Abstract

Influenza-associated hospitalization rates by race and ethnicity and social vulnerability index, flusurv-NET 2019-20 through 2022-23

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Background

Historically, racial and ethnic minorities have experienced higher influenza-associated hospitalization rates than non-Hispanic White persons.

Objectives

To describe and compare influenza-associated hospitalization rates stratified by race and ethnicity, age and Centers for Disease Control and Prevention's social vulnerability index (SVI).

Methods

Influenza-associated hospitalization rates were calculated combining 2019-20, 2021-22, and 2022-23 season data from the Influenza Hospitalization Surveillance Network (FluSurv-NET). FluSurv-NET data were merged with 2020 SVI data by county, with counties categorized into low, medium, and high vulnerability areas using SVI tertiles, where high indicates highest vulnerability. Hospitalization rates by race and ethnicity were stratified by age group and SVI, and rate ratios were calculated with non-Hispanic White (White) as the reference group.

Results

Compared with White persons, hospitalization rates for non-Hispanic Black (Black) persons ranged from 1.7 to 2.5 times higher in the 65-74 and 18-64 year age groups, respectively. Among non-Hispanic American Indian/Alaska Native (AIAN) persons, rates ranged from 1.5 to 3.0 times higher in the 50-64 and 0-4 year age groups, respectively. Among Hispanic persons, rates ranged from 1.2 to 1.9 times higher in the 65-74 and 0-4 year age groups, respectively. In all SVI levels, compared with White persons, Black persons had 1.6 to 1.8 times higher hospitalization rates, while in medium and high levels, AIAN persons had 1.6 and 1.7 times higher rates, respectively.

Conclusion

Racial/ethnic disparities in influenza-associated hospitalization rates persisted during the COVID-19 pandemic by age group and SVI. More information is needed to understand systemic factors that contribute to disparities.

Diversity and culture Epidemiology Public health or related research