

# The Nature of the Rural-Urban Mortality Gap

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# The Nature of the Rural-Urban Mortality Gap

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THE HEALTH 202

# Rural Americans are way more likely to die young. Why?

Analysis by Jazmin Orozco Rodriguez  
with research by [McKenzie Beard](#)  
April 15, 2024 at 7:56 a.m. EDT

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APRIL 9, 2024 | 5 MIN READ

## Rural Americans Are Dying at Increasingly Higher Rates Than City Dwellers

The urban-rural mortality rate gap in the U.S. is increasing, especially among young women and Native Americans. Limited access to health care could help explain why

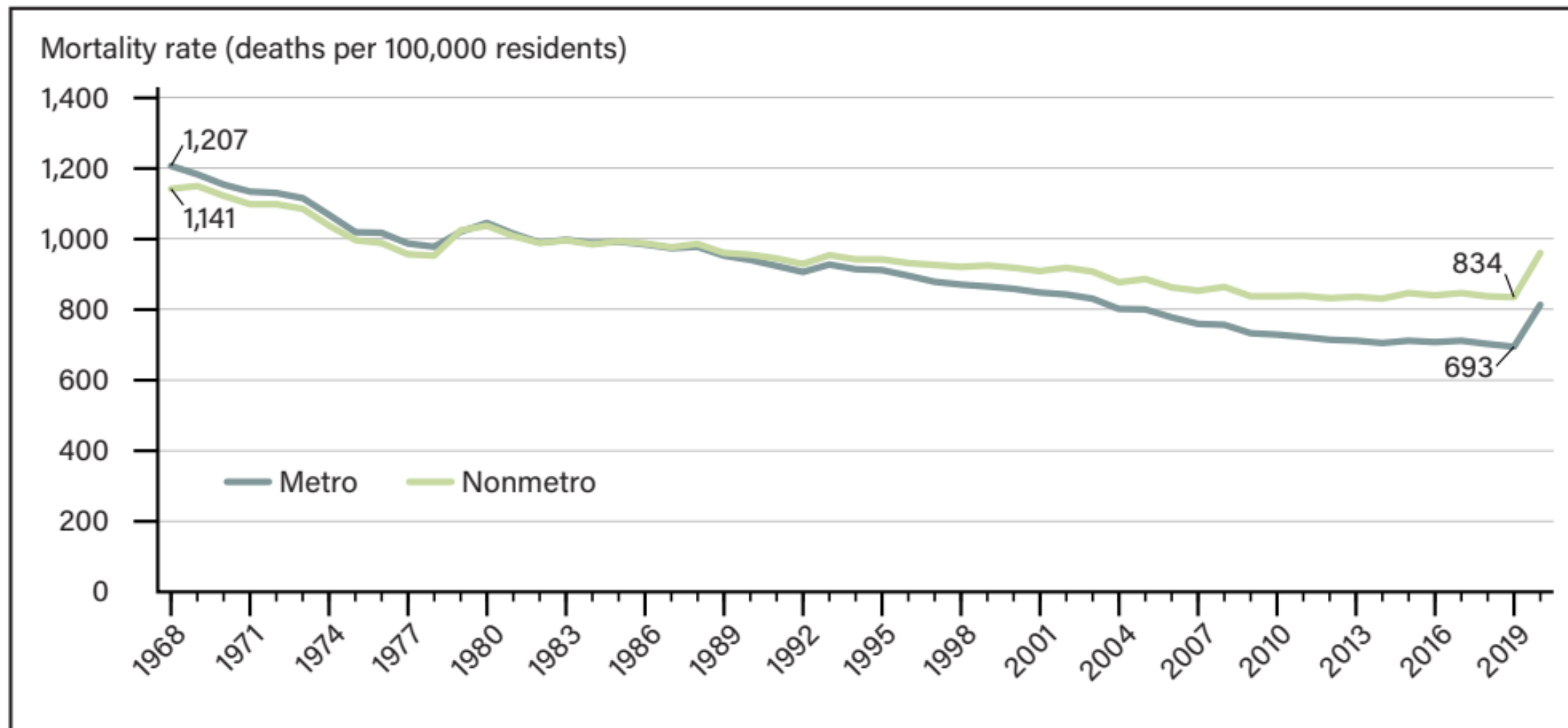
BY JAZMIN OROZCO RODRIGUEZ & KFF HEALTH NEWS



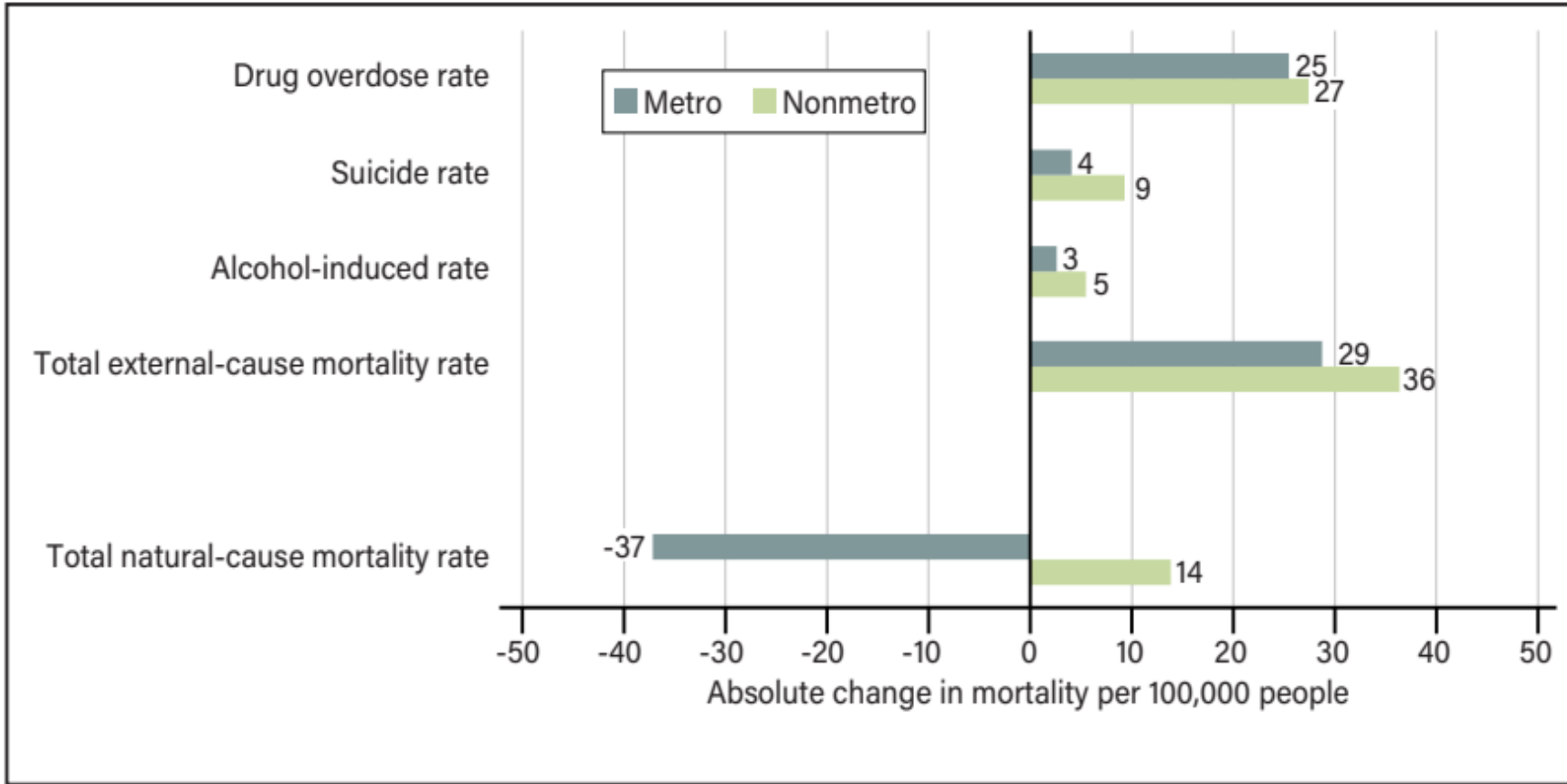
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## Age-adjusted all-cause mortality rates for metro and nonmetro areas, 1968-2020



**Change in age-adjusted, prime working-age, external- and natural-cause mortality rates for metro and nonmetro areas, 1999–2001 to 2017–2019**



Rural & urban areas had increases in external-cause mortality rates (including drug overdose, suicide, accidents, and alcohol-induced deaths)

Rural areas alone had increases in natural-cause mortality



# Data & Definitions

- Rural = nonmetropolitan/ Urban = metropolitan
- National Center for Health Statistics → Mortality Data on CDC Wonder
  - Underlying cause-of-death data
    - All Ages Deaths from Compressed Mortality
    - Counts and rates of death can be obtained by underlying cause of death, state, county, age, race, sex, and year
- National-level data split between Nonmetro vs. Metro (OMB 2013 definition)
  - Examining by 5-year age cohorts
  - Broken down by sex, race, ethnicity, and regional (state) variations
- Use two, 3-year averages to compare data
  - 1999-2001 vs. 2017-2019
  - *We exclude the 2020 mortality rates from our analysis due to the COVID-19 pandemic and break in long-term trends that would convolute our results*

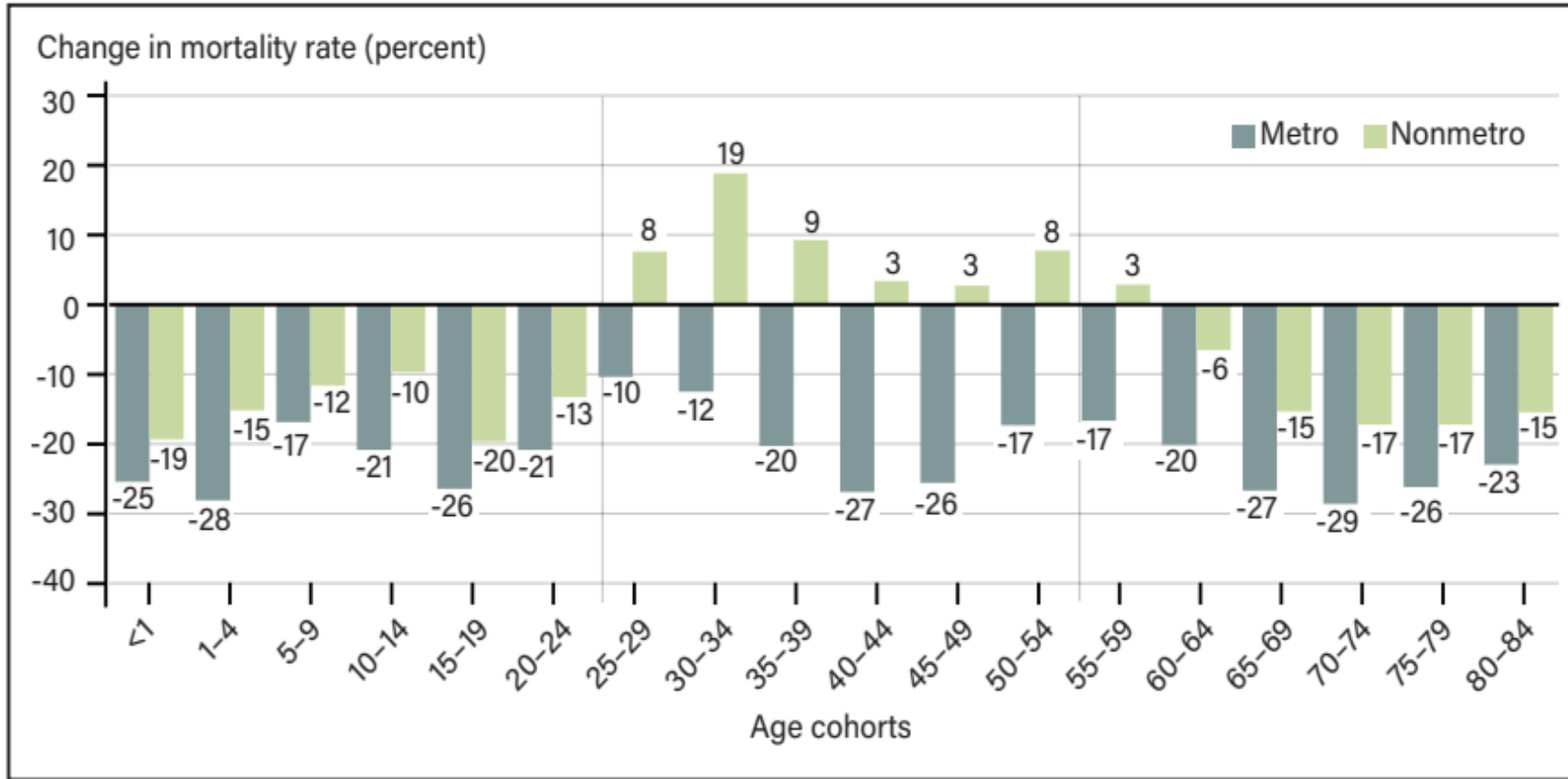


# Natural Cause Mortality (NCM) Defined

- **Natural cause mortality (NCM)** is defined as deaths from natural causes, which excludes accidents (e.g. overdoses), homicide, and suicide
- Measured by the crude death rate (number of deaths in a given period divided by initial size of population)



**Change in natural-cause, crude mortality rates by 5-year age cohorts for metro and nonmetro areas, 1999–2001 to 2017–2019**

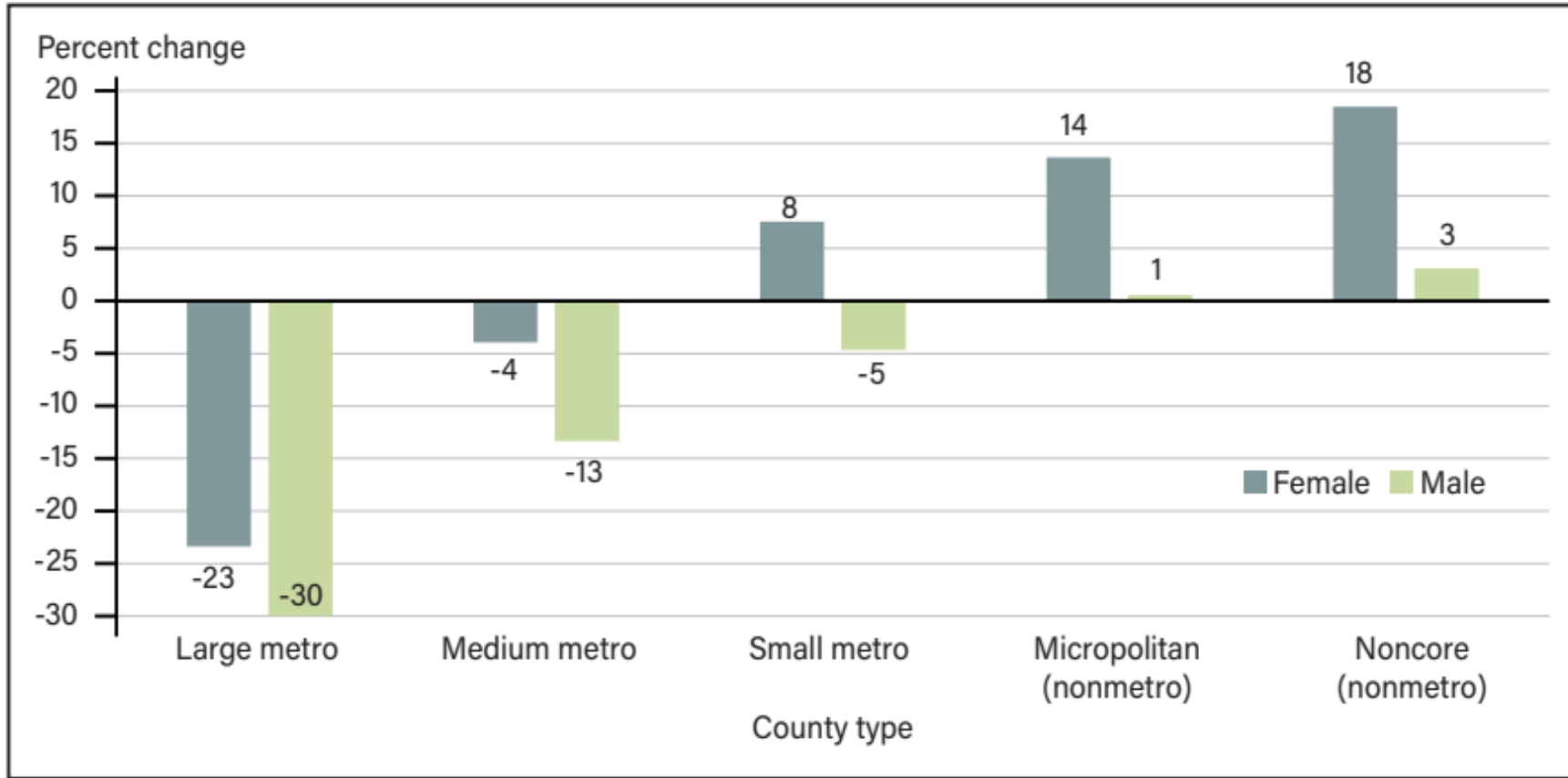


Increase in NCM pronounced for rural ‘prime-working age’ population

Urban NCM decreased for all age cohorts



**Change in age-adjusted, prime working-age natural-cause mortality across the nonmetro-metro county spectrum by sex, 1999-2001 to 2017-2019**

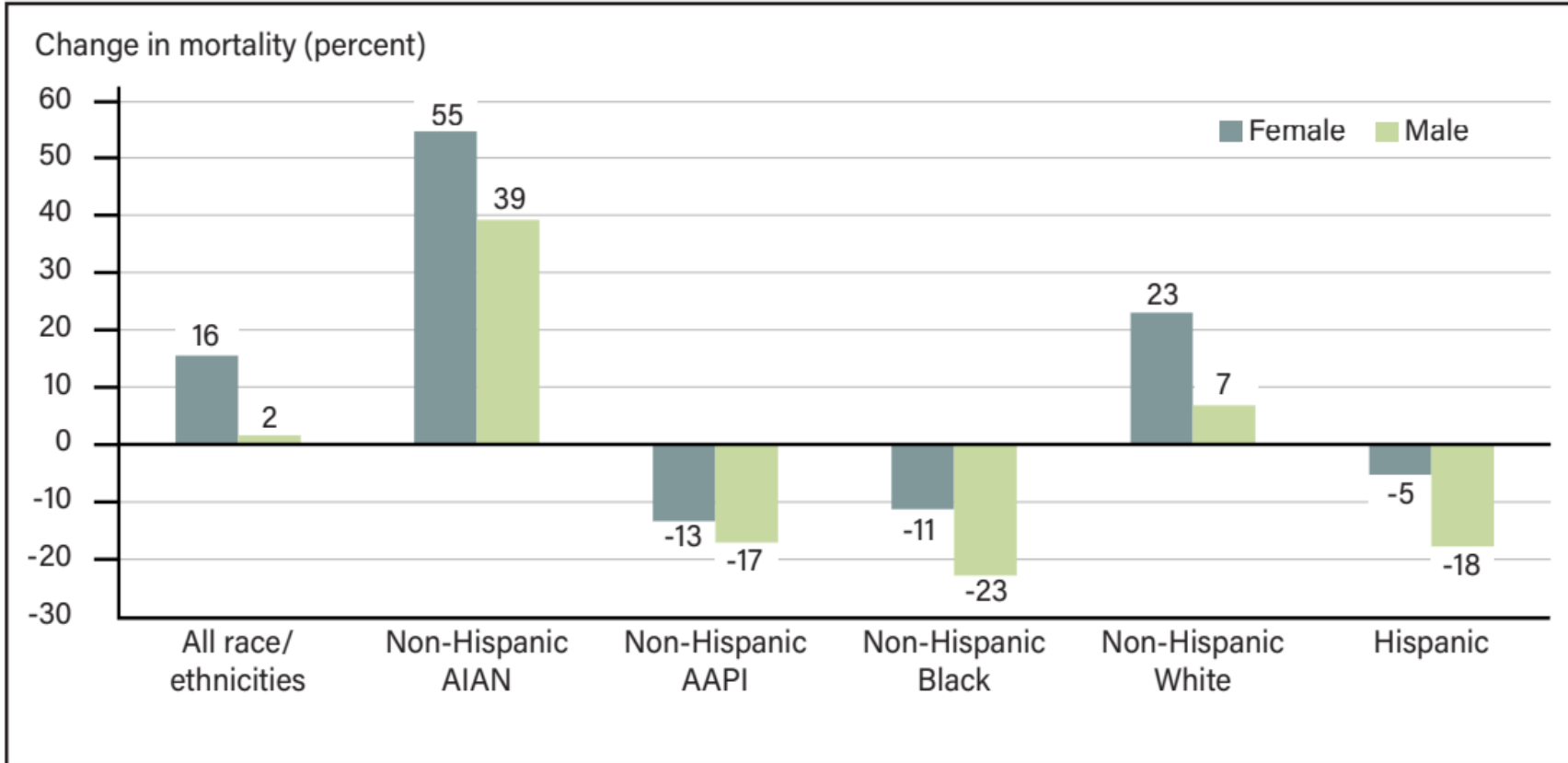


Prime working age NCM increases with rurality, especially for women





**Change in age-adjusted, nonmetro prime working-age natural-cause mortality rates by sex and race and ethnicity, 1999–2001 to 2017–2019**



Nonmetro, prime working age NCM increased for Non-Hispanic AIAN and Non-Hispanic White males and females

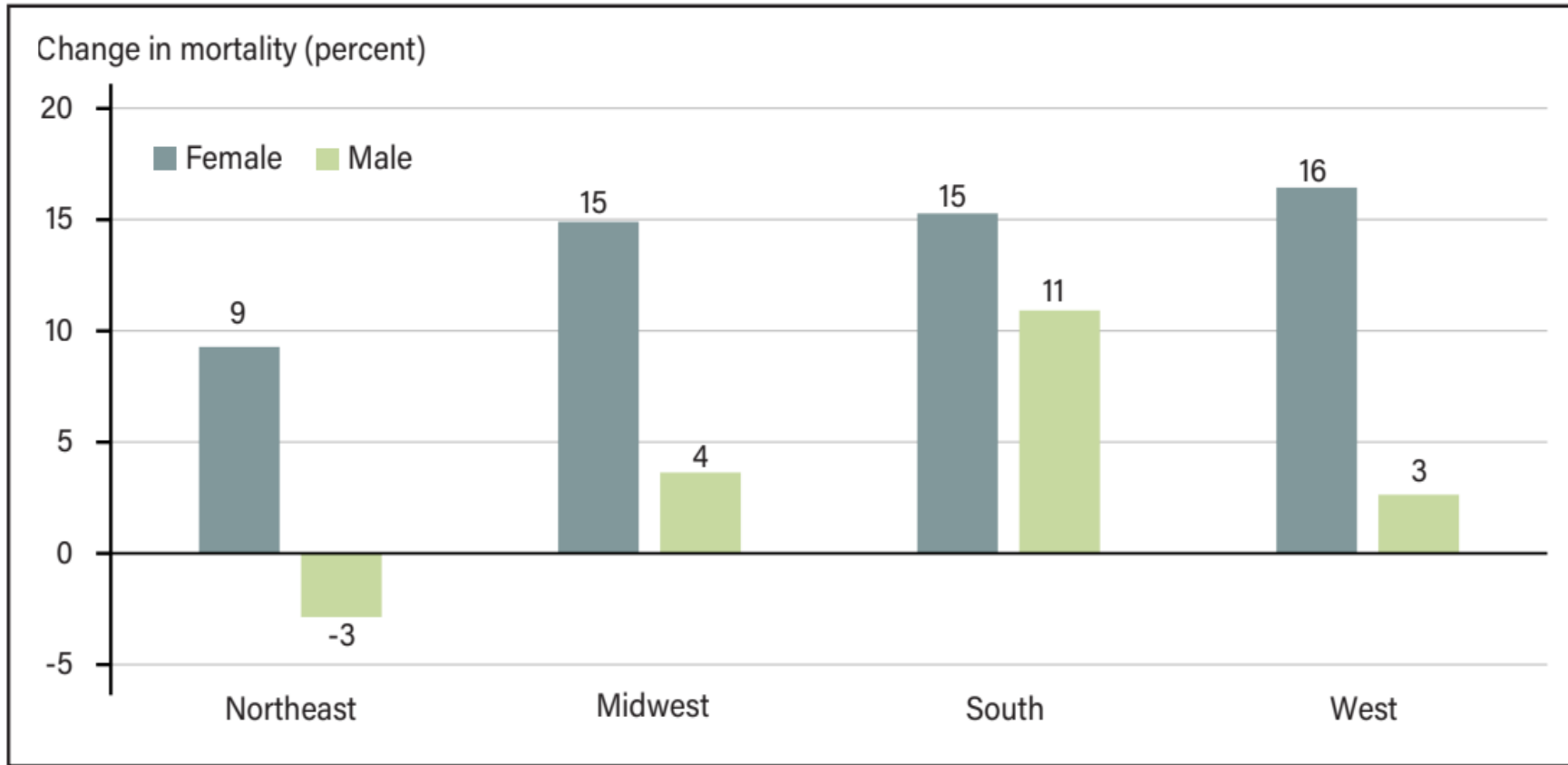
Nonmetro prime working age female NCM increased more than male

- Over double for non-Hispanic White females

Although heading in the right direction, levels of non-Hispanic Black and Hispanic mortality were higher initially



**Nonmetro change in age-adjusted, prime working-age natural-cause mortality rates by sex and region, 1999-2001 to 2017-2019**



Changes in PWA NCM rates in rural...

South had greatest increase

Across all regions, rural females had larger increases than males

The greatest increase for females was in West, and males in the South



# What's next?



Differences in healthcare resources?

Differences in health behaviors?

Accessibility, quality, and affordability of care?

Availability (lack of availability) of care?

Other reasons?



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