

Afternoon Discussion Questions

Biomonitoring California Scientific Guidance Panel Meeting

July 16, 2021



- What is the optimal timing for collecting urine samples after each school day to best reflect air pollution exposures experienced during the school day, given the biomarkers chosen for analysis?
 - How should expected diurnal variations of the various biomarkers be considered in evaluating the optimal timing?

- To help with the interpretation of laboratory results, we will be administering online questionnaires.
 - Which topics would you consider the highest priority for inclusion on the questionnaires?
 - Are there other factors not captured in the next slide that we should consider including?
 - What timeframe should be covered when asking about these factors (e.g., last 2 or 3 days, last week)?

Possible questionnaire topics include:

- Demographics, such as age, sex, ethnicity, income, and education
- Home characteristics, such as:
 - Type of building and flooring
 - Heating, ventilation, and air conditioning systems
 - Presence of attached garage
 - Type of stove; presence of stove fan
- Activities in the home, such as:
 - Smoking
 - Use of standalone air filtration units
 - Cooking methods
 - Use of cleaning products, air fresheners, candles, incense, and other consumer products that can impact air quality
- Child's:
 - Diet
 - Activities, such as time spent outdoors, ways they get to school, or sleeping with windows open
 - Health, such as asthma and acute respiratory and gastrointestinal illness
 - Medication use, such as asthma and allergy medications, pain relievers, cold and flu medicine, and antibiotics

- How can we use biomarkers of oxidative stress and inflammation to support the interpretation of biomarkers of air pollution exposures?
- We will use biomarkers of oxidative stress and inflammation as indicators of children's air pollution exposures; we will not be providing a health interpretation of these results.
 - Given this context, do you have suggestions on how best to explain results for biomarkers of oxidative stress and inflammation to parents?
- Because we have a very narrow time window to conduct the study, we may have to proceed even during a wildfire. Under this scenario, are there specific study design modifications we should consider?