Schools Indoor Air Project

CAPHE Partners

Community Action Against Asthma
Detroit Community-Academic Urban Research Center
Detroit Health Department
Detroit Hispanic Development Corporation
Detroiters Working for Environmental Justice
Ecology Center
Green Door Initiative
Healthy Environments Partnership
Michigan Department of Environment, Great Lakes, and Energy (EGLE)
Sierra Club
Southwest Detroit Community Benefits Coalition
Southwest Detroit Environmental Vision
University of Michigan School of Public Health
University of Michigan-Dearborn
University of Detroit Mercy School of Law

The CAPHE partnership includes community-based organizations, community residents, health service providers and public health researchers. Our overarching goal is to use scientifically-based, community-led actions to reduce air pollution and associated adverse health effects in Detroit and surrounding communities.

American students spend over 1300 hours each year inside schools or child-care centers, making them the most important indoor environment for children after their homes. Good air quality in schools is critical to learning and health, while poor indoor air quality is linked to illness and health symptoms that can decrease students' performance at school and increase school absences for health-related reasons.

The *Schools Indoor Air Project* (ScIP) is dedicated to improving indoor air quality in schools and other child serving organizations in the Detroit area. Organized by the *Community Action to Promote Healthy Environments* (CAPHE) partnership, ScIP will place enhanced indoor air filters in participating schools or early childhood centers and monitor the impact on indoor air quality.

ScIP will be conducted at a subset of Detroit's public and charter schools and Head Start programs. Buildings located near heavily trafficked roadways, near industry, and in areas with highlevels of outdoor air pollutants will be prioritized. Selection will also consider building characteristics and community preferences. In 2021-2023, our team will place in-room filter units and "drop-in" filters in 4 buildings and evaluate their impacts. Based on the results, the team will refine protocols as needed, and then in 2024-2025, extend the program to 6 additional schools and child serving facilities.

ScIP will also inspect heating, ventilating and air conditioning (HVAC) systems, assess ventilation using HVAC data and tracer gas methods, and conduct building walkthroughs utilizing checklists and other previously developed resources. In newer or retrofitted buildings with air handling units or unit ventilators, high performance filters will replace existing or missing filters. In older buildings with radiators, free standing filter units will be installed. These systems will be provided at no cost to participating schools or child serving organizations, and will become their property following the study's completion. In addition, we will tailor guidelines for reducing asthma triggers initially developed by the Detroit Asthma Team.

If you are interested in exploring the possibility of participating in ScIP, please contact Alison Walding at walison@umich.edu.