



Stockton Air Pollution Exposure Project

The Office of Environmental Health Hazard Assessment (CalEPA), the University of California (Berkeley and Merced), and Little Manila Rising are teaming up to conduct a biomonitoring project at a school in Stockton. The State will fund the project and there will be no cost to the school or to the participants.

What is biomonitoring?

- Biomonitoring is a way to measure chemicals in a person's body, usually by analyzing blood or urine samples. It tells us about chemical exposures from all types of sources, including air, water, dust, food, and consumer products.

What are the main goals of the Stockton Air Pollution Exposure Project?

- Learn more about children's air pollution exposures.
- Find out how effective school air filtration is in reducing those exposures.

Who can participate?

- Up to 60 children at the selected school.
- One parent or guardian for each participating child.

What will participation in the project involve?

- Children will:
 - Provide urine samples collected before school and after school on two school days (a total of 4 urine samples).
- Parents or guardians will:
 - Assist with the urine collection using the kit provided by project staff and drop the samples off at a site near the school. Project staff can also pick up the samples.
 - Fill out two short surveys about topics like their child's daily activities, diet, tobacco smoke exposures, and health (e.g., asthma), and some household characteristics (e.g., type of heating system).
 - Receive a gift card as a thank you for their family's participation.

What will project staff do?

- Obtain informed consent from the parent or guardian and agreement from the child to participate.
- Visit classrooms to record information like room size, number of people in the room, ventilation system, and air temperature.
- Temporarily place equipment to measure air quality in some classrooms and indoor common areas, and at locations outside on school grounds. This equipment will be removed at the end of the study.
- Test the children's urine samples for chemicals that show exposure to air pollutants like volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs).
- Prepare packets summarizing the children's individual biomonitoring results for parents who request them.

When will the project happen and how long will it take?

- The project will be conducted in Fall 2021 and take about one to two weeks.

Why is this project important?

- Empowers families to learn more about their children's exposures to air pollution and possible ways to reduce those exposures.
- Evaluates the effectiveness of school air filtration as a way to reduce children's exposures.
- Supports public health efforts to improve air quality in Stockton and other AB 617 communities.