

Assessing Racial and Socioeconomic Disparities in Industrial Air Pollution Burdens over the Life Course Using RSEI Geographic Microdata

Thursday, 8:45-9:15 a.m.

Grand Ballroom

Paul Mohai, Presenter

Nearly all quantitative environmental justice analyses have relied on Census data to determine the extent that environmental hazards are distributed disproportionately by race and socioeconomic status (SES) and whether such disparities have increased or decreased over time. However, Census data characterize geographic areas and not specific individuals or groups of people. If demographic characteristics around environmental hazards change over time, we do not know where the “old” residents have migrated to or where the “new” residents have migrated from. Thus, we do not know whether pollution burdens increase or decrease for specific individuals or groups of people over their life course, and whether these increases and decreases are different for various groups based on race, socioeconomic and other demographic characteristics.

Longitudinal panel data provide an opportunity to characterize the environmental quality under which individual and groups of people live over time, to assess if these burdens increase or decrease for certain individuals and groups, and to determine whether racial and SES disparities in these burdens are linked to racial and SES disparities in future health outcomes and mortality. In this study, we used the Americans Changing Lives Survey, a national-level longitudinal panel study, and the RSEI Geographic Microdata to determine whether respondents who moved since 1986 have moved to neighborhoods with greater or less concentrations of industrial air pollution and whether the patterns are different for individuals based on race and SES. We also determined whether industrial air pollution burdens have increased or decreased in the neighborhoods of individuals who have not moved and whether the patterns are different based on race and SES.

Dr. Mohai is a Professor at the University of Michigan, where he teaches courses in environmental justice, environmental policy, and environmental public opinion. He is a long-time researcher in the area of environmental justice and is the author or co-author of numerous articles, books, and reports on the topic, including *Race and the Incidence of Environmental Hazards, Toxic Wastes and Race at Twenty* and “Which Came First, People or Pollution?” He organized in 1990 with Dr. Bunyan Bryant the historic Michigan Conference on Race and the Incidence of Environmental Hazards, served between 2007 and 2013 on EPA’s National Environmental Justice Advisory Council, and received in 2014 the Damu Smith Power of One Award from the Deep South Center for Environmental Justice. His current research involves national level studies examining

the causes of environmental disparities and the role environmental factors play in accounting for racial and socioeconomic disparities in health.