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Abstract:
COVID-19 has become a nationwide public health crisis in the United States and the number of COVID-19 cases is different by U.S. counties. Also, previous studies have reported that neighborhood contexts have an influence on health outcomes. Therefore, the objective of this study was to examine the association between neighborhood contexts and cumulative number of confirmed COVID-19 cases (per 100,000) in U.S. counties. Cumulative number of COVID-19 cases gained from USA FACTS and variables related to neighborhood contexts gained from the 2018 5-Year American Community Survey at the county level. Data were analyzed using spatial autoregressive models. According to the present results, firstly, larger population, high poverty rate, higher % of bachelor's degree, higher % of no health insurance, higher employment rate, higher % of manufacturing jobs, higher % of primary industry jobs, higher % of commute by drove alone, higher % of foreign born, higher % of Hispanic, and higher % of Black are positively associated with higher cumulative number of COVID-19 cases. Secondly, higher income, higher % of cash assistance recipient, higher % of SNAP recipient, higher unemployment rate, higher % of commute by walked, higher % of Asian, and higher % of senior citizen are negatively associated with higher cumulative number of COVID-19 cases. In conclusion, there exist geographical differences in cumulative number of COVID-19 cases in U.S. counties, which is influenced by various neighborhood contexts. Hence, these findings emphasize the need to take various neighborhood contexts into account when planning COVID-19 prevention.