

**NATIONAL CONVERSATION ON PUBLIC HEALTH AND CHEMICAL EXPOSURES
POLICIES AND PRACTICES
Meeting No. 5 Summary
Washington Plaza
Washington, D.C.
April 8–9, 2010**

Meeting Objectives:

- Review and discuss work by subgroups
- Identify *National Conversation on Public Health and Chemical Exposures Policies and Practices Work Group (Policies and Practices Work Group)* principles, policies, and practices
- Understand the progress made and challenges for each subgroup and make adjustments to ensure success

Upcoming Meeting/Call	When & Where	Suggested Agenda Items
Sixth work group meeting (Teleconference)	Wednesday, May 19, 2:00 p.m.-4:00 p.m. EDT, by teleconference	<ul style="list-style-type: none"> • Discuss work products of subgroups and review emerging recommendations • Discuss any input from <i>National Conversation on Public Health and Chemical Exposures Leadership Council (Leadership Council)</i> on work done so far • Discuss plan for <i>Policies and Practices Work Group</i> chair, subgroup chairs, and National Center for Environmental Health (NCEH) / Agency for Toxic Substances and Disease Registry (ATSDR) staff revision and refinement of draft report

I. Action Items

Primary, Secondary, and Tertiary Prevention Subgroups	Who	Completed by
Providing subgroup work plans and the next steps with Montrece Ransom and Abby Dilley	Subgroup co-leaders	April 30, 2010
Continue developing work products and refining recommendations	Subgroup members	May 19, 2010
Sharing the Chromium 6 example with full <i>Policies and Practices Work Group</i>	Nick Ashford	April 30, 2010
Leadership Team	Who	Completed by
Submit to the <i>Leadership Council</i> the names that the <i>Policies and Practices Work Group members</i> have offered as potential replacements for Cal Baier Anderson on the work group and the leadership council	Dilley and Ransom	May 19, 2010
Inquire with other work groups on if and how the 10 Essential Services of Public Health, which are included, are being addressed	Dilley and Ransom	May 19, 2010

Compile principles and e-mail to full <i>Policies and Practices Work Group</i>	Ransom	April 12, 2010
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II. Meeting Summary

1) Welcome, Introductions, Review of Meeting Goals, Outcomes, Ground Rules, and Agenda

Dick Jackson, chair of the *Policies and Practices Work Group*, convened the meeting with welcoming comments, and noted that he would like to see the work group end the meeting with a clear understanding of the end products for each of the three subgroups. Following this welcome and a round of introductions, Abby Dilley, *Policies and Practices Work Group* facilitator, led the group through a roll call. Ms. Dilley then reviewed the meeting agenda, which is attached as Appendix A. Dr. Jackson suggested one adjustment to the agenda be made to change the schedule from 1:00 p.m. forward with subgroup meetings until 3:45 p.m. The *Policies and Practices Work Group* members agreed to this change.

Questions and Discussion:

Membership Updates

Dr. Jackson also mentioned that Anderson has resigned from the *Leadership Council* and the *Policies and Practices Work Group*. The *Policies and Practices Work Group* engaged in a discussion about how best to ensure similar representation on the *Leadership Council* and the work group, and offered the following names as potential replacements:

- Robbie Reikart, DuPont
- Dr. Joel Bender, Medical Director (retired), GM
- Dr. John Biedenoff (retired), 3M
- Rick Becker, ACC

Ms. Dilley and Ms. Ransom advised that they had taken this information to the *Leadership Council*.

2) Context Setting: Assessing Work Group Activity and Progress

Ms. Ransom, NCEH/ATSDR staff to the *Policies and Practices Work Group*, led a discussion to set the context for the meeting. Generally, the *Policies and Practices Work Group* is where it is supposed to be with regard to the process map. Ms. Ransom encouraged members to remember the charge and to try to deliver what we said we would deliver to the *Leadership Council*. The charge is included as Appendix B. Specifically, the *Policies and Practices Work Group* charge states that the work group will:

- identify a set of policies and practices,
- identify a universal set of principles,
- analyze and provide answers to the 6 questions listed in the charge, using the 3 layers of prevention; and
- develop recommendations based on this analysis.

Ms. Ransom asked the group to keep this in mind as they move forward, and consider how the matrices and other products that the three subgroups have developed will translate into a final report that meets the requirements of the Final Work Group Report Template.

Ms. Ransom also offered an update on the major milestones and upcoming meetings. The April in-person meeting will be used to discuss subgroup products and develop a plan for moving forward. The May teleconference will be used to ensure that *Policies and Practices Work Group* members are beginning to assemble draft reports. The teleconference planned for June will allow *Policies and Practices Work Group* members to integrate input from other mechanisms including the web dialogues, listening sessions, and community conversations. The purpose of the July or August in-person meeting is to draft the final *Policies and Practices Work Group* report. If a call is held in September, the goal will be to identify any final steps before the final *Policies and Practices Work Group* report is submitted. A final teleconference in October will be to finalize the report and submit it. Ms. Ransom noted that this timeline has been shared via e-mail with the full *Policies and Practices Work Group*, and it is also posted on the shared project website. There may be additional opportunities for involvement after October, but we are not clear yet if there will be more requested of *Policies and Practices Work Group* members after that point.

Questions and Discussion:

Crafting and prioritizing recommendations

The *Policies and Practices Work Group* members suggested that recommendations be crafted with an emphasis on implementation, perhaps including language regarding milestones and accountability. Ms. Ransom also mentioned that as the group works toward the creation of its report, the group should ensure that it can stand on its own, separate from the *Leadership Council's* Action Agenda. It was suggested that the *Policies and Practices Work Group* consider publishing the findings as a 5-page report for *Environmental Health Perspectives*. There was also agreement among the *Policies and Practices Work Group* that members should see the recommendations before determining how best to prioritize them.

3) Update from Subgroups

Primary Prevention

Updates from the *National Conversation on Public Health and Chemical Exposures Policies and Practices Work Group Primary Prevention Subgroup (Primary Prevention Subgroup)* were offered by Tim Malloy, co-leader of the subgroup. To date the *Primary Prevention Subgroup* has thought carefully about roles for federal agencies, particularly the role of NIOSH and ATSDR in preventing harmful exposure to toxic chemicals. There is a placeholder to stimulate though the group realizes that the role for these agencies might show up more in the secondary prevention group. Malloy also noted that the subgroup is aiming toward concentrating on things that have the capacity to get done, and offered that there may be benefit from suggesting that they could be done in a systematic way.

Secondary Prevention

The *National Conversation on Public Health and Chemical Exposures Policies and Practices Work Group Secondary Prevention Subgroup (Secondary Prevention Subgroup)* members reported that they needed clarification about whether they should focus on exposures or hazards. The subgroup members noted that a lack of regulatory attention is a component of reducing burden, and offered a presentation on the principles that they have developed to date. There was discussion about “disproportionate” burden and if any level of burden is acceptable, and the *Secondary Prevention Subgroup* agreed to wordsmith their principles to convey true

intention to reduce burden. In addition, there was discussion about what is meant by “disproportionate” burden and whether any level is acceptable.

Tertiary Prevention

The *National Conversation on Public Health and Chemical Exposures Policies and Practices Work Group Tertiary Prevention Subgroup (Tertiary Prevention Subgroup)* report was delivered by Kristen Hill, one of the subgroup’s co-leaders. The *Tertiary Prevention Subgroup* has shared a list of overarching principles that were guided in their development by the 10 essential services of public health.

Questions and Discussion:

Developing one set of work group principles

In an effort to develop a list of overarching principles as called for in the charge, members of the *Tertiary Prevention Subgroup* asked if it would be appropriate to nest the principles the subgroup has developed with those that the primary and secondary subgroups have developed. This seemed amenable to the subgroup as long as there are not any critical gaps, from the *Tertiary Prevention Subgroup’s* perspective, in the principles offered by the primary and secondary subgroups. At least one *Policies and Practices Work Group* member suggested that we take what we have and develop a series of principles that could be applicable to all three subgroups. Another *Policies and Practices Work Group* member agreed with that, and added that we might consider outlining a set of core principles that are important to all members with additional principles that are especially important to particular subgroups. There was also clarification that these should be over-arching, operational principles.

4) Principles Discussion

To begin this discussion, Dr. Jackson asked *Policies and Practices Work Group* members if they were comfortable with moving toward developing a list of core principles with additional, subgroup specific, principles as necessary. At least one *Policies and Practices Work Group* member suggested that the work group should develop definitions or additional language to provide context to the principles, and include them in the report as an appendix. Members noted that we have been asked to apply the 10 Essential Services of Public Health, included as Appendix C, and asked if and how the other work groups of the National Conversation are addressing the task. Dr. Jackson suggested that convening a smaller group might be a better strategy to develop a slate of guiding principles. In response, one *Policies and Practices Work Group* member suggested that the work group determine a process for coming to agreement on the principles.

Policies and Practices Work Group members noted that the principles will need to fit into the Final Work Group Report Template, and suggested several policies and practices may exist that operationalize or drive each of the principles. Another suggestion was that each principle would have a case example, perhaps drawn from what is on the matrix.

The group also discussed prevention and risk reduction. The *Policies and Practices Work Group* members seemed to agree that everyone is in favor of prevention wants to eliminate and limit the hazard when possible, and that we need judicious, limited use of chemicals.

Emerging principles

Principles that emerged from this discussion include the following:

- Institutionalize and promote prevention and safety first to eliminate and prevent harm from chemical exposures.
- The development and diffusion of safer products and processes is fundamental.
- Include occupational health and safety as a central part of chemical safety policies and practices.
- Implement effective review and approval mechanisms for new and existing chemicals, including initiating manufacturer burden of proof to eliminate and minimize adverse health consequences
- Chemicals affect health and the economy. Cradle to grave costs, not just production costs.

5) Adjourn for the day

Chair Jackson adjourned the meeting at 4:54 p.m. Eastern.

III. Participation

Members Present:

Brenda Afzal, University of Maryland School of Nursing
Laura Anderko, Georgetown University (by phone)
Nick Ashford, MIT (by phone)
Patricia Beattie, Arcalis Scientific
Linda Bruemmer, Minnesota Department of Health
Sascha Chaney, CDC/NCEH/ATSDR
Kerry Dearfield, USDA Food Safety Inspection Service
Pamela Eliason, Toxic Use Reduction Institute
Doug Farquar, National Council of State Legislatures
Rick Hackman, Procter and Gamble (by phone)
Kristin Hill, Great Lakes Inter-Tribal Epidemiology Center
Richard Jackson, UCLA School of Public Health (Chair)
Lin Kaatz Chary, Gary Care Partnership
Timothy Malloy, UCLA School of Law
Andrew McBride, City of Milford Health Department
John McLeod, Cuyahoga County Board of Health
Anne Rabe, Community Concerned About NL Industries, CHEJ
Gail Shibley, Oregon Department of Human Services
Brian Symmes, EPA

Regrets:

Beth Anderson, NIEHS
Lynn Bergeson, Bergeson and Campbell, PC
Arlene Blum, Green Science Policy Institute
Ken Cook, Environmental Working Group
Catherine Dodd, City and County of San Francisco
Robert Harrison, University of California, San Francisco
Kristin Ryan, Alaska Department of Environmental Conservation
Kristen Welker-Hood, Physicians for Social Responsibility

Facilitation & Staff Team Present:

Adam Brush, NCEH/ATSDR staff

Abby Dilley, RESOLVE facilitator

Montrece Ransom, NCEH/ATSDR staff

Day 2: April 9, 2010

1) Review Day's Agenda

Dilley opened the discussion with a quick update of overnight activities and posed options for the rest of the day today. Jackson and Dilley noted that they met with a small group on the evening of April 8 to refine the principles. The group agreed to spend the remaining time honing and finalizing the principles.

2) Discussion of Principles

The *Policies and Practices Work Group* spent this time reviewing the edits made to the 5 principles developed thus far. The result of the discussion was:

- Institutionalize and promote prevention and safety first to eliminate and reduce harm from chemical exposures.
- Advancement of the development and the diffusion of safer alternative products and processes to improve human and ecological health are fundamental.
- Chemical health policy must protect the general public, workers, and the environment. Workers are often most heavily exposed and must be protected.
- Manufacturers are responsible for demonstrating the chemical safety of their products, including taking into account the removal and disposal of those products and chemicals.
- Life cycle analysis of chemicals and chemical components (including extraction, production, use and disposal) are conducted and must identify key points for eliminating and preventing chemical exposures. Do not shift risk. A health effects assessment is essential and should include a consideration of all costs including social, economic, ecological, and human health.

To ensure maximum usage of the in-person time, the *Policies and Practices Work Group* also designated a small group to further develop additional principles. The 3-person subgroup reported back on the principles they developed. After discussion, the following principles emerged:

- Prioritize actions to address the disproportionate treatment and burden of chemical exposures placed on over-burdened, under-served, less-resilient, over-burdened and under-represented populations.
- Ensure full public engagement in all activities to address and prevent chemical exposures with a transparent decision making process. This includes right to know, and coordination between federal, state, and local governments.
- Promote the development, dissemination, and access to information that is transparent, compelling, accurate, and useful at all phases of a chemical's lifecycle.
- Advance prompt health protective actions, investigations, and remediation of contaminated communities (potential recommendations may look at health protective standards at sites, effective study protocols, and enforcement).

3) Policies and Practices

During this time, the subgroups provided feedback on the policies and practices that should be analyzed in light of the principles developed and the goal of coming up with actionable recommendations.

Primary Prevention Subgroup

This subgroup noted that in their work so far, 4 categories of potential policies or practices have emerged. Of those 4, the following 3 categories were discussed:

1) **Regulatory Mechanisms**

The first category deals with the regulatory mechanisms for the phase out of chemical products and processes. As an example, Ashford discussed the Chromium 6 (C6) example that he created. (See Appendix D). The question is about not using the process when there are alternative processes already in place, for example with Chromium 3, electroplating with zinc. It was noted that using alternatives means that you don't have to worry about controlling worker and community exposures as this method is inherently safer. The subgroup members noted that a federal ban is needed, and preferred to state bans. A second, related activity would be needed to work with the electroplaters to use alternative processes. The subgroup suggested that small firms might need financial assistance, perhaps tax rebates. The challenge is that the legacy process in place (electroplating) that is widespread in "garage" operations. According to subgroup members, changing technology represents a big challenge because smaller firms are risk averse, and when the process was developed, C6 was not recognized as a carcinogen.

This subgroup also discussed potential challenges associated with alternative and life cycle analysis. It was noted that such analyses are complicated to conduct and contain many value-based choices and may not be "the answer" to address current decision-making and assessment challenges.

Questions and Discussion

Disadvantages of State-Based Approaches

At least one *Policies and Practices Work Group* member asked about the disadvantages of a state-based approach. Ashford noted that a shift in commerce and that people will move from state to state to use old processes. According to Ashford, this is why a federal policy is needed. Other *Policies and Practices Work Group* members noted that the European Union regulations changed the use of C6 plating for General Motors because automobiles could not be shipped to Europe containing these materials. The change was much bigger than just Europe because it required new practices domestically.

Potential Role of CDC to Advance Regulations

Another *Policies and Practices Work Group* member asked about the potential role of the Centers for Disease Control and Prevention (CDC) to advance regulations. Malloy, *Primary Prevention Subgroup* co-leader, offered an example of how this could be done under existing regulation with additional regulation. According to Malloy, a good example of this relates to dry cleaning and the Clean Air Act wherein the best available technology must be chosen. In California, regulators looked at best dry cleaning with perc and because of the availability of safer alternatives, the allowable exposure level was set at zero. Ashford noted that CDC and ATSDR focus on health, rather than technology, and as such, ATSDR may need to improve technological expertise. It was also noted during this discussion that CDC is not regulatory, but there are programs that help inform regulatory work. It was further noted that many of CDC's program may be moving toward making stronger recommendations in the regulatory arena as programs provide more and better data. Jackson, the *Policies and Practices Work Group* chair, noted that there needs to be more policy thinking at ATSDR. He suggests that a lot of

work needs to be done at the nuts and bolts level, but there is not a lot of thinking at ATSDR on the policy level. He also noted that there are huge opportunities for people to use existing laws. As an example, he offered that the Clean Water Act might be used to address climate change due to the increasing acidity of the oceans. He advises that ATSDR could prioritize activities and policy pursuits related to public health.

2) Management-Based Regulations

The second category focuses on management-based regulations that deal with creating management systems within firms. One subgroup member offered an example from the Massachusetts Toxics Use Reduction Act (TURA). TURA does not require the adoption of safer alternatives. It builds off of Federal release reporting requirements. In Massachusetts, companies have to report on their use of toxic chemicals and how it flows out of the facility. The important shift is the TURA requirement that companies engage in planning that includes state-certified planners. This planning requires companies to look at why toxic chemicals are being used, and companies have to look at options for reducing use including alternative processes, process modification, closed-loop recycling, and using alternatives. In addition, companies have to employ in-house professionals or bring them in. They have to evaluate if there are economic and technologically feasible ways to reduce exposures. TURA does not require implementation. However, with 20 years of experience in Massachusetts, companies have reduced exposures by 90 percent. Once they see that these programs actually work, save money, and reduce or eliminate exposures and risk, companies tend to be willing to adopt them. It was also noted that both companies and their employee workers are affected. As such, initially labor was concerned that implementation of the act would eliminate jobs, but they are now supportive.

It was noted that communities have more access to data that has been vetted, and is available on the web. In addition, all companies must report on the use of chemicals. The TURA program then adds up the numbers and makes the information publicly available.

Questions and Discussion

Need for a Compendium or Clearinghouse of Best Practices

Jackson noted that he sees a need for a compendium or clearinghouse of best practices, laws, etc. Currently, this information is collected and shared on a state-by-state basis, and there is a strong need for federal input—particularly from CDC/ATSDR perhaps in partnership with other relevant state and federal agencies. He notes that states are trying to prioritize which chemicals are of most concern and a federal overview would be helpful in this regard. The TURA example is good one that the Toxic Use Reduction Institute has been working with a number of states to develop protocol toward replication of this program in other states. Another *Policies and Practices Work Group* member advises that it should be noted that different states have different types of government. For example, his is a home rule state and, as such, they can use laws like state law and local ordinances like zoning laws to restrict or put requirements on industry in this area. At least one *Policies and Practices Work Group* member noted that the transmission and distribution methodologies related to these best practices should also be carefully considered. For example, one consideration might be using non-traditional modalities including

social networking tools to help ensure the information is shared at a much lower level.

3) Capacity Building

The third category of policies and practices that has emerged from the deliberations of the *Primary Prevention Subgroup* relates to capacity building. Malloy offers that the group has been discussing the creation of centers or a network to share information. For example, CDC and NIOSH have a role to play toward inherently safer design. NIOSH has demonstrated interest and at least one *Primary Prevention Subgroup* member came across documents where NIOSH has analyzed best practices, looked for inherently safer design, and then compiled this information into a document. The subgroup notes that perhaps this paradigm can be mainstreamed and put into legislation or some action. The effort would be toward creating a network to overcome inertia and link technologies with regulation in a reasonable way. Another subgroup member noted that southern California might also provide a good example of successful capacity building. This member offers that southern California is a remarkable place for innovation, and the creation of the technology needed to address these problems. For example, in the dry cleaning area, the OTA essentially funded early commercialization studies that analyzed fairly rough technology, and called for collaborations with manufacturers to do commercialization studies to determine if it is a reasonable alternative. Trainings were also conducted. When it came time to consider banning perc, there was evidence of alternative technologies already in use. While there has been a lot of debate about the feasibility of the use of this technology, having the commercialization studies done in a rigorous, peer reviewed way, meant that evidence was available when discussion of banning perc were raised.

Subgroup members noted that a need for a stable funding source for such capacity building work. In California, sources included a \$1 fee on vehicle registration, supported by the advance technology fund. A potential role also exists for the private sector, linked with government, academia, and others with a stake in the development of alternative technologies. One *Policies and Practices Work Group* member noted that the downside of this might be that some might see the regulatory agency as picking the 'winners' in the marketplace. This *Policies and Practices Work Group* member noted that the appearance of government interference with the natural development of new technologies should be avoided, but the government does it anyway. As such, this should be done in an objective, transparent way.

The fourth category, development and use of predictive toxicology methods, was mentioned, but not discussed.

Secondary Prevention Subgroup

Lynn Bergeson, co-leader of the *Secondary Prevention Subgroup*, opened the discussion with a brief overview of the subgroup work process. One area that has been considered by this subgroup is the information included on Material Data Sheets and the need for better information on chemical products in the market place. It was noted that the HAZCON standards only require material data sheets. For example, at General Motors, they went above and beyond and set a policy of 100 percent disclosure on material data sheets. One way they avoiding issues with confidential business information was by requiring exact data on hazardous materials on the sheets. For example, if the information was protected, then a general name or chemical specific name was acceptable, with a goal toward knowing the family of information. The existing policy at OSHA is only hazardous ingredients. According to this subgroup, this

needs to be modified to make information available, accessible, and understandable to general public and workers.

Policies and Practices Work Group members commented that the material data sheets, but often just put on a shelf. Keeping them updated and on the minds of those potentially exposed is important. Employees also much undergo annual training to keep accreditation. In Environmental public health, perhaps there could be a connection with public health accreditation standards.

This subgroup noted that having more information available about chemicals in consumer products would provide greater opportunities for consumers to make informed purchases based on chemical content. To the extent that the information is presented in a meaningful and clear way, it might also impact the retail market and perhaps result in diminished use. This approach might also provide opportunities for industry to make better decisions about chemical components purchased, produced, and used. Along with other incentives such as tax subsidies, branding rights, and labeling, having more information available might also incentivize better manufacturing decisions thus yielding a better universe of chemicals and chemical products. There also might be value in federal laws which would reward better chemical use and chemical purchasing suggestions of industry.

At least one *Policies and Practices Work Group* member suggests that some of these aspects might make for separate policies for review. The material data sheets issue is one, and the others that flow from this might be better captured as separate items.

Questions and Discussion

Confidential Business Information and Health Impact Data

At least one *Policies and Practices Work Group* member noted that confidential business information is a real sticking point in all three layers of prevention and our whole policy approach to this area, and as such we may need to be more explicit about it in our discussions. Dilley notes that the issues regarding confidential business information fits into principle No. 4. A WG member advised that there are ways to get around confidential business information, and that what we need is hazard and interpretive information. Bergeson, subgroup co-leader, noted that this subgroup has spent some time discussing the abuse of the assertion of confidentiality. She opined that in order to protect and reward innovation, there must be a legitimate concern for CBI.

Policies and Practices Work Group members noted that the industry also has access to science and health impact data that state and local governments do not. According to *Policies and Practices Work Group* members, under the Toxic Substances Control Act, the U.S. Environmental Protection Agency (EPA) can compel the disclosure of that information, but no comparable state requirement. A question was raised about why this information is not used by EPA, and what they might do with it. *Policies and Practices Work Group* members noted that industry might note that many have participated in voluntary programs where varying amounts of that information has already been provided, but not being used in a transparent manner by the EPA.

Another *Policies and Practices Work Group* member noted that EPA can also demand the disclosure of industry information on chemicals health impact. A Federal register announcement is required and then that information is required to be disclosed. This authority is used fairly parsimoniously.

Tertiary Prevention Subgroup

Hill, *Tertiary Prevention Subgroup* co-leader, gave an overview of this subgroup. She began by noting the discussion of health status information has been a focus on this subgroup, and that CDC has oversight of the health status database, which can be a real advantage, but it is not easily accessible. Many states have data registries which are being used. However questions remain including: 1) what are the triggers for use of the health data registries and 2) what are the mechanisms for identifying problems that surface in the data that might indicate a potential negative health impact? For example, one *Policies and Practices Work Group* member offered that the state of Wisconsin has a registry, which has been around for some time, looking at infant cardiac defects. A cardiovascular surgeon at a Children's Hospital began compiling this data, and noticed that American Indian children had the highest levels of cardio defects. He also identified the highest rates along the industrial Fox Valley along eastern Wisconsin. The *Policies and Practices Work Group* members offered that perhaps there needs to be a mechanism to recognize a sequence of events, and then trigger an epidemiological study— noting that the capacity to use statistics, GPS, and other tools to target health issues very well, but who is monitoring this information and how it gets triggered is unclear. Dilley advised the group that this is an issue that both the *Monitoring* and *Scientific Understanding* work groups are grappling with.

John McLeod, *Tertiary Prevention Subgroup* subgroup co-leader, commented on the need for better awareness of what is going on in our communities. Perhaps there are or should be roles we can play in support of what is already known on the local level. For example, should locals have the capacity to do spot checks on industry in their jurisdiction?

The issue of “resiliency” was also raised during this subgroup review. One *Policies and Practices Work Group* member noted that the toxicologists on her staff have been increasingly talking about this as an issue. For example, exposure to a toxic chemical occurs, the effect or increased risk of advance health effects is on some part related to the resilience of that organism, based in some parts on the legacy of the exposure (e.g. prenatal). This needs to be noted because people may be talking about the contaminant of the month, but until the legacy chemicals are dealt with, they will continue to pose problems.

The concerns of the environmentally stressed community were also raised during this discussion. One *Policies and Practices Work Group* member noted that she lives in a city with a huge disconnect between what we are talking about and the environmentally stressed community which is so burdened by economic issues, housing issues, and are simply much more vulnerable to the historic environmental insults that we are chronically exposed to. *Policies and Practices Work Group* members also noted a disconnect in data. For example, when trying to get minimal data statistics, the best we can do is county level, but mostly, the statistics are state level. As such, there is no real way to way to find out what true community level prevalence is, and no money to do that kind of research. Local health departments are overburdened and underfunded, so perhaps this is a role for ATSDR. It was noted that ATSDR might also have a role in working with local Corrective Action Management Units (CAMUs). This is important to consider because the chemicals are regulated by the federal government, and the authority of the local government is such that they cannot affect permitting standards. This begs the question of what can be done on the local level to mitigate exposures. One subgroup member encouraged the *Policies and Practices Work Group* to look at the Congressional report on ATSDR from last March. She highlighted the section that has an assessment of ATSDR science. She discussed several case studies where either the science was said to have been ignored or where problems are not being addressed by ATSDR.

Examples mentioned included sites in Pennsylvania, El Paso, Bunker Hill, and Washington, D.C. It was suggested that this report and some of these case studies be reviewed by the *Tertiary Prevention Subgroup* with these specific actions in mind:

- Preventative public health actions to deal with off-site contamination problems
- Health-based standards for remedial actions so that actions are timely, effective, impactful
- Establishing effective protocols for health studies and health assessments.

Additional issues raised during this discussion include:

- Issues needed to be framed to include disparities but also make them relevant to all communities.
- Take into account exposures from food, in part related to legacy food processing practices.
- Consider the application of an integrated approach to examining the relationship toxic chemical exposure and obesity (i.e., linking chronic disease to chemical exposure), and how the current approach in public health tends to limit its focus to lifestyle.

Questions and Discussion

Recognizing Jurisdictional Issues

During this discussion, the importance of recognizing jurisdictional issues when considering issues that affect local government was noted. One *Policies and Practices Work Group* member mentioned that ATSDR visited Libby, MT and the health department did not know about the visit. It was noted here that there has to be some recognition that the federal government needs to embrace state and local qualities. A positive example of this federal/state interaction occurred in Minnesota, where they did a risk assessment on sulfur dioxide at a feed lot. The goal was to determine public health hazards, and ATSDR's review was seen as value added in that it had a huge impact. This impact was non-regulatory, but it was extremely supportive of state efforts. The take home here may be that the state should set the priorities. In this instance, the ATSDR regional delegate was co-located with EPA delegate, this proved helpful, and might also be a best practice. Perhaps the recommendation that emerges from this is to set regional priorities for ATSDR, clearer priorities, and deadlines.

4) Subgroup sessions to Develop Work Plans

At this point on the agenda, Dilley adjourned the full group meeting, and allowed the 3 subgroups about 30 minutes to develop work plans for moving forward based on the feedback received thus far.

5) Wrap-up and adjourn

Dilley advised the full *Policies and Practices Work Group* that the leadership team would type up the principles, and Ransom will send them to the full work group, post them on the shared project management site by Monday, April 12, and include them in the meeting summary. (See Appendix E for the full list of principles). She noted that given the extensive time and thought that went into the development of the principles, there will be a "high-bar" for changing them substantively. Any edits should be sent to Ransom by May 12, in preparation for the May 19 full *Policies and Practices Work Group* call. Additional next steps include:

- Sharing the C6 example Ashford developed
- Providing subgroup work plans and the next steps with Ransom and Dilley

IV. Participation

Members Present:

Brenda Afzal, University of Maryland School of Nursing
Laura Anderko, Georgetown University
Nick Ashford, MIT (by phone)
Patricia Beattie, Arcalis Scientific
Lynn Bergeson, Bergeson and Campbell, PC
Linda Bruemmer, Minnesota Department of Health
Sascha Chaney, CDC/NCEH/ATSDR
Kerry Dearfield, USDA Food Safety Inspection Service
Pamela Eliason, Toxic Use Reduction Institute
Doug Farquar, National Council of State Legislatures
Kristin Hill, Great Lakes Inter-Tribal Epidemiology Center
Richard Jackson, UCLA School of Public Health (Chair)
Linn Kaatz Chary, Gary Care Partnership
Timothy Malloy, UCLA School of Law
Andrew McBride, City of Milford Health Department
John McLeod, Cuyahoga County Board of Health
Anne Rabe, Community Concerned About NL Industries, CHEJ
Gail Shibley, Oregon Department of Human Services

Regrets:

Beth Anderson, NIEHS
Arlene Blum, Green Science Policy Institute
Ken Cook, Environmental Working Group
Catherine Dodd, City and County of San Francisco
Rick Hackman, Procter and Gamble (by phone)
Robert Harrison, University of California, San Francisco
Kristin Ryan, Alaska Department of Environmental Conservation
Kristen Welker-Hood, Physicians for Social Responsibility
Brian Symmes, EPA

Facilitation & Staff Team Present:

Adam Brush, 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 April 8–9, 2010

Washington Plaza Hotel
10 Thomas Circle, NW
Washington, D.C. 20005
Proposed Agenda

Meeting Objectives

- Review and discuss work by subgroups
- Identify *Policies and Practices Work Group* principles, policies, and practices
- Understand the progress made and challenges for each subgroup and make adjustments to ensure success

Meeting Outcomes

- Work plans for the subgroups and the *Policies and Practices Work Group* as a whole to develop a draft *Policies and Practices Work Group* report for presentation to the *Leadership Council* by August, 2010
- Dates for future *Policies and Practices Work Group* conference calls and meetings

Thursday, April 8th

- 9:30 a.m. *Policies and Practices Work Group* Convenes
- Members arrive and meeting set up
- 10:00 a.m. Welcome, introductions, review of meeting goals, outcomes, ground rules and agenda
- Take lunch orders
- 10:30 a.m. Context Setting: Assessing *Policies and Practices Work Group* activity and progress
- Discuss overall timeline and process for achieving the charge
 - Where is the work group and subgroups in regards to:
 - Identifying a set of operating principles
 - Identifying specific policies and practices
 - Determining progress on addressing the 6 charge questions
- 10:45 a.m. Brief subgroup updates
- Subgroup activities since the March 16^t *Policies and Practices Work Group* conference call
- 11:30 a.m. Principles discussion
- Discussion of principles across the 3 types of prevention (core)
 - Discussion of additional principles unique to specific layers of prevention
 - Identify any gaps or additions
- 11:50 a.m. Subgroup reports on identified policies and practices
- List and discuss the range of policies and practices identified by the subgroups.
 - Primary prevention
 - Secondary prevention
 - Tertiary prevention
 - Are there additional policies and practices to be highlighted?

- 1:00 p.m. Break for lunch and subgroup sessions
- 2:00 p.m. Continue discussion of policies and practices
- 3:45 p.m. Break
- 4:00 p.m. Case examples
- How can case examples be used most effectively as a discussion tool and in the Draft Report?
 - Do we want to use case examples across layers of prevention (and the subgroups) or a variety of examples to illustrate different principles, policies and practices? [See narrative on Cr+6 as a guideline].
 - Discussion of case examples identified by the subgroups
 - Primary prevention
 - Secondary prevention
 - Tertiary prevention
- 5:00 p.m. Adjourn for the day
- Friday, April 9**
- 8:30 a.m. Review day's agenda
- 8:45 a.m. Six questions of the *Policies and Practices Work Group* charge: How can we use them to develop the draft report?
- Discuss overall progress of the subgroups in answering the 6 questions.
 - Discuss actions and roles of the federal, state, local, tribal agencies, and private sector (including business, academia and NGO's) in promoting identified policies and practices.
 - What are next steps for completing these questions?
- 10:00 a.m. Integration of input from National Conversation Public Engagement Mechanisms Discussion
- Timing of input
 - Process for identifying relevant comments
 - Review and integration of comments
- 10:30 a.m. Break
- 10:45 a.m. Determine overall *Policies and Practices Work Group* plan
- Drafting
 - Dates for work group conference calls and meeting
- 11:00 a.m. Subgroup sessions to develop work plans
- 12:00 p.m. Reconvene in full group
- Share subgroup plans
 - Identify any needs for support or assistance
- 12:30 p.m. Wrap-up and adjourn

APPENDIX B

Policies and Practices Work Group

Final Charge

The *National Conversation on Public Health and Chemical Exposures* 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/or 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/or 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 prevention, and 3) developing recommendations grounded in these principles.

APPENDIX C

10 Essential Public Health Services

Retrieved from: <http://www.cdc.gov/od/ocph/nphpsp/essentialphservices.htm> (April 12, 2010)

The **Essential Public Health Services** provide the fundamental framework for the NPHPSP instruments, by describing the public health activities that should be undertaken in all communities.

The Core Public Health Functions Steering Committee developed the framework for the Essential Services in 1994. This steering committee included representatives from U.S. Public Health Service agencies and other major public health organizations.

The Essential Services provide a working definition of public health and a guiding framework for the responsibilities of local public health systems.

1. **Monitor** health status to identify and solve community health problems.
2. **Diagnose and investigate** health problems and health hazards in the community.
3. **Inform, educate**, and empower people about health issues.
4. **Mobilize** community partnerships and action to identify and solve health problems.
5. **Develop policies and plans** that support individual and community health efforts.
6. **Enforce** laws and regulations that protect health and ensure safety.
7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. **Assure** competent public and personal health care workforce.
9. **Evaluate** effectiveness, accessibility, and quality of personal and population-based health services.
10. **Research** for new insights and innovative solutions to health problems.

APPENDIX D
Chromium Six Example
Illustration of the Relationships among Primary, Secondary, and Tertiary Prevention
Using the Example of Cr+6 Electroplating

Nicholas A. Ashford

April 4, 2010

The following distinctions are important:

Primary prevention—preventing harm by eliminating and/or reducing the production or use of harmful chemicals and by spurring the development and diffusion of safer and healthier alternatives.

Secondary prevention—addressing harm by eliminating and/or reducing the exposures to harmful chemicals.

Tertiary prevention—addressing harm caused by historic practices, by protecting the health of at-risk populations and contaminated communities.

Cr+6 is used in electroplating processes to produce a shiny, non-corrosive metal surface on other metals. The +6 valence of Chromium is a recognized carcinogen presenting health risks to workers and waste handlers, as well as to communities contaminated with Cr+6 wastes.

Primary prevention entails using either Cr+3 sources or other metals, like zinc for electroplating. Both input changes and process changes need to be made by electroplaters to eliminate Cr+6 risks. The technologies are known and well-proven.

If primary prevention is not utilized, secondary prevention methods must be employed to control exposures to (1) plating workers, (2) worker in plating plants and waste-handling firms, and (3) communities contaminated from housing built on land contaminated by chromium tailings or from water contaminated from waste disposal sites.

If secondary prevention methods are not employed, the tertiary prevention methods of removing the tailings or the treatment of soils and waste are indicated to lower the health risks to the community.

APPENDIX E
Policies and Practices Work Group
DRAFT
April, 12, 2010
Principles

1. Institutionalize and promote prevention and safety first to eliminate and reduce harm from chemical exposures.
2. Advancements in the development and the diffusion of safer alternatives products and processes to improve human and ecological health are fundamental.
3. Chemical health policy must protect the general public, workers, and the environment.
 - a. Workers are often most heavily exposed and must be protected.
 - b. Certain portions of the population, such as children, pregnant women, and the elderly, are more susceptible and must be protected.
4. Manufacturers are responsible for demonstrating the chemical safety of their products, including taking into account the removal and disposal of those products/chemicals.
5. Life cycle approach to chemicals and chemical components (including extraction, productions, use and disposal) are conducted and must identify key points for eliminating and preventing chemical exposures.
 - a. Do not shift risk.
 - b. A health impact assessment is essential and should include a consideration of all social, economic, ecological and human health costs.
6. Prioritize actions to address the disproportionate treatment and burden of chemical exposures placed on over-burdened and under- represented populations.
 - a. Maybe add “under-served, less-resilient, over-burdened...”
7. Ensure full public engagement in all activities to address and prevent chemical exposures with a transparent decision making processes
 - a. ‘Right to know,’ coordination between federal, state, and local govs are all critical components to this.
8. Promote the development, dissemination, and access to information that is transparent, comprehensive, accurate, and useful at all phases of a chemical lifecycle.
 - a. Discussion about what is meant by compelling. Not just a list of chemicals, comprehensive may be a better substitute?
9. Advance prompt health protective actions, investigations, and remediation of contaminated communities.
 - a. Potential recommendations may look at health protective standards at sites, effective study protocols, and enforcement.
10. Coordination among state, tribal, local, and federal agencies with full public engagement is critical.