

Racial Inequality and the Social Determinants of Health in the Neighborhood Networks of Urban Mobility in US cities

A large body of research has been dedicated to understanding the neighborhood conditions that impact health, which outcomes are affected, and how these effects vary by demographic and socioeconomic neighborhood and individual characteristics. This literature has focused mostly on the neighborhoods in which individuals reside, thus failing to recognize that residents across race/ethnicity and class spend a non-trivial amount of their time in neighborhoods far from their residential settings. We fill this gap by using 2018-2019 anonymized mobile phone data to construct neighborhood networks based on residents' daily travel for 88 of the largest U.S. cities. The objective of our study is to compare neighborhood ethnoracial and socioeconomic inequalities in the Social Determinants of Health across three neighborhood scales: (1) the residential neighborhood; (2) the neighborhoods bordering the residential neighborhood; and (3) the non-adjacent neighborhoods visited by residents across the city.