



# Temporal Trends in Craniofacial Fractures-Related Mortality (2001-2023): A CDC WONDER Analysis

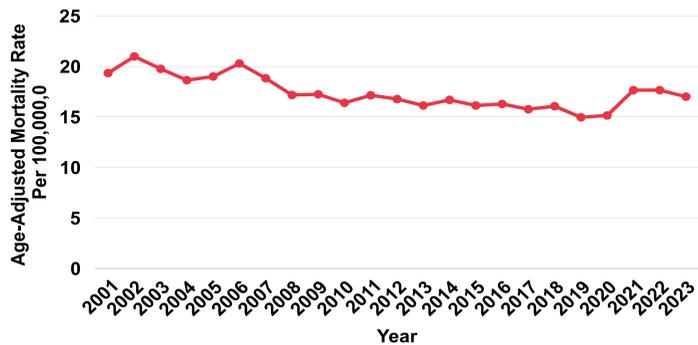
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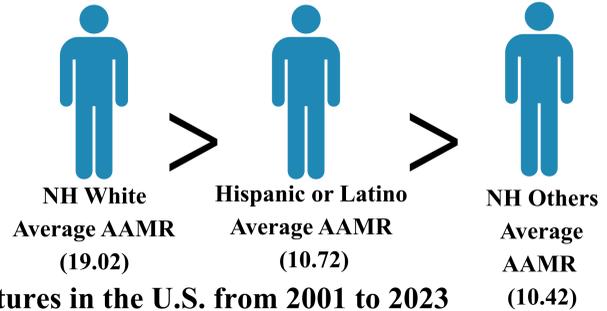


## CENTRAL ILLUSTRATION: Temporal Trends in Craniofacial Fractures-Related Mortality (2001-2023): A CDC WONDER Analysis



AAMR 2001: 19.34  
AAMR 2023: 17.00

### RACIAL DISPARITIES

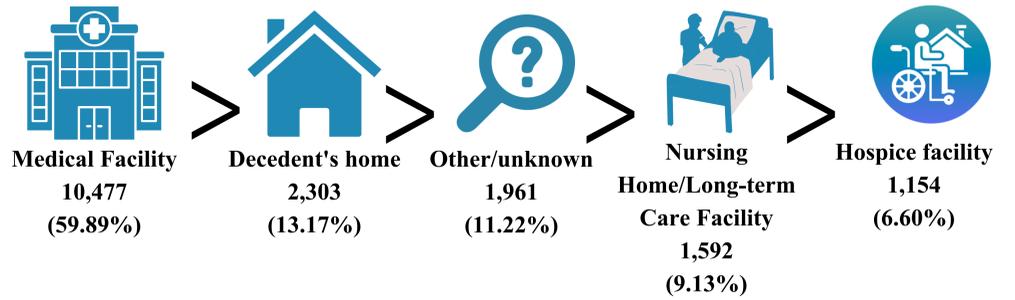
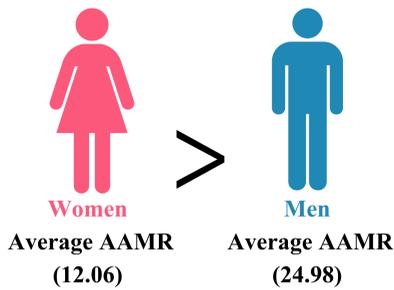


A total of **17,493** deaths were reported in Older patients with Craniofacial fractures in the U.S. from 2001 to 2023

### SEX

### CENSUS REGION

### PLACE OF DEATH



## Introduction

- Craniofacial Fractures (CFF) are a group of fractures that carry significant morbidity and mortality, especially in the elderly.
- Mortality trend analyses related to CFF among older adults in the United States are scarce.

## Objective

- To examine national mortality trends among adults aged 65 years and older with CFF stratified by sex, race, place of death, and geographic region.

## Methods & Material

- Type of Study: Retrospective Observational Study
- Data Source: CDC WONDER underlying cause of death database.
- Study Population: adults 65 years and older in the United States.
- Analysis: Age-adjusted mortality rates (AAMRs) were calculated per 1,000,000 persons with 95% confidence intervals (95% CI) from CDC WONDER using ICD-10 codes for CFF (S02).
- Average annual percent change (AAPC) and annual percent change (APC) were calculated using **Joinpoint regression software**, with significance at  $p < 0.05$ .

## Results

- **Total Mortality:** 17,493 deaths were reported (2001-2023).
- **Trend:** Overall AAMR declined from **19.35** (2001) to **17.01** (2023) per 100,000.0.
- **Annual Percentage Change:** Significant average decrease of **-0.56%** per year (95% CI: -1.14 to -0.15).
- **Racial Disparity:**
  - Highest AAMR: Non-Hispanic White individuals (**19.02**).
  - Intermediate AAMR: Hispanic or Latino individuals (**10.72**).
  - Lowest AAMR: Non-Hispanic Others (**10.42**).
- **Geographic Disparity:**
  - **Census Region:** Highest burden in Northeast region (**22.62**), followed by the Midwest (**17.67**), West (**16.61**), and Northeast (**14.93**).
- **Place Of Death:** Majority of deaths occurred in Medical Facilities (**59.89%**), while Hospices had the least (**6.60%**).

## Conclusion

- CFF-related mortality rates have decreased from 2001 to 2023, with distinct disparities among demographic and geographical groups.
- Further research into evaluating the causative factors of such demographic and regional mortality disparities is crucial.

## Contact

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## References

- The Center for Disease Control: National Center for Health Statistics, National Vital Statistics System. <https://wonder.cdc.gov/mcd.html>