

Benefits of High Efficiency Filtration to Children with Asthma

Contract 11-324

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Why did ARB fund this study?

- PM and ozone known to cause adverse respiratory health effects. Children, elderly and sensitive groups more vulnerable
 - Elevated PM and ozone associated with asthma symptoms
 - Outdoor PM and ozone still very high in some areas
 - Reduce indoor exposure to outdoor PM and ozone
- Previous studies with asthmatics in indoor environments inadequate
 - Small numbers of participants
 - Not high efficiency filtration. Did not document pollutant reductions
 - Did not have long enough interventions
 - Data gaps

CARB's Use of Results

- IAQ: Recommendations to improve IAQ in homes
- Building Codes: Support inclusion of high efficiency filtration in newly constructed homes
- Health:
 - Potential health benefits and cost savings as an asthma intervention tool in California.
 - Other respiratory and cardiovascular benefits

Today's Speaker



Deborah H. Bennett, Ph.D.

- Associate Professor at the Department of Public Health Sciences, University of California, Davis
- Ph.D. in Mechanical Engineering from UC Berkeley in 1999
- Research focus: fate of, transport and exposure to particulate matter and compounds in multi-scale applications
- Research interests include exposures and autism, consumer products, flame retardants, perfluorinated compounds, and other hazardous pollutants.