

Declining but Unequal: Trends and Sociodemographic Disparities in Acute Myeloid Leukemia Mortality in the United States, 2018–2024

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INTRODUCTION

- Acute myeloid leukemia (AML) is an aggressive hematologic malignancy in adults.
- Despite recent therapeutic advances, whether mortality improvements are equitably distributed across sociodemographic groups remains unclear.

OBJECTIVE

- Characterize temporal trends in AML mortality (2018–2024)
- Quantify disparities by race/ethnicity, sex, census region, and urbanization

METHODS

- Design:** Cross-sectional analysis of death certificate data using joinpoint regression, rate ratios, and rate differences.
- Setting:** United States, 2018–2024.
- Participants:** All decedents with AML recorded as the underlying cause of death (ICD-10: C92.0, C92.4, C92.5) in the CDC WONDER Multiple Cause of Death database.
- Outcome measures:** Age-adjusted mortality rate (AAMR) per 100,000 (2000 US standard population); annual percent change (APC); rate ratios and rate differences by subgroup.

RESULTS

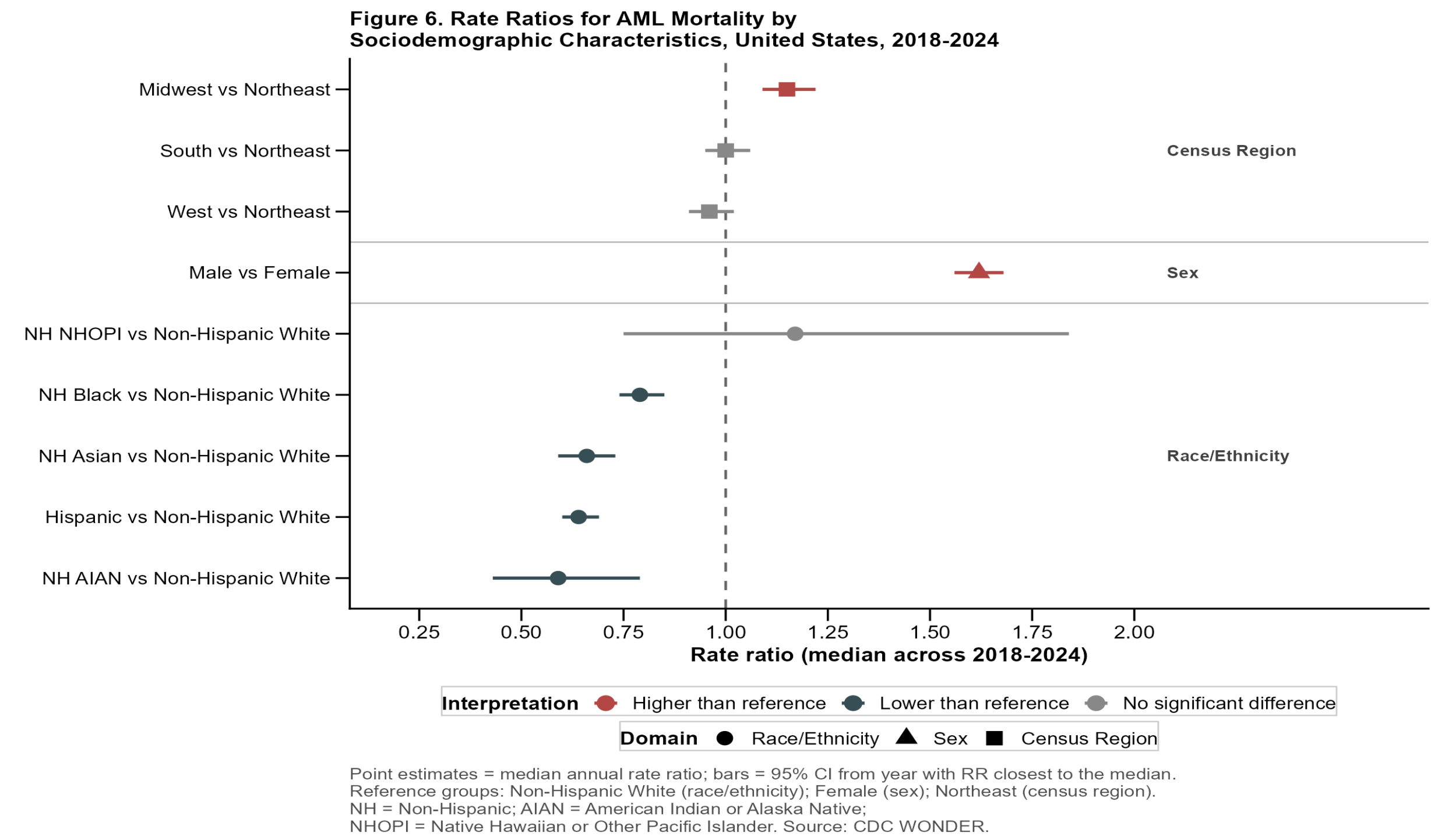
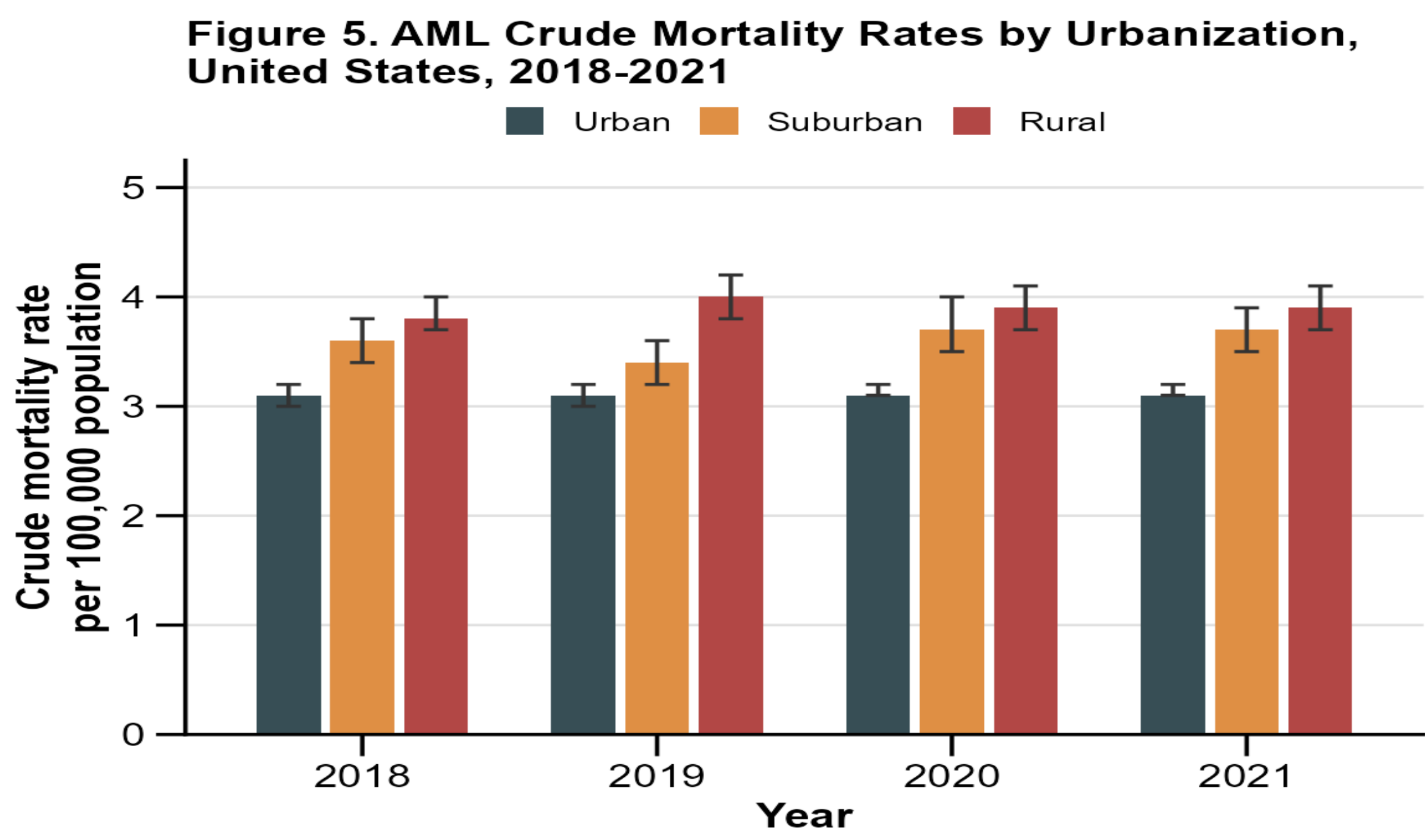
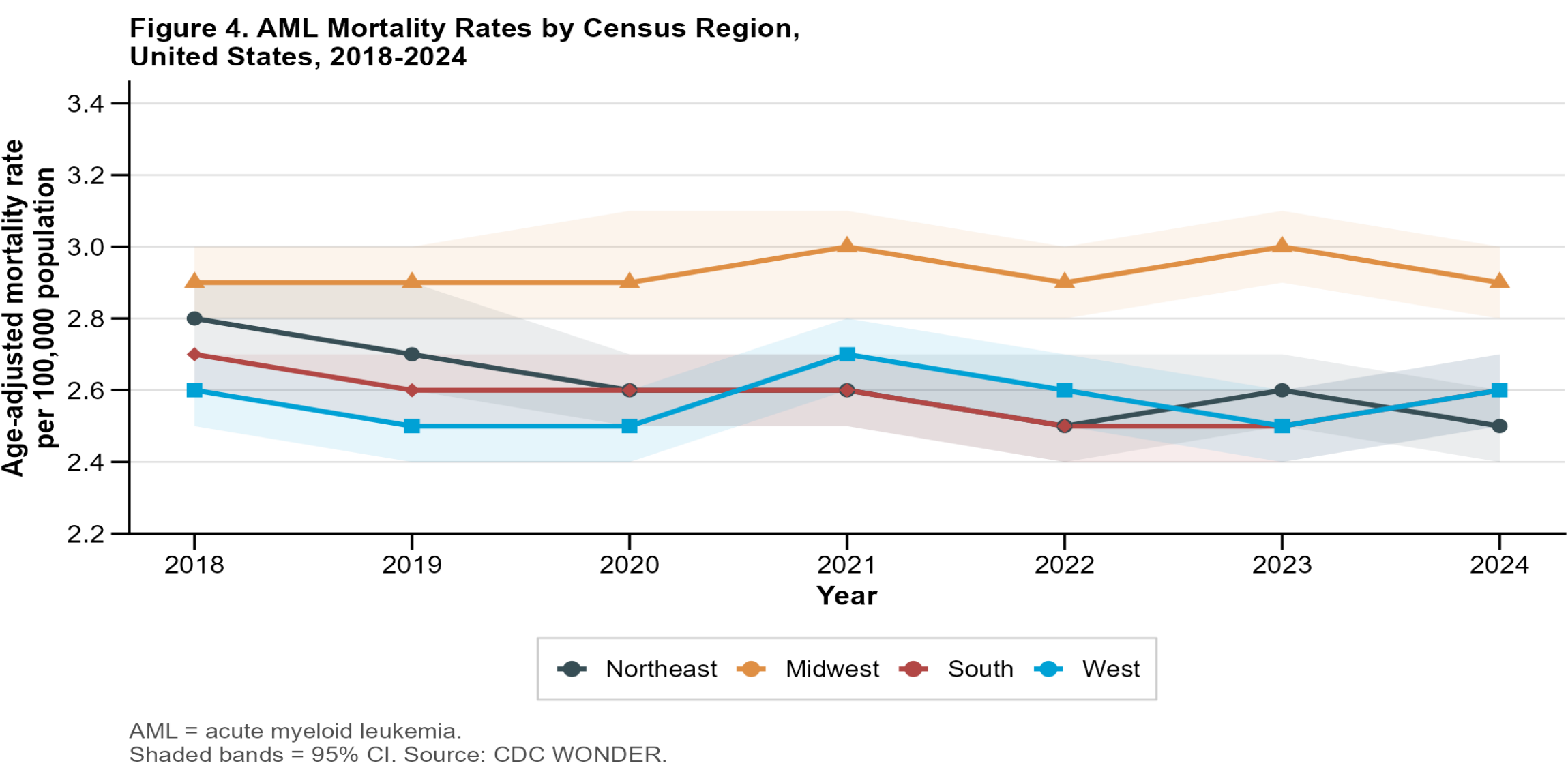
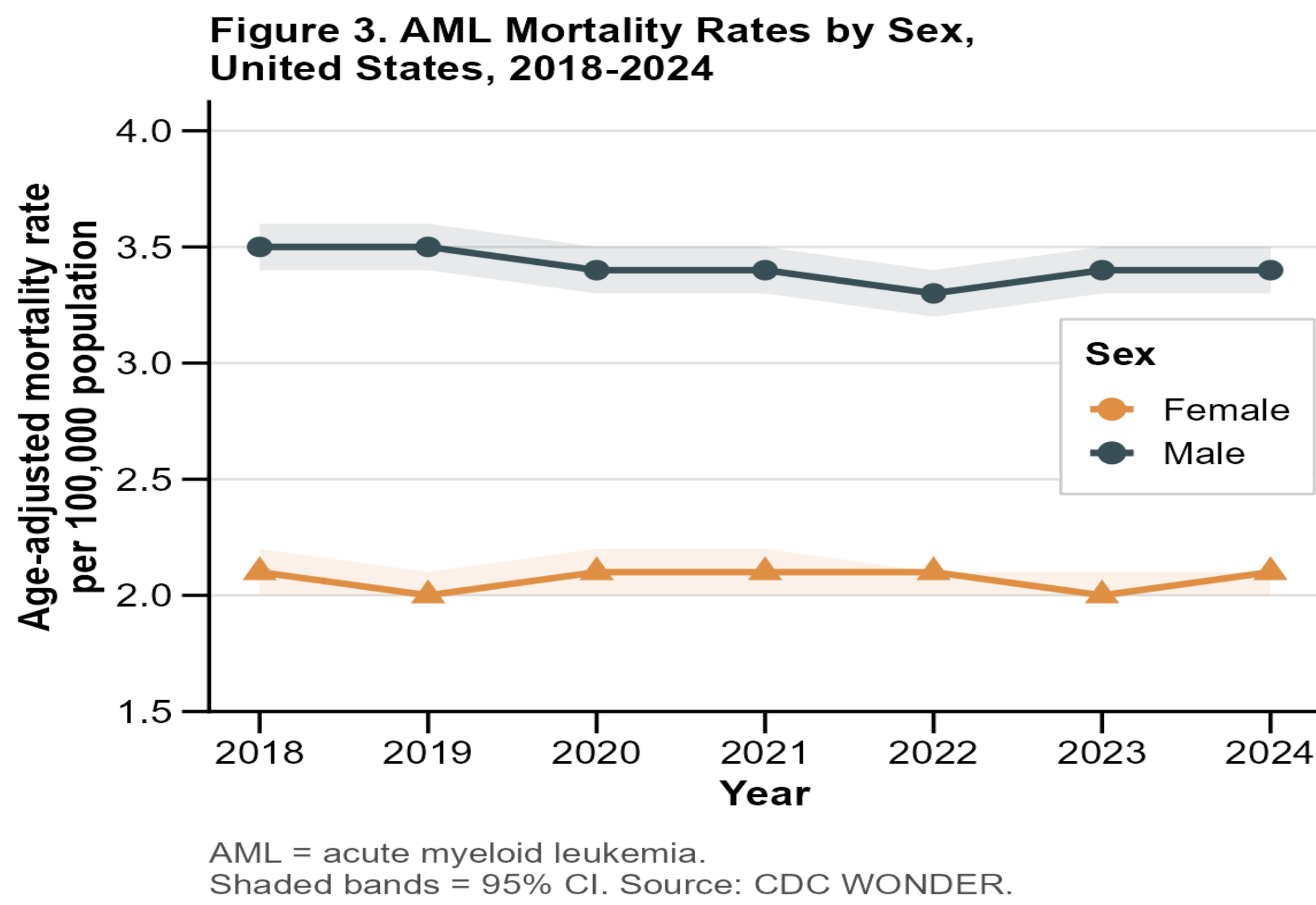
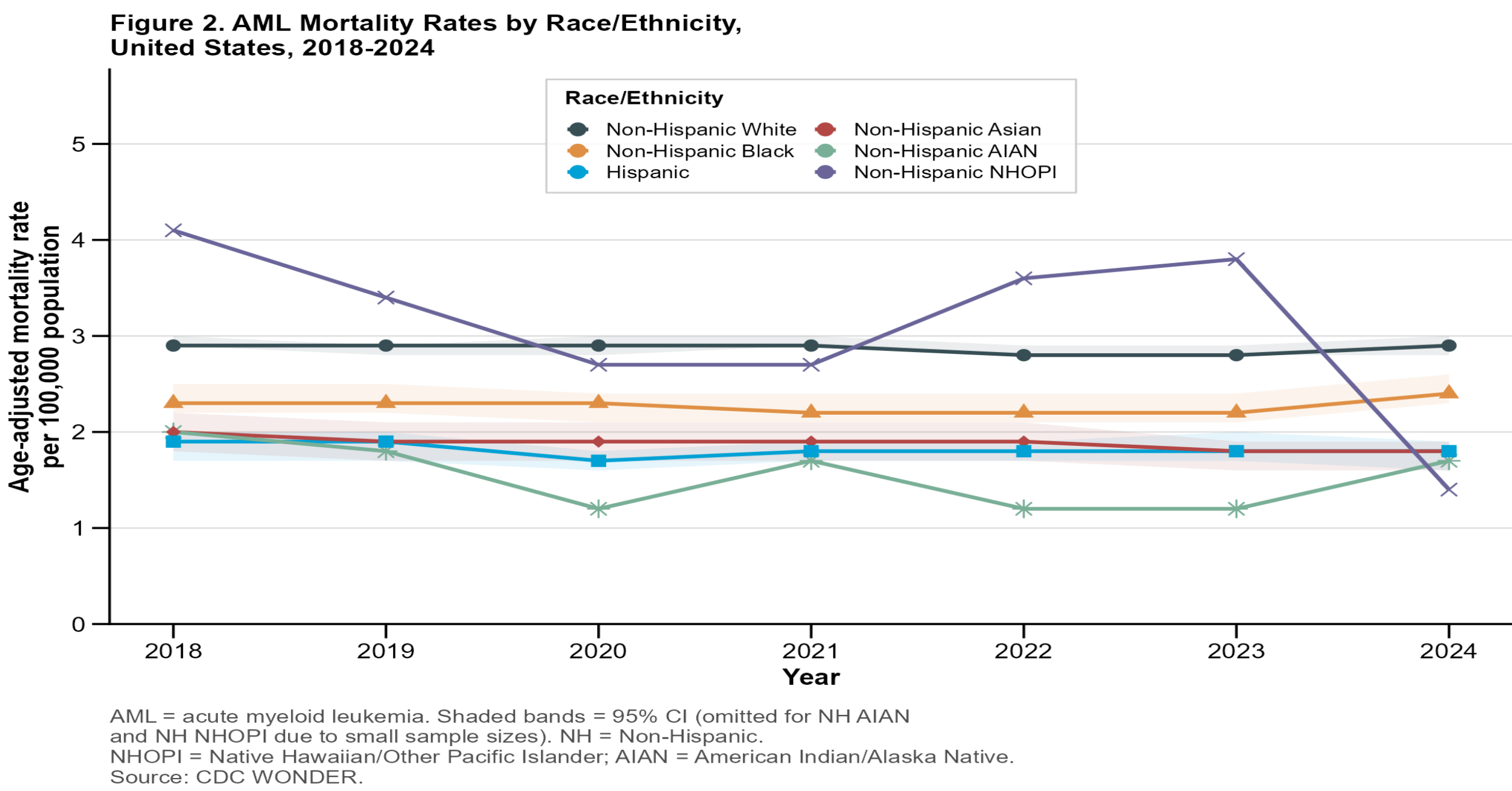
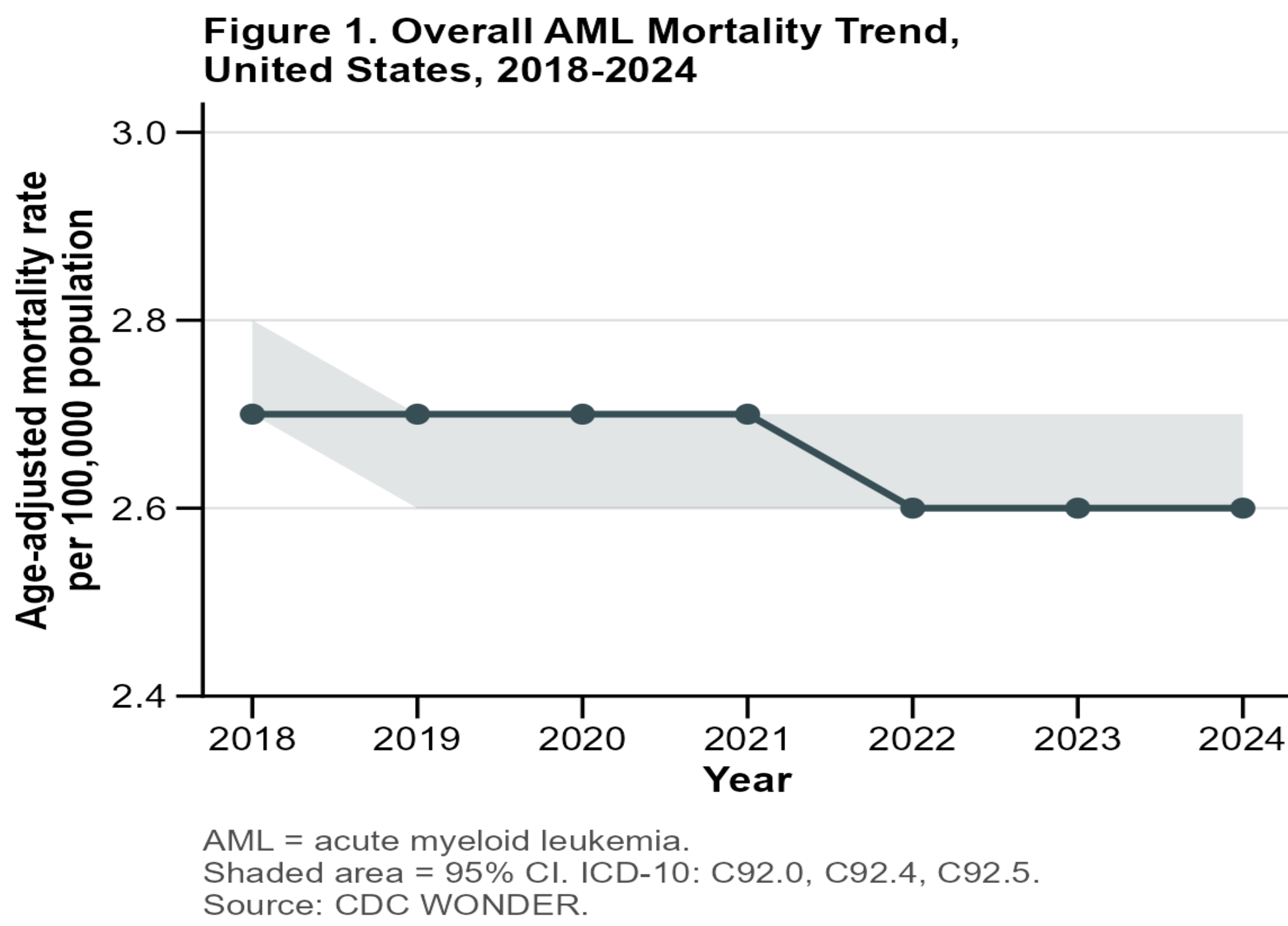
- 76,884 AML deaths occurred, 2018–2024
- AAMR declined modestly, 2.7 → 2.6 per 100,000 (Figure 1)
- Non-Hispanic Asian was the only group with a significant decline; NH Native Hawaiian and Other Pacific Islanders had the highest AAMR (Figure 2)
- Men had ~62% higher AAMR than women (Figure 3)
- Midwest had the highest regional AAMR (Figure 4)
- Rural areas had higher mortality than urban areas (Figure 5)
- Mortality was higher in men and in the Midwest, and lower in all non-White groups vs. NH White (Figure 6)

DISCUSSION

- AML mortality declined only modestly during 2018–2024.
- Mortality remained uneven across sociodemographic groups.
- Differences may reflect unequal access to specialist care and newer AML therapies.
- Targeted policy interventions are needed to ensure equitable distribution of therapeutic advances across all sociodemographic groups.

CONCLUSION

- AML mortality declined modestly, but substantial sociodemographic disparities persisted, highlighting the need for more equitable access to advances in AML care.



REFERENCES

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