

July 28-29, 2009 Meeting of the Scientific Guidance Panel of the California Environmental Contaminant Biomonitoring Program

Panel Recommendations and Meeting Conclusions

The Scientific Guidance Panel (SGP) of the California Environmental Contaminant Biomonitoring Program (CECBP) met on July 28 and 29, 2009 in Oakland. The SGP deliberated on and made recommendations regarding designated and priority chemicals. The Panel also provided comments on issues related to reporting biomonitoring results to individuals. The SGP's specific recommendations and suggestions on various topics are summarized below. Meeting materials, including an agenda and the transcript, are available on the biomonitoring website (<https://biomonitoring.ca.gov/events/scientific-guidance-panel-meeting-july-2009>).

Panel recommendations regarding designated¹ and priority² chemicals:

1. The SGP recommended that the following chemicals and chemical classes be added as "designated chemicals" for inclusion in the CECBP:
 - Pyrethrins and pyrethroids (as a chemical class)
 - Iprodione
 - Fipronil
 - Octhilinone
2. The SGP recommended that the following chemicals and chemical classes be added as "priority chemicals" for inclusion in the CECBP:
 - Cyclosiloxanes (as a chemical class)
 - Perfluorinated compounds already designated³
 - Dichlorodiphenyltrichloroethane (DDT)
 - *para*-Dichlorobenzene (1,4-dichlorobenzene)
 - 2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters
3. The SGP recommended that N,N-diethyl-3-methylbenzamide (DEET) not be added as a priority chemical for inclusion in the CECBP at this time.

Panel suggestions regarding general strategies for selecting chemicals for discussion at future SGP meetings:

Panel members provided CECBP staff with input on several issues related to selecting chemicals to include in the CECBP. Panel suggestions are summarized below. For full details of this discussion, consult the transcript from July 28 (available at: <https://biomonitoring.ca.gov/sites/default/files/downloads/SGPTranscript072809.pdf>).

1. CECBP staff should not necessarily wait for biomonitoring results from the Centers for

¹For a complete list of the CECBP designated chemicals, visit <https://biomonitoring.ca.gov/chemicals/designated-chemicals>

²For a complete list of the CECBP priority chemicals, visit <https://biomonitoring.ca.gov/chemicals/priority-chemicals>

³ Priority chemicals in this class include only those members that are already designated.

Disease Control and Prevention (CDC) to become available before bringing chemicals to SGP as potential priority chemicals. The Program should evaluate this issue on a chemical-by-chemical basis. There may be compelling reasons to bring a chemical forward for discussion in the absence of CDC biomonitoring results.

2. If CDC biomonitoring results are available, they should be evaluated by the Program in order to decide whether to bring a chemical forward for consideration as a potential priority chemical. In general, CECBP staff should focus less attention on chemicals that are rarely detected by the CDC. However, there will be exceptions to this general guidance. For example, if laboratory methods have advanced or if there are significant differences in use and/or exposure in California, the chemical may warrant consideration for inclusion in the program, and it would be important to bring the chemical forward to the SGP.
3. Chemicals that have shared metabolites with CECBP designated or priority chemicals should not necessarily be automatically be assigned the same status. This decision should be made on a chemical-by-chemical basis. CECBP should give particular attention to parent compounds that give rise to a shared metabolite that is known to be toxic and has exposure potential. In these cases, the class of parent compounds may be brought forward for consideration.
4. There may be compelling reasons for CECBP staff to bring limited/declining use or banned chemicals to the SGP for possible inclusion in the Program. These reasons could include continued use of these chemicals in other parts of the world (leading to potential exposures to Californians) or the potential for biomonitoring to evaluate the efficacy of public health actions aimed at these chemicals.
5. CECBP staff may want to consider bringing chemicals with exposure that is difficult to quantify forward for discussion at SGP meetings if biomonitoring could be a useful means of assessing exposure to these chemicals.
6. In recognition of the fact that analytical methods are constantly evolving and improving, current analytical method limitations should not preclude a chemical from being brought to the SGP for consideration for inclusion in the CECBP.

Panel input regarding CECBP reporting biomonitoring results to participants:

The Panel heard a number of presentations on topics related to communicating biomonitoring results to participants. The Panel recommended that Program staff keep the information provided during the presentations and discussion in mind when planning future results communication activities. Highlights of the panel comments and suggestions are provided below. For full details of this discussion, consult the transcript from July 29 (available at: <https://biomonitoring.ca.gov/sites/default/files/downloads/SGPTranscript072909.pdf>).

1. It is important to begin dialogue with community groups early in the development of a community-based study.
2. One-on-one meetings between study researchers and study participants to communicate results are commonly used in small studies and allow for fuller discussion and education. Given the logistics of a statewide study and limited Program resources, the Panel discussed methods other than in-person reporting. Web-based methods of reporting results were suggested as one option for disseminating a basic level of information to study participants.
3. When biomonitoring reference levels are available, they should be used as a standard for comparison for individual and group results.

4. Health care providers should be involved in biomonitoring studies and local health officers may be able to identify appropriate health care providers in the community. There was a wide-ranging discussion of many issues related to results communication. These involved community-based participatory research, clinical ethics, and comparisons between a public health model and a clinical model for results communication. The Panel expressed interest in discussing these issues further at future meetings.

Panel suggestions regarding discussion topics for future meetings:

1. The SGP recommended that Program staff continue to evaluate and bring forward pesticides to which the public is thought to have considerable exposure, based on volume and/or type of use.
2. In addition to chemicals and chemical classes that have been mentioned at previous SGP meetings (e.g., chloramine disinfection byproducts, glycol ethers, phthalate replacements), some new chemicals were suggested for consideration as potential designated and potential priority chemicals including:
 - a. Manganese (potential designated chemical)
 - b. Low-VOC (volatile organic compound) solvents (e.g., 1-bromopropane) (potential designated chemical or chemical class)
 - c. Dichloroanilines (potential designated chemical class)
 - d. Acrylamide (potential priority chemical)
3. Panel members believe that questionnaires and other exposure assessment methods are a critical component of any biomonitoring project and they expressed an interest in seeing the CECBP draft questionnaire for evaluating participants' exposures.

