BIOMONITORING CALIFORNIA

Introduction to Panel Discussion of:

March 17, 2011 Workshop on Understanding and Interpreting Biomonitoring Results

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Presentation at

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Purpose of agenda item

- Provide overview of March workshop highlights
- Outline direction of Biomonitoring California
- Allow for Panel discussion and obtain Panel recommendations

Background for workshop

- Biomonitoring California
  - Returns individual results to participants upon request
  - Advises individuals on follow-up steps as needed
- Biomonitoring results will help the state evaluate public health efforts to reduce chemical exposures

March 17, 2011 Workshop

- Workshop structure
  - Presentations by six national experts
  - Discussions with speakers and audience
- Meeting materials available here: http://www.oehha.ca.gov/multimedia/biomon/sgpwrkshp031711.html

Workshop objectives

- Discuss approaches for understanding and interpreting biomonitoring results
- Discuss methods for developing comparison levels in blood or urine
- Consider scientific challenges in interpreting results, including how to address
  - Multiple chemical exposures
  - Sensitive sub-populations
- Provide input to Biomonitoring California

Workshop highlights

Brief summary of some discussion areas:

- Returning individual results - context and uncertainty
- Information on chemical health effects and exposure sources for report back
- Developing levels of health concern
- Evaluating exposure sources and studying early effect markers
- Aspects of biomonitoring measurements
- Informing public health and regulatory actions

Workshop highlights - Individual results return

- Convey uncertainties in the interpretation of biomonitoring results
- Provide context for individual results
  - Results from the study population, NHANES and other relevant populations
- Most people want their results and more information on the chemicals being biomonitored

Workshop highlights – Interpretation of health effects

- Advice on possible health concerns can be provided for well known hazards like lead and mercury
- Developing levels of health concern for individual risk interpretation should not be a Program focus

Workshop highlights – Exposure sources

- Following up on "Who's high and why?" can provide useful information on exposure
- Removing known sources and monitoring the effect on results can reveal key sources and ways to reduce exposures

Workshop highlights – Aspects of measurements

- Take into account how analytical issues (like level of detection) affect interpretation
- Consider a study design with multiple measurements in each person to better estimate variability

Workshop highlights – Public health and regulatory action

- Some motivations for establishing Program:
  - Investigating possibly higher exposures in some communities
  - Setting priorities for which chemical exposures warrant action
  - Generating data on emerging chemicals
- Think strategically about the questions the Program can answer and how those relate to regulatory and public health policies

Biomonitoring California direction

- Focus will remain on generating data to:
  - Understand levels of chemicals and trends in communities and the general population
  - Support evaluation of public health and regulatory programs
- Best practices framework will guide individual results return and follow up