

TITLE: Impact of Air Pollution Exposure on Metabolic Health Outcomes for California Residents

PRIME CONTRACTOR: University of California, Berkeley

SUBCONTRACTORS: University Hospitals Cleveland Medical Center
\$62,448

University of California, Los Angeles
\$48,323

PRINCIPAL INVESTIGATOR: Jason Su, Ph.D.

CONTRACT TYPE: Interagency Agreement

BUDGET: \$475,000

CONTRACT TERM: 24 Months

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I. SUMMARY

CARB routinely quantifies three adverse health endpoints associated with particulate matter (PM) exposure. These health endpoints are premature death from cardiopulmonary disease, hospitalizations for heart- and lung-related causes, and emergency room visits for asthma. Research has shown that numerous adverse health effects are associated with exposure to a variety of criteria pollutants and toxic air contaminants. In April 2020, CARB adopted Board Resolution 20-13 directing staff to expand their methodologies to include additional air pollutants and health endpoints.

This proposed project will develop models to estimate statewide concentration-response (C-R) functions between exposures to air pollutants and metabolic health endpoints, and the resulting economic benefits. This project will identify C-R functions for not only the average statewide population, but also for sub-groups by race/ethnicity. The information gained through this contract will support CARB's ability to evaluate the effects of its policies and programs, including a wide range of public health benefits.