Dr. Christina Fuller • Asthma, Outdoor Air, and Transportation

Dr. Christina Fuller is an Assistant Professor at the Georgia State University School of Public Health in the Division of Environmental Health. Dr. Fuller works in the field of air quality exposure assessment and environmental epidemiology. Her research interests include outdoor air pollution, the effects of air pollution on lung and heart health, community-engaged research, urban health and environmental justice. Dr. Fuller has worked providing technical assistance and advocacy directly with community groups on environmental issues in New York City, Boston and Atlanta. She is an alumna of Northwestern University earning her BS in environmental engineering. She received her MS and ScD from the Harvard School of Public Health and was recently awarded a 3-year Harvard JPB Environmental Health Fellowship.

Discussion Notes

Living near expressways is associated with health problems: bronchitis, asthma, wheezing, and coughing. Air conditioning with proper air filters reduces pollution. Make sure to achieve a balance between good ventilation and a good seal on the window. Avoid going outside at high pollution times. Community-based monitoring can help us get a sense of when we are most exposed.

Potential solutions to these problems may come in the form of policy changes like sound barriers and policies to address limitations for where and when trucks and other heavy polluters can travel. We can also bike, walk, use transit, and organize around alternative transportation options.

Tackling this issue will require identifying stakeholders and leaders and learning to communicate in the same language as organizations like the EPA.

TAKE-HOME POINTS

Air pollution is a mix of many gases and chemicals.

Air pollution can affect health (eg. asthma).

Two important pollutants are particulate matter (PM) and ozone.

Air pollution varies from place to place and over time.

You can reduce exposure by spending less time outside when pollution levels are high.

KEY WORDS

Particulate matter: small particles—including dust, dirt, and droplets—than can enter the lungs when inhaled

Ozone: a gas that contributes to ground-level smog