



TRENDS IN MORTALITY FROM URINARY BLADDER CANCER AND CARDIOVASCULAR DISEASE AMONG OLDER ADULTS IN UNITED STATES: A CDC WONDER ANALYSIS, 1999–2020

Adnan Memon¹, **Zareen Gull**¹, Mahnoor Aijaz¹, Abdul Khalique Hidayat¹, Gaaitri Lohano¹, Areesha Memon²
¹Liaquat University of Medical and Health Sciences, Jamshoro, ²Peoples University of Medical and Health Sciences, Nawabshah

OBJECTIVE

- Evaluate national mortality trends involving both urinary bladder cancer (UBC) and cardiovascular disease (CVD) among older adults in the United States from 1999–2020.
- Assess disparities in mortality according to sex, age, race/ethnicity, geographic region, state, and urbanization status.
- Identify high-risk populations experiencing the greatest mortality burden and unfavorable temporal trends.

METHODOLOGY

- **Data source:** CDC-WONDER mortality database, covering U.S. residents from 1999–2020.
- **Study population:** Older adults with both UBC and CVD mentioned on the death certificate.
- **Measures:** Calculated crude and age-adjusted mortality rates (AAMR) per 100,000 population.
- **Trend analysis:** Used Joinpoint regression to assess temporal trends and estimate annual percent changes (APC).

RESULTS

- 139,672 deaths involving both UBC and CVD were identified during 1999–2020.
- Overall AAMR declined significantly from 1999–2018 (APC: -0.62% , $p=0.02$), followed by a non-significant increase from 2018–2020.
- Males consistently had higher AAMRs than females.
- NH White individuals accounted for the highest number of deaths (128,990) and showed a significant post-2018 increase.
- Mortality was highest among adults aged ≥ 85 years, with a significant rise after 2018 (APC: 6.31%).
- Non-metropolitan areas and the Southern U.S. experienced the most pronounced recent increases in mortality.

CONCLUSION

- UBC–CVD mortality declined for nearly two decades but showed a recent reversal after 2018.
- The increase was more pronounced among NH White adults, males, and rural populations.
- Integrated cardiovascular and cancer prevention strategies are needed to address emerging mortality disparities in the aging U.S. population.

REFERENCES

- Please scan here for study references.

