Policies and Practices Work Group* members are incorporated. Ms. Dilley advised that the best mechanism for this might be the Work Group Coordinating Committee, which consists of the work group chairs and senior liaisons. If comments and thoughts are provided to Dr. Jackson, then he can pass them on. Ms. Ransom also noted that the conference call notes and materials developed by and for the other work groups can be found on the shared, collaborative webspace. Ms. Ransom and Ms. Dilley will continue to explore ways to ensure this type of cross-fertilization.

5) **Wrap-Up and Next Steps for Work Group**

Policies and Practices Work Group Chair Jackson adjourned the meeting at 2:54 p.m. Eastern.

III. Participation

Members Present:
Brenda Afzal, University of Maryland School of Nursing

Laura Anderko, Georgetown University
Beth Anderson, National Institute of Environmental Health Sciences
Nicholas Ashford, Massachusetts Institute of Technology
Caroline Baier-Anderson, Environmental Defense Fund
Patricia Beattie, Arcalis Scientific
Arlene Blum, Green Science Policy Institute
Linda Bruemmer, Minnesota Department of Health
Lin Kaatz Chary, Gary CARE Partnership
Ken Cook, Environmental Working Group
Kerry Dearfield, U.S. Department of Agriculture, Food Safety and Inspection Service
Catherine Dodd, City and County of San Francisco
Pamela Eliason, Toxics Use Reduction Institute
Rick Hackman, Procter & Gamble, Inc.
Robert Harrison, University of California, San Francisco
Kristin Hill, Great Lakes Inter-Tribal Epidemiology Center
Richard Jackson, UCLA School of Public Health, chair
Annette McCarthy, U.S. Food and Drug Administration
John McLeod, Cuyahoga County Board of Health
Anne Rabe, Community Concerned About NL Industries
Kristin Ryan, Alaska Department of Environmental Conservation
Tom Sinks, NCEH/ATSDR senior liaison
Brian Symmes, U.S. Environmental Protection Agency
Kristen Welker-Hood, Physicians for Social Responsibility

Regrets:
Lynn Bergeson, Bergeson & Campbell, P.C.
Sarah Brozena, American Chemistry Council
Doug Farquhar, National Council of State Legislatures
Timothy Malloy, UCLA School of Law
Gail Shibley, Oregon Department of Human Services, Public Health Division

Facilitation & Staff Team Present:
Benjamin Gerhardstein, NCEH/ATSDR staff
Abby Dilley, RESOLVE facilitator
Montrece Ransom, NCEH/ATSDR staff

APPENDIX A

NATIONAL CONVERSATION ON PUBLIC HEALTH AND CHEMICAL EXPOSURES

Policies and Practices Work Group

March 16, 1:00 pm – 3:00 pm Eastern/12:00 pm – 2:00pm Central
11:00 am – 1:00 pm Mountain/10:00 am – 12:00 pm Pacific/9:00 am – 11:00 am Alaska

Number: 1-866-742-6815
Code: 4273973 #

Proposed Call Agenda

Call Objectives:

- Provide updates and discuss subgroup activity and deliberations to date
- Discuss how to enhance use of the shared collaborative work space and development of draft report
- Determine the goals and outcomes for the April 8–9 *Policies and Practices Work Group* meeting
- Determine the preparation for the April 8–9 *Policies and Practices Work Group* meeting
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Time	Topic	Lead(s)
5 minutes	**Welcome and Agenda Review** • Welcome members to call—Jackson • Roll call—Dilley • Review of call ground rules and procedures—Dilley • Review and finalize conference call agenda—Dilley	Jackson, chair, and Dilley, facilitator
10 minutes	***National Conversation* Updates and Use of Collaborative Space** • General update—Jackson • Work groups, WGCC, and *Leadership Council*—Ransom and Tom Sink • Use of collaborative space and draft reports—Ransom	Jackson, Ransom, and Tom Sinks
60 minutes	**Subgroup Updates and Discussion** • Overview—Jackson • Primary Prevention—Malloy and Ashford • Secondary Prevention—Bergeson and Afzal • Tertiary Prevention—Hill and McLeod • Identification and discussion of overlaps, gaps, and how to	Jackson and Dilley, subgroup co-leaders

address them—Jackson and Dilley

15 minutes	**Discussion of Goals, Outcomes and Preparation for April 8–9 Meeting** • Proposed goals and outcomes—Jackson • Facilitated discussion—Dilley	Jackson and Dilley
5 minutes	**Wrap-Up and Next Steps**	Jackson

APPENDIX B
(Revised charge)

Policies and Practices Work Group
Charge

The *National Conversation* is working to develop an action agenda for strengthening the nation's approach to protecting the public from harmful chemical exposures.

Charge

In order to protect public health, the *Policies and Practices Workgroup* will determine prioritized actions that can be taken through legislation, regulation and policy that will prevent harmful chemical exposures and spur the development and use of safer alternatives.

To accomplish this charge, the *Policies and Practices Work Group* will identify policies and practices of government agencies and the private sector that will facilitate accomplishing these goals and highlight opportunities and examples for achieving them. The *Policies and Practices Work Group* will use the following "layers of prevention" framework to guide its work:

1. Primary prevention—Preventing harm by eliminating and reducing the production or use of harmful chemicals and by spurring the development and diffusion of safer and healthier alternatives.
2. Secondary prevention—Addressing harm by eliminating and reducing the exposures to harmful chemicals.
3. Tertiary prevention—Addressing harm caused by historic practices, by protecting the health of at-risk populations and contaminated communities.

For each layer, the following questions would be answered:

- What is the baseline or current situation?
- What should policy approaches look like if they are to strengthen this prevention layer?
- What actions can be taken to eliminate disparities and inequities in preventing or addressing exposures to harmful chemicals?
- What is the role of federal, state, local and tribal agencies in promoting these policies?
- What is the role of the private sector, including business, academia, and NGOs in promoting these policies?
- What resources and incentives are necessary for government and private entities to get there?

The group will focus its efforts on 1) identifying a set of universal principles that protect the public and workers from harmful chemicals exposures, 2) characterizing and analyzing these principles as they relate to select policies and proposals through the lens of primary, secondary, and tertiary preventions, and 3) developing recommendations grounded in these principles.

APPENDIX C

Primary Prevention Subgroup
Policy and Practice Matrix
March 12, 2010

Overarching Operational Principles
1. Embrace prevention over risk management as an operating principle. This includes focusing on alternatives assessment (Technology Options Analysis) and hazard reduction, rather than traditional sequential risk assessment followed by risk management. Targets should be chosen for their potential for achieving dramatic improvements and reductions in the nature and magnitude of health and ecological effects.
2. Advance both the development and the diffusion of safer alternative products and processes.
3. Include occupational health and safety as a central part of chemical policy and practices, along with the health and safety of the general population and ecological effects.
4. Implement effective review and approval mechanisms for new and existing chemicals, including placement of obligations to provide alternatives and technology options analyses upon manufacturer, importer, and user.
5. Incorporate a life cycle approach to policies and practices, including emphasis on end-of-life issues—with identification of where in the LCA environmentally sounder and inherently safer technology is desirable.
6. Integrate health and environmental priorities as a central element of economic and institutional decision-making.
7. Articulate a focus on inputs, final products, processes, and systems in making policy decisions.

Policy or Practice	Principle Nos.	Case Study/ Examples	Existing Policy/Practice	Enhancement over Existing Policy/ Practice	Effect on Interested Stakeholders (including disparate impacts)	Role of Fed/State/Local Agencies	Role of Private Sector	Resources/Incentives Needed
Phase-out of hazardous process	7 (Input and process change in manufacturing)	Elimination of Cr+6 in electroplating	Technology-based risk management	No reliance on management approach; no concern over adequate operation and maintenance; no compliance concerns		Regulatory implementation of ban; demonstration projects for alternative processes; worker retraining		Financial assistance to small firms
Phase-out of hazardous chemical	7 (Final product substitution)	Eliminate BisPA in cans/plastic containers	No systematic regulation; individual state/local bans/restrictions	Elimination of chemical		Implement phase-out; support develop of new technologies		
Create network of centers for development of safer alternatives	2,5	South Coast AQMD Office of Technology Advancement						
Create network of centers for development of safer alternatives	2,5							
Adoption of management-based regulation requiring identification & evaluation of safer Alternatives	1,3,4	Mass. TURA						
Adoption of management-based regulation requiring evaluation of safer alternatives	1,3,4	Contra Costa County Industrial Safety Ordinance						
Collection/recycling of certain heavy metals in electronic equipment.	1; 3; 5; 7	California law	Indiscriminate disposal	Elimination of metals in the waste stream that contaminate drinking water		California		Collection/recycling/remanufacturing, new but not technologically challenging
Review of older chemicals as alternatives are created—dynamic rather static. (Caveat: Impt. not to wait to act on chemicals until alternatives are available to act on a chemical.)	1; 2; 3; 4; 7							
Use of predictive toxicology--SAR(repro, development toxicology, other hazards may not be captured by this) ; HTS development	1 (TOA - Apply to alter-native technolgies, processes and practices), 4	Tox21 (NIEHS); ToxCast (EPA)						
Addressing drug end of life issues New	5	• Collection programs						
Addressing drug end of life issues	5	• Take back program						
Information Disclosure focused upon facilitating market/regulatory pressure for development/selection of safer processes/products	1,2,6 {NOTE-Disagreement w/I group as to whether this is primary							

APPENDIX D
PUBLIC HEALTH SERVICE AND CHEMICAL EXPOSURE
PRINCIPLES AND PRACTICES

Essential Public Health Service	Applied Principles in Cases of Chemical Exposure	Selected "Scenario" Illustrations for Action
Monitor environmental and health status	• Combine agencies' data to capture the extent of community contaminants such as pesticides, lead, pharmaceuticals, radiation, mercury, PCBs, VOCs, ambient air data, asthma, EBLs, fish, poison control centers, hospitals, locals, beaches, water, wastewater. leachate, and methane. • Use an ongoing multi-disciplinary community based response team to establish local monitoring priorities • Comprehensive, robust monitoring network, integrated with agriculture, forest and other natural resource data bases. • Establish biomonitoring programs for use locally with local input and annual reports to the public. • Utilize geographical data in existing data sets to identify and monitor exposures. • Promote prevention, safer chemicals, feasible alternatives and alternatives assessments	Cancer cluster data is often interpreted as being chronic disease or behaviorally related (smoking, obesity, exercise), but very difficult to determine the accumulated exposure to chemicals that contribute to their morbidity or mortality. Create and fund national surveillance system: —Expand NHANES biomonitoring program to at least 12 more states, with sufficient data to allow cross-tabulations and local data queries, particularly for minority communities. —Develop better ways to interpret biologic samples to communicate health risks of various contaminants and mixtures. —Require inter-agency data integration at state level for federally funded programs.
Diagnose and investigate health problems	• How are local health officials involved? • What are the agencies' roles? Fragmentation among federal, state and local agencies has or	A recent underground storage tank identified by other fed and state agencies leaked and infiltrated a house sewer that led to an explosion was not on the local public health radar for

	could lead to missed opportunities to investigate and prevent exposure. • Standardize and use health impact assessment • Use existing registries, refining them as needed, to provide key indicators of traumatic environmental exposures. • Leverage public health research and expertise to guide environmental remediation priorities. • Determine the role of ATSDR in local investigations.	involvement. Local public health officials' are on the front in their communities every day and typically are the first to receive the calls for health impact information. Develop national birth anomalies registry—Fund all states to implement surveillance system. Develop national framework for cancer cluster investigations, so that localized efforts fit into larger picture. Create a presumption that environmental remediation will follow Public Health recommendations, so that PRPs no longer run to the "environmental protection" entity (federal or state) and use that entity's softness to push back on PH-recommended actions, complaining "You want us to do even more than DEQ/EPA require!"
Inform, educate and empower people	• Often community constituents are not aware of their surroundings and the exposures that they may be affected by. • Establish a relationship with a local science and environmental news reporter; develop a regular news feature emphasizing local "chemistry" • Raise the profile of EPH and its role in protecting a community's health. • Reward community engagement. • When exposures are identified, immediate action and resources should be available to halt the exposure and protect communities.	Public health officials can hold community forums, phone banks, and awareness campaigns about specific issues, and also inform through community assessments such as MAPP or PACE-EH that involves constituents and stakeholders in the issues and solutions. Identify and clarify Public Health's role at each site; communicate beginning & end points of ATSDR efforts. Provide relevant, actionable information to residents. Find ways to include bucket brigades, citizen sampling and other local involvement.

	• Ensure "right to know" and disclosure • Transparency in the way in which government safety decisions are made.	
Mobilize community partnerships	• Agencies must respect each others domain and realize the benefit and value of early communication and collaboration. Local entities can connect with • Integrate community partners from other areas of Public Health through CDC leadership and funding. • Every state should have an Early Warning Committee of health, environmental, and wildlife experts, local, state and federal agencies and non-profit organizational leaders.	Develop high level cross-over initiatives at the Centers for Disease Control and Prevention (CDC): —Create and enforce programmatic requirements in Chronic Disease and Maternal and Child Health to improve collaboration and cross-training. —reduce and eliminate silos within CDC vis-à-vis EPH, Chronic Disease and Maternal and Child Health Early Warning Committees would serve as channels both for reporting emerging problems and making recommendations to act on findings of credible evidence of harm.
Develop policies and plans	• Ensure that a toxic substance response process is included in all 5 year local public health plans • Embrace Precautionary Principle as policy foundation for federal, state, and tribal efforts. • Integrate community health into environmental planning and policy. • We need to establish a precautionary definition of "harm" to set terms for protective actions and define the "Credible Evidence of Harm" Threshold for Protective Action. • Establish a "hazard-based" rather than risk-based assessment.	Local agencies understand the need to conduct health impact assessments of local ordinances for barriers to positive public health outcomes. A scenario of an individual or business moving onto a property zoned industrial that could become office or residential thus leading to exposure. Apartment complexes in at-risk communities may use inappropriate pesticides that may lead to acute and chronic exposures. Laws are there but issues still real. We dealt with the use of methyl-parathion (a crop pesticide) used in an urban apartment complex for cockroaches. CDC create bully-pulpit opportunities to inform/educate

	• Institutionalize precaution and prevention policies • Put safety first • Chemical manufacturers should be required to provide information on the health hazards associated with their chemicals, how they are used and the ways that the public or workers could be exposed: proving the burden of harm falls on the manufacturers rather than EPA. • Heed early warnings • Address the precept of "confidential business information" and claims of proprietary information	policy makers about the Precautionary Principle and the need to act despite scientific uncertainty. Require full Health Impact Assessment as part of EIS. Train and fund local, state, national HIA capacity.
Enforce laws and regulations	• Local communities can assess and establish ordinances to assure site assessments are conducted. • Use full array of federal and state resources to protect health. • Demonstrate federal leadership to protect health at contaminated sites, and prevent future contaminations. • Phase out PBT's (persistent, bioaccumulative toxicants • Manufacturers should be required to assess alternative technologies and demonstrate that safer products and processes are not available before bringing a new toxic chemical into the market place.	Create and strengthen law enforcement partnerships: —US DOJ provide leadership, CLE and other training —States attorney general and tribal enforcement agencies as active partners. Require federal responsiveness and support for PH-recommended actions: —the federal government is a huge landowner and a significant source of site pollution, yet its reputation for denial, obstruction and recalcitrance is well-deserved.
Link people to needed services	• Many people just do not know what public health agencies do and who or what their respective	Increase knowledge and expertise at all levels of PH to use and interact with the public on social

	partners do. • Reduce barriers (administrative and bureaucratic) to maximizing potential of Social Networking and other media.	media sites. CDC provide templates and examples of best practices
Assure a competent workforce	• Increased awareness and understanding of types and limits to exposures, in addition to the potential negative health outcomes. • Engage institutions of higher learning in grants and contracts with NCEH, CDC, and EPA • Ensure adequate capacity of first responders and receivers for chemical emergencies.	EPH tracking initiatives, land use planning, built environment, and health impact assessment initiatives are forcing public health officials to increase their competencies and involvement in chemically related community exposures such as lead, mercury, PCB's, voc's, and other industrial related Brownfield exposures. Utilize mechanisms to fund faculty and students in program efforts
Evaluate effectiveness and quality	• Engage local constituents in quality improvement design and activities • Base state and federal priorities & funding on measured, evaluated PH effectiveness and quality • Immediate adoption of a comprehensive process of identifying and assessing information for all substances before they can be used.	Develop national 'roll up' metrics to evaluate PH's involvement at a site, while providing opportunity for states and tribes to adapt or add locally relevant measures.
Research for new insights	• Biomonitoring • Integrate federal (NIEHS, NTP, DOD, EPA, USDA, USFW, NOAA, etc.) research priorities on learning how to prevent contamination and increase resilience of already-affected communities. • Research into green chemistry and innovative, safer technologies.	NIH is conducting a National Childs Study to identify exposure over a 21-year period from birth to age 21.

March 16, 2010