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EXAMINING THE INEQUALITY AND INEQUITY OF CAR OWNERSHIP AND THE EFFECTS OF POLLUTION AND HEALTH OUTCOMES SUCH AS RESPIRATORY DISEASES

S. Stevenson, C. Stephens, M. Landon, T. Fletcher, P.Wilkinson, C. Grundy Environmental Epidemiology Unit, London School of Hygiene and Tropical Medicine, UK.

Background: Pollution especially from cars is an important issue in terms of health risk and effecting policy on public transport systems. This study shows the relationship between those who own cars and drive to work in London producing traffic pollution and those who are most effected in terms of health outcomes.
Methods: Data is linked and compared using a Geographical Information System (GIS) and then analysed and plotted. Variables taken from the 1991 Census include car ownership and a measure of deprivation; London is divided into digitised census wards and a value of road density (roads metres per kilometre, smoothed) calculated. Emission data in the form of a 10 x 10 km grid is taken from the national emissions archive to give values for NO_x and CO. Rates for respiratory mortality are calculated at ward level using the Office for National Statistics annual mortality data.
Results: Descriptive analysis shows a broad inverse relationship between the distributions of people with 2 or more cars outside of London in affluent census wards compared to the distribution of NO_x, CO emissions, road density and respiratory mortality in the city.

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COMMUNITY-OWNED EPIDEMIOLOGIC STUDY

C Lopez, J VanDerslice, L Espinoza, H Ulmer, Department of Family and Community Medicine, School of Medicine, University of New Mexico, Albuquerque, New Mexico, USA

This paper describes the efforts of a disadvantaged community in conducting their own investigation of community health problems, the results of study, and the mixed reactions of state and federal agencies to these efforts. Residents of Sunland Park, NM, a low-income, predominantly Hispanic community along the US-Mexico border, have been concerned about the siting and operation of a municipal landfill in their community since the 1980s; they consider the siting of this landfill as an example of environmental injustice. Shortly after the facility began operations, residents began complaining of health problems, including skin, respiratory, gastro-intestinal and neurologic disorders. Because residents were unsuccessful in getting state or federal agencies to investigate their health concerns, a nonprofit community organization obtained funding to conduct their own environmental epidemiologic investigation and recruited advisors from local universities to help design,conduct and analyze the study. Study results demonstrated associations between (1) living in subdivisions located near the landfill, (2) having direct and indirect contact with the landfill and, (3) attending elementary schools near the landfill boundary, with a variety of illnesses. However, state authorities have generally been reticent to accept the results of the study, charging residents with having manipulated and biased study results.

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BALTIMORE ENVIRONMENTAL JUSTICE PROJECT

B. Sattler, Program Director. University of Maryland at Baltimore School of Medicine. Environmental Health Education Center.

This is a 4-year project to enhance partnerships for communication, research, and action within Baltimore communities by bringing together the Environmental Justice Youth Council, the Law Program of Lake Clifton High School, the Baltimore City Health Dept., the Dept. of Chem. and Biochem. at the University of MD at College Park, and the Toxicology Program at the University of MD at Baltimore School of Medicine.

AIMS:
*Increase awareness and understanding of urban, environmental health issues in the community through teachers and middle/high school students in Baltimore City.
*Implement a research project to comparatively characterize the distribution of air pollutants in several neighborhoods in Baltimore representing a diverse range of populations.
*Provide students with unique opportunities to meet and work with environmental health researchers and practitioners. Teach students the basic elements of environmental science.
*Provide an environmental health awareness program to the health practitioners and allied health professionals providing primary care in Baltimore City through the Adolescent Clinics of the Health Dept. Develop and pilot a comprehensive, community environmental health assessment tool to be used by community residents.
*Sustain community involvement in all aspects of this project by enhancing the infrastructure of the Environmental Justice Youth Council; organizing an Environmental Justice Youth Conference; and continuing outreach and educational projects through active, existing community advisory boards, such as the

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COMMUNITY-BASED RESEARCH TO REDUCE PESTICIDE EXPOSURE IN MINORITY FAMILIES.

L. McCauley, J. Santana, M. Napolitano, M. Beltran, G. Higgins, J. Rothlein, K. Anger.

Minority populations are over-represented in pesticide exposures and bear a disproportionate share of the potential health risks. The largest single group exposed are seasonal farm workers and their children. We are reporting the progress of a four-year, community-based prevention/intervention program focusing on pesticide contamination in agricultural communities. The premise of this research program is that achieving environmental equity can be best accomplished through a team effort involving farmworkers, community groups serving farmworkers, farm owners/growers, local health care providers, and research scientists. This collaborative endeavor closely involves the Hispanic migrant community in the design and conduct of the research process. The project recruits children and parents from agricultural families being served by the Migrant HeadStart programs in rural areas of the northwest U.S. The project includes cross-sectional surveys of pesticide use and protection practices, analyses of home-dust samples for pesticide residues, assessment of biomarkers of organophosphate exposure and assessment of effects on neurobehavioral function. The association between pesticide exposures of migrant farm families and factors related to parental occupation, home environment, pesticide drift in homes adjacent to agricultural areas, and pesticide levels in soil and home dust are being analyzed. Culturally-relevant intervention strategies for migrant Hispanic farmworkers and families will be planned, pretested, implemented and evaluated. Specifically, the research program is designed to test whether intervention programs integrated into established child-focused community organizations are effective in increasing migrant families' knowledge of pesticide safety and behaviors that decrease exposures at work and at home, resulting in decreased risk of exposure to pesticides in the environment and improved health.