

November 8, 2012 Meeting of the Scientific Guidance Panel for Biomonitoring California

Summary of Panel Input and Recommendations

The Scientific Guidance Panel (SGP) for the California Environmental Contaminant Biomonitoring Program (also known as Biomonitoring California) met on November 8, 2012 in Sacramento. This document briefly summarizes the Panel's input and recommendations on each agenda item and related public comments. To view or download the presentations, other meeting materials, and the full transcript, visit the [November 2012 SGP meeting page](#).

Program Update

[Presentation by Michael Lipsett, M.D. and Amy Dunn, M.P.H.](#)

Michael Lipsett, M.D.: *Chief, Environmental Health Investigations Branch, California Department of Public Health (CDPH) and Lead of Biomonitoring California*

Amy Dunn, M.P.H.: *Research Scientist III, Safer Alternatives Assessment and Biomonitoring Section, Office of Environmental Health Hazard Assessment (OEHHA)*

Document: [Biomonitoring California Results: October 2012 Update](#)

Panel members:

- Supported further exploration of using samples from the California Prenatal Screening Program for biomonitoring, including investigating potential quality control issues.
- Suggested publicizing the upcoming new Biomonitoring California website through:
 - Social media avenues (Facebook, Twitter)
 - Listservs of groups that may be interested in biomonitoring
 - Networking at conferences (e.g., Society of Environmental Toxicology and Chemistry and Society of Toxicology)
 - Presentations about the website to other California state departments, such as:
 - Division of Occupational Safety and Health [Cal/OSHA]
 - Green chemistry program (i.e., the Safer Consumer Products program) within the Department of Toxic Substances Control [DTSC]).
- Suggested possible additions to the website, such as “resources for workers”.

Public comment:

Nancy Buermeyer of the Breast Cancer Fund expressed continued support for the Program and all the work that it does. She noted the importance of publicizing the Program and its accomplishments.

Davis Baltz of Commonwealth congratulated the program on the ongoing work being done. He suggested reaching out to cities and counties with large environmental health or public health departments that have an interest in biomonitoring (such as those who responded to the Program's survey of California Council of Local Health Officers). He suggested inviting them to attend or give a small presentation at a future SGP meeting. He proposed holding a panel meeting in a different part of the state to attract new audiences, depending on Program resources. He encouraged pursuing samples from the California Prenatal Screening Program, noting the importance to communities of learning more about prenatal exposures. He suggested the Program contact the University of San Francisco's environmental health nursing program as part of looking into ongoing biomonitoring of medical and/or nursing students. He noted the lasting educational benefit for these students of being biomonitored.

The California Teachers Study: Preliminary Results

[Presentation by Myrto Petreas, Ph.D., M.P.H.](#), *Chief, Environmental Chemistry Branch, Environmental Chemistry Laboratory. DTSC*

Panel members discussed approaches for evaluating and presenting biomonitoring results. They recommended that the Program:

- Develop probability plots of biomonitoring results.
- Consider the appropriate age/gender groups with sufficient numbers in the National Health and Nutrition Examination Survey (NHANES) for comparison.
- Compare Program results to California-specific NHANES data if possible.

Preliminary Results for Some Environmental Phenols and Polycyclic Aromatic Hydrocarbons

[Presentation by Jianwen She, Ph.D.](#), *Chief, Biochemistry Section in the Environmental Health Laboratory Branch at CDPH*

Panel member Dr. Tom McKone suggested the Program consider calculating percentiles using ranks, to help avoid bias that can arise from assigning values to non-detects (e.g., half the detection limit). He also suggested generating probability plots, which are rank based.

Potential Designated Chemicals: *p,p'*-Bisphenols and Diglycidyl Ethers of *p,p'*-Bisphenols

[Presentation by Laurel Plummer, Ph.D.](#), Associate Toxicologist, Safer Alternatives Assessment and Biomonitoring Section, OEHHA

Document: [p,p'-Bisphenols and Diglycidyl Ethers of p,p'-Bisphenols](#)

The Panel:

- Unanimously voted to recommend adding “*p,p'*-bisphenols and diglycidyl ethers of *p,p'*-bisphenols” to the list of designated chemicals for Biomonitoring California.
- Requested that the Program bring these chemicals back to the SGP for consideration as potential priority chemicals.
- Suggested that the Program explore availability of quality assurance/quality control (QA/QC) programs for *p,p'*-bisphenols and related compounds.

Public Comment

Nancy Buermeyer of the Breast Cancer Fund expressed support for the inclusion of this group of chemicals on the designated list for biomonitoring.

Chemical Selection Planning: Discussion of Synthetic Musks for Potential Future Consideration

[Presentation by Gail Krowech, Ph.D.](#), Staff Toxicologist, Safer Alternatives Assessment and Biomonitoring Section, OEHHA

The Panel recommended that the Program prepare a document to support the consideration of synthetic musks as potential designated chemicals.

Input on 2013 SGP Agenda Items

[Presentation by Sara Hoover, M.S.](#), Chief, Safer Alternatives Assessment and Biomonitoring Branch, OEHHA

Panel members:

- Supported the following 2013 agenda items suggested by the Program:
 - Program and laboratory planning, including:
 - Program sustainability.
 - Follow up on possibly biomonitoring medical and/or nursing students. Dr. Luderer offered her assistance in contacting the UC Irvine medical school.
 - Discussion of biomonitoring results as they become available.

- Report back on surveys and interviews to assess participants' understanding of their biomonitoring results.
- Screening chemicals of potential interest for biomonitoring, including:
 - Selected pesticides from the California Department of Pesticide Regulation Top 100 List.
 - Chemicals emerging on the marketplace.
- Consideration of potential designated chemicals, such as synthetic musks
- Consideration of potential priority chemicals, such as p,p'-bisphenols and diglycidyl ethers of p,p'-bisphenols (see above)
- Guest speakers. The Panel suggested that this would be a good way to explore the integration of biomonitoring with other state programs. They also suggested programs from which guest speakers could be invited, such as:
 - DTSC - Safer Consumer Products program
 - CDPH – California Safe Cosmetics Program (CSCP)
 - California Air Resources Board - Consumer Products Program
 - Cal/EPA - Environmental Justice Program
 - California Healthy Nail Salon Collaborative. Possible topic: interface between employers and employees in the Vietnamese community regarding chemical exposures.
- Suggested additional 2013 agenda items:
 - An update on how aspects of the Program's current pilot studies could inform a more representative statewide biomonitoring program, if resources become available.
 - A discussion on how aggregated results from the different community-based Biomonitoring California studies should be combined, presented, and interpreted, including:
 - Approaches for combining and publicly presenting results from these studies that would be acceptable to study principal investigators.
 - How best to compare the aggregated results to national data.
 - How to interpret these aggregated results in terms of how representative they are of statewide exposures.
 - Screening for unknown compounds – follow up on earlier discussions and development of laboratory capacity.
 - Development of resources for workers related to biomonitoring.
 - For example, identifying biomonitored chemicals likely to be used in workplaces and discussing the potential for higher occupational exposures. Dr. Michael Wilson offered his assistance in developing these resources.

