

Impact of COVID-19 on Hematologic Malignancy Mortality: Pre-COVID (2015–2019) vs COVID-Era (2020–2023) U.S. Death Rates

A Comparative CDC WONDER Analysis, Adults Aged ≥25 Years

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644,402

Hematologic-malignancy deaths, 2015–2023 (ICD-10 C81–C96)

280.9 → 265.1

Overall AAMR per million (2015 → 2023) · –5.6%

+2.8%

White-population AAMR rose pre → COVID (280.9 → 288.7)

58.3%

Male share of deaths in the COVID era (up from 57.5%)

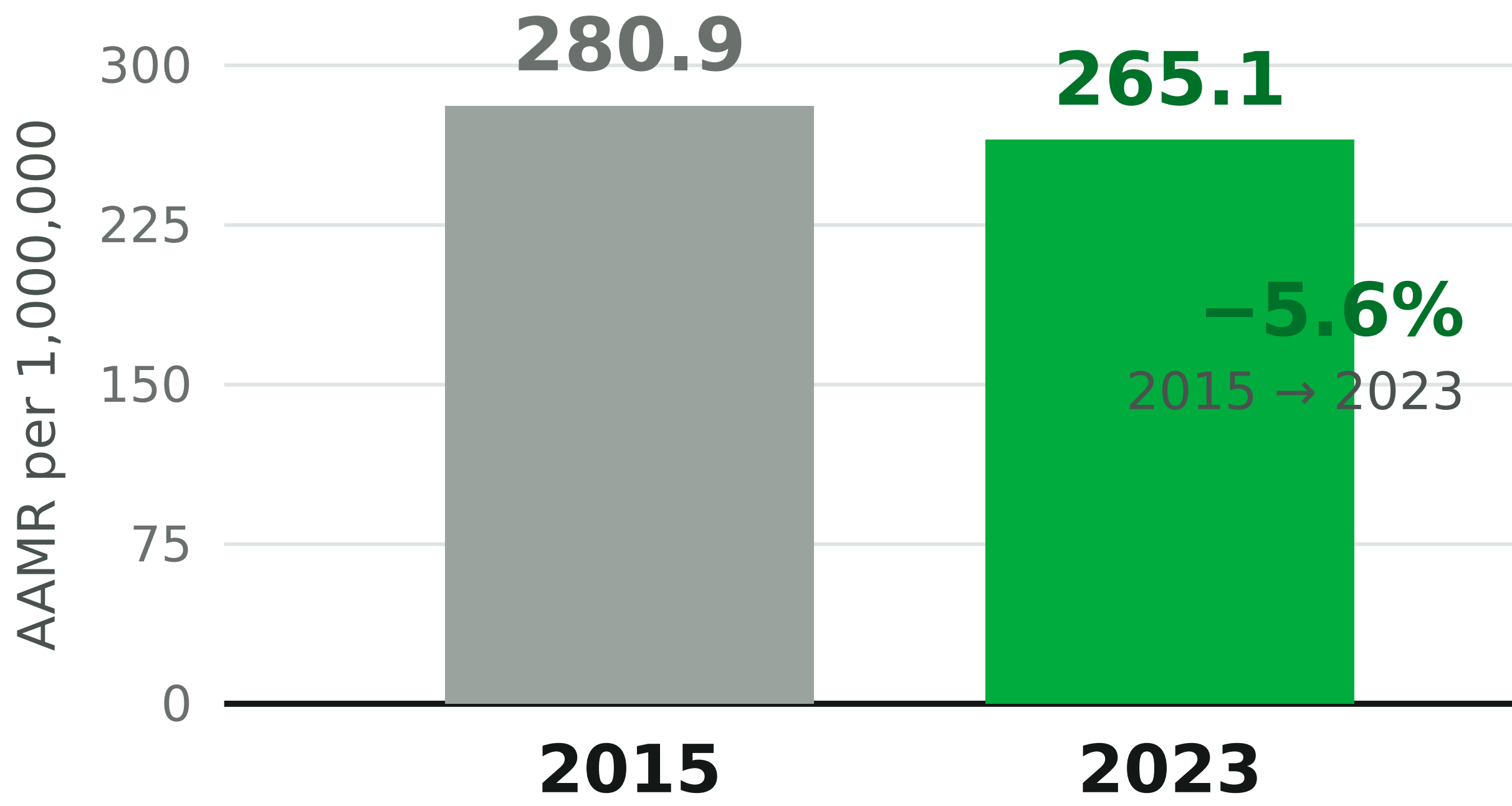
Background

Hematologic malignancies are a substantial contributor to U.S. cancer mortality, yet how the COVID-19 pandemic reshaped their mortality patterns is incompletely characterized.

We compared age-adjusted mortality before and during the pandemic to quantify overall change and identify groups whose burden shifted.

Overall mortality edged down

Age-adjusted mortality rate, 2015 vs 2023

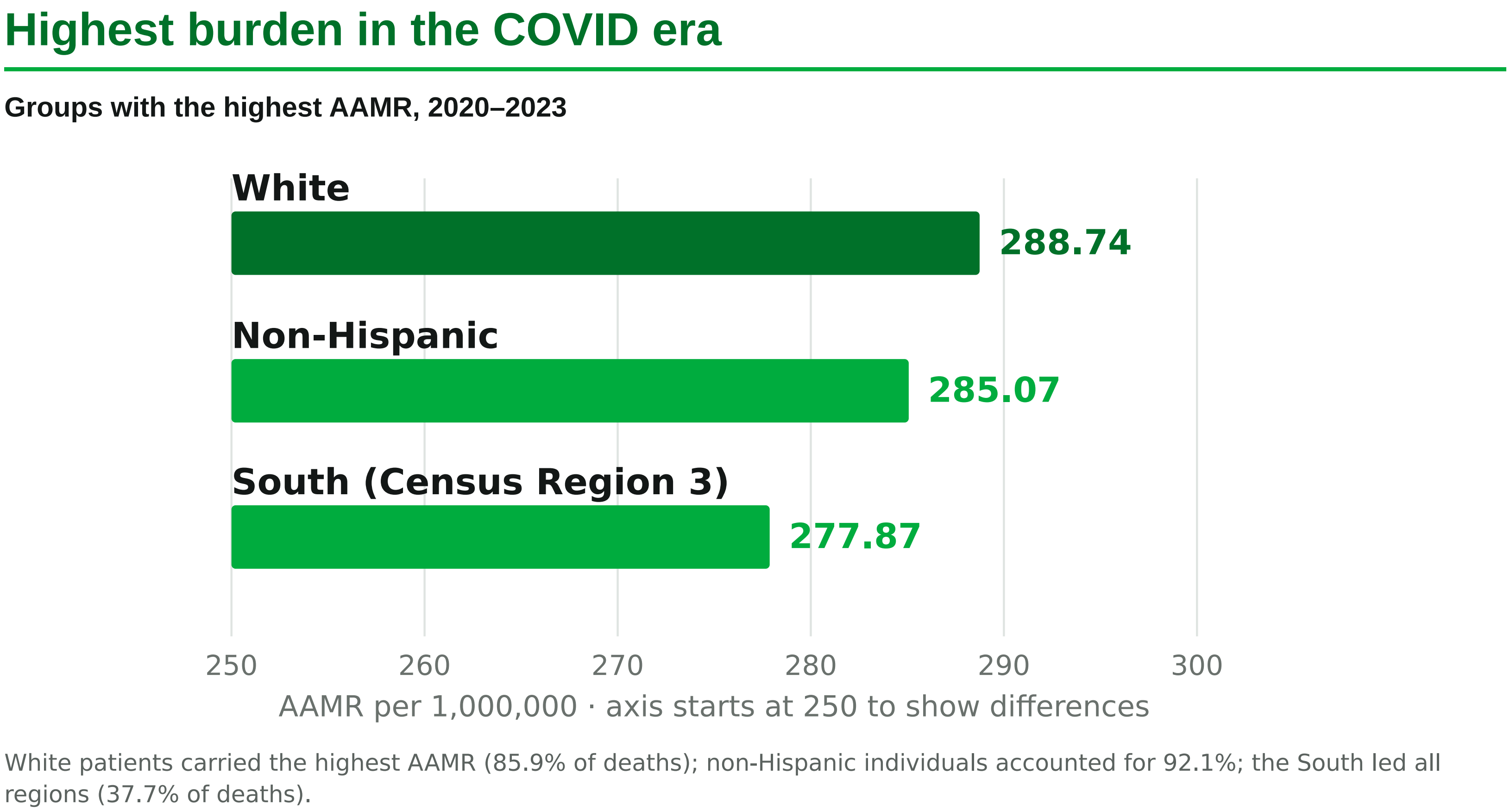
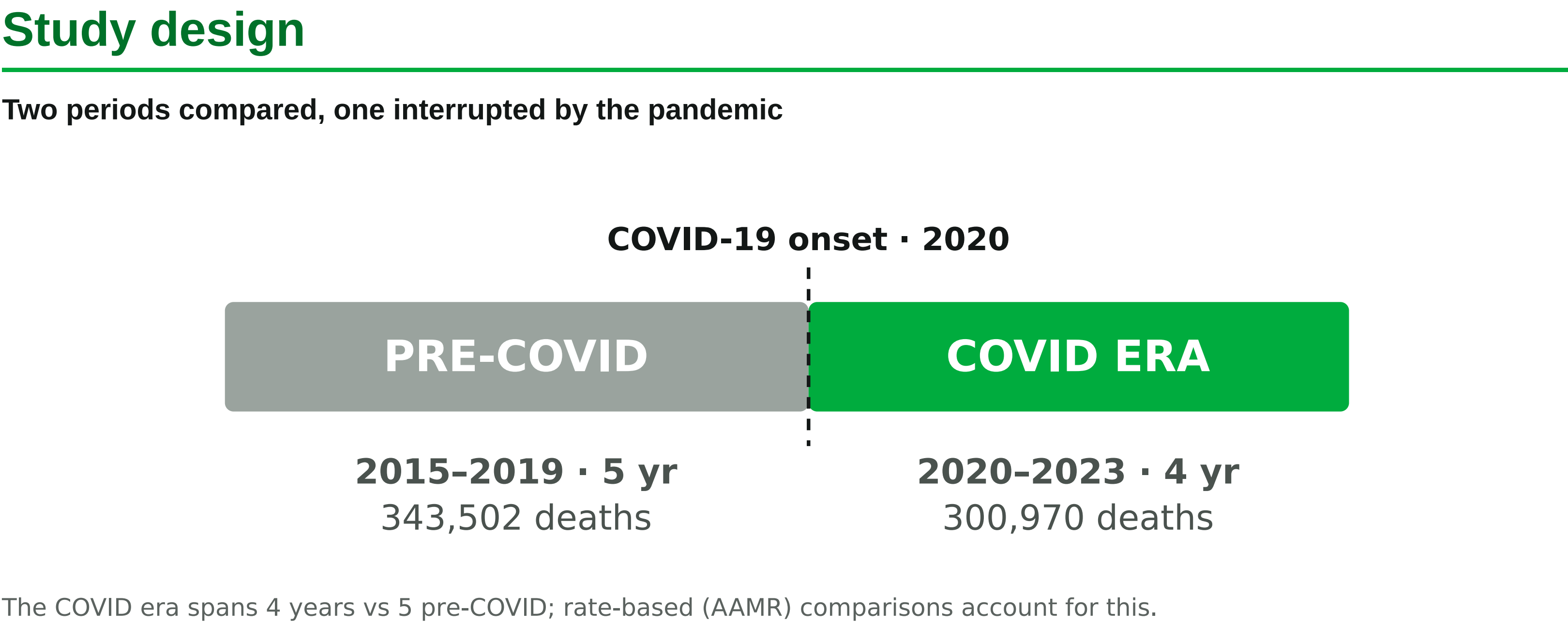


Year	AAMR per 1,000,000
2015	280.9
2023	265.1

What changed, pre-COVID → COVID era

Overall AAMR 2015 → 2023	280.9 → 265.1	–5.6%
White-population AAMR pre → COVID era	280.9 → 288.7	+2.8%
Male share of deaths pre → COVID era	57.5% → 58.3%	+0.9 pp

- Methods
- ◆ **Source.** CDC WONDER Multiple Cause of Death, 2015–2023.
 - ◆ **Population.** Adults aged ≥25 years.
 - ◆ **Case definition.** Hematologic malignancies (ICD-10 **C81–C96**).
 - ◆ **Periods.** Pre-COVID **2015–2019** vs COVID-era **2020–2023**.
 - ◆ **Rates.** AAMR per 1,000,000; stratified by sex, race/ethnicity, and Census region.



- Conclusions
- ◆ Hematologic-malignancy mortality declined gradually from 2015 to 2023 — steady improvement through the pandemic.
 - ◆ Burden remained concentrated among **males**, **non-Hispanic** and **White** populations, and the **South**.
 - ◆ White-population AAMR and the male share of deaths **rose** during the COVID era, signaling widening gaps.
 - ◆ Persistent demographic and regional inequalities warrant focused public-health efforts.