

Mortality Trends of Lymphoid and Hematopoietic Malignancies Among US Adults: A CDC Wonder-Based Analysis

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OBJECTIVE

- To assess 22-year temporal trends (1999–2020) in mortality from malignant neoplasms of lymphoid and hematopoietic tissues among U.S. adults aged ≥25 years.
- To evaluate changes in age-adjusted mortality rates over time.
- To examine mortality disparities by sex, race/ethnicity, age, geographic region, and urban–rural classification.
- To identify high-risk populations and underserved geographic areas with a disproportionate mortality burden.

RESULTS

- 1,217,470 deaths were reported between 1999–2020.
- Overall mortality declined significantly (AAPC: –1.8%; $p<0.001$).
- Mortality declined during 1999–2008 (APC: –1.9%), slowed during 2008–2012 (APC: –1.0%), and declined more rapidly during 2012–2020 (APC: –2.1%; all $p<0.001$).
- Males had a higher AAMR than females (33.3 vs 20.05).
- The highest AAMR was observed among non-Hispanic Whites (26.17), followed by non-Hispanic Blacks (25.60).
- Mortality increased with age, with the highest crude mortality rate among adults ≥65 years (100.12).
- Higher AAMRs were observed in the Midwest (27.61) and non-metropolitan areas (26.87).

METHODOLOGY

- Mortality data for U.S. adults ≥25 years were obtained from the CDC WONDER database.
- Crude mortality rates and age-adjusted mortality rates (AAMRs) were calculated using the 2000 U.S. standard population.
- Temporal trends were assessed using Joinpoint regression.
- Annual Percent Change (APC) with 95% confidence intervals (CIs) was estimated.
- Statistical significance was set at $p \leq 0.05$.
- Analyses were stratified by demographic and geographic characteristics.

CONCLUSION

- Mortality from lymphoid and hematopoietic malignancies declined significantly from 1999–2020.
- Despite this overall decline, a higher mortality burden persisted among males, older adults, and Non-Hispanic White individuals.
- Midwestern and non-metropolitan areas also showed higher mortality rates.
- These findings highlight the need for targeted strategies to address demographic and geographic disparities in hematologic cancer mortality.

REFERENCES

- Please scan here for study references.

