

Trends in Colorectal Cancer Mortality Among Reproductive-Aged Women in the United States

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Introduction

- Despite advancements in treating colorectal cancer (CRC), a significant gap remains in understanding the mortality rates among reproductive-aged women with CRC in the United States.
- This study aims to uncover the disparities within this demographic and guide future healthcare policies.

Methods and materials

- This study used the Centers for Disease Control and Prevention Wide-Ranging Online Data for Epidemiologic Research (CDC WONDER) database to analyze CRC-related deaths among women aged 15-44 from 1999 to 2020.
- We examined demographic differences in mortality rates over time, considering age, ethnicity, and geographic areas. Results are reported as age-adjusted mortality rates (AAMR) with 95% confidence intervals (CI), computed by standardizing CRC-related deaths in the US in 2000.

- Joinpoint regression calculated trends over time and average annual percentage change (AAPC).

Results

- Between 1999 and 2020, a total of 14,757 women aged 15-44 died from CRC in the US, with an AAMR of 1.1 per 100,000 (95% CI: 1.1-1.2).
- The AAMR showed an upward trend from 1.1 in 1999 to 1.3 in 2020 (AAPC 0.87; 95% CI: 0.40-1.41). However, this overall rise in mortality rates masked disparities: Non-Hispanic Black women had the highest AAMR at 1.7, while Hispanics displayed the lowest mortality rates at 0.9.
- Geographically, the South emerged as the most affected region with an AAMR of 1.3, contributing to 42.4% of deaths, where rural areas demonstrated higher AAMR compared to urban areas (1.4 vs. 1.1).
- The older age groups (35-44) accounted for the majority of deaths at 79.3%.

Conclusions

- CRC-related mortality among reproductive-aged women has increased from 1999 to 2020, highlighting persistent disparities.

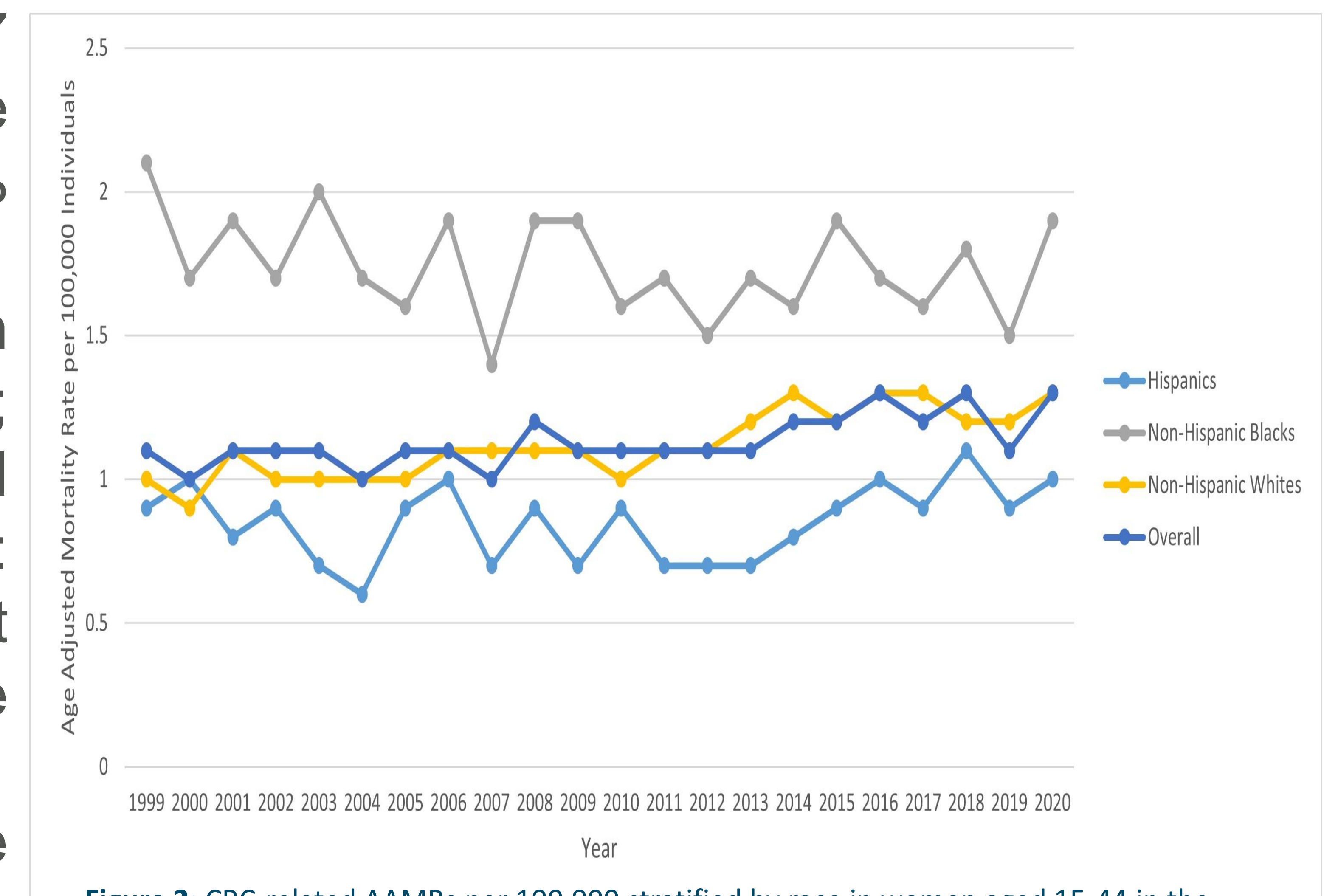
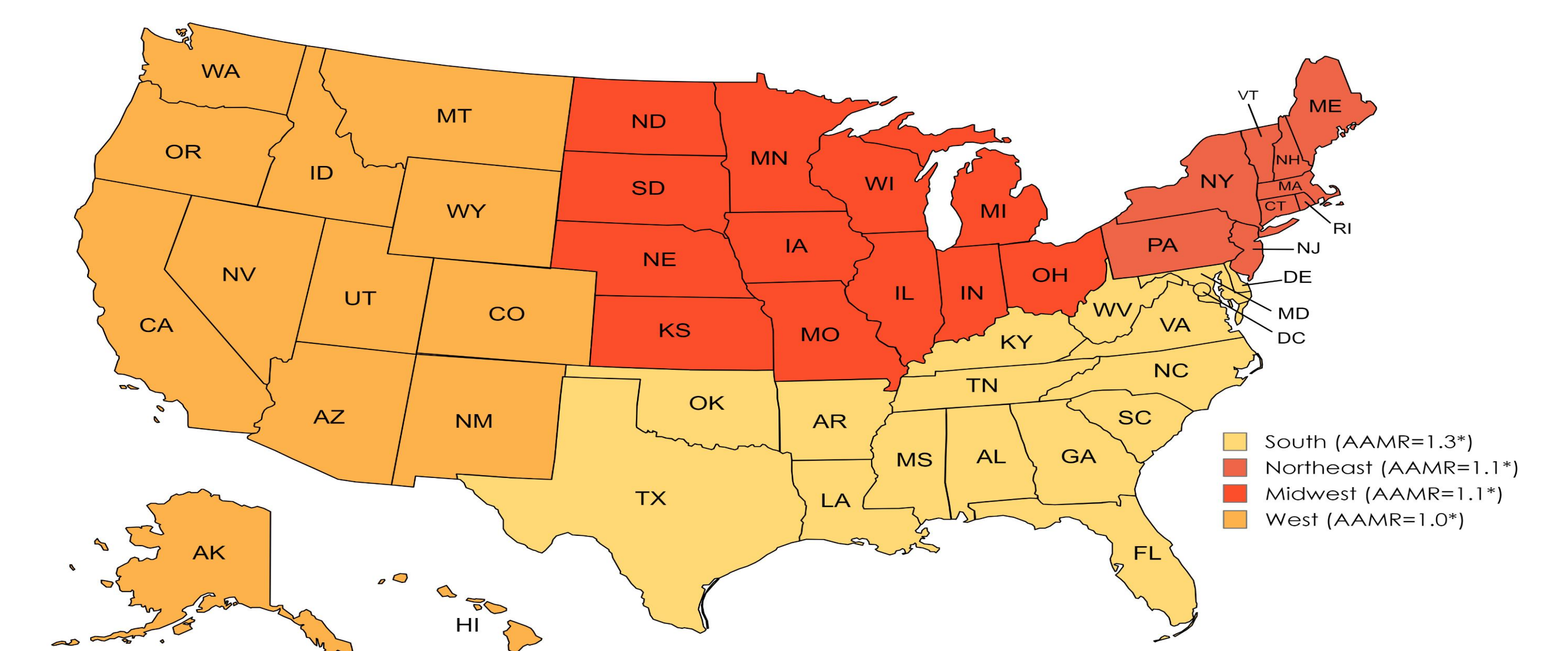


Figure 2: CRC-related AAMRs per 100,000 stratified by race in women aged 15-44 in the United States, 1999 to 2020.



Created with mapchart.net

Figure 1: CRC-related age-adjusted mortality rate per 100,000 among women aged 15-44 from 1999 to 2020 in the United States census regions. *=significant at $p < 0.05$; confidence interval does not include zero