Unintentional Fall-Related Injuries Among Older Adults in New Mexico - 2019-2023

INTRODUCTION

Falls among older adults (age 65+) are a significant public health concern in the United States, leading to serious injuries, loss of independence, and substantial healthcare costs. Each year, over 14 million (1 in 4 adults) older adults experience a fall, with nearly nine million sustaining injuries that require medical attention or limit daily activities.[1] Falls can result in severe physical injuries, such as hip fractures and traumatic brain injuries, as well as psychological effects like fear of falling, which can reduce mobility and overall quality of life.[2]

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In New Mexico, falls are the leading cause of injury-related death among adults aged 65 years and older. Between 2019 and 2023, there were 1,418 unintentional fall-related deaths reported among older adults in the state.[3] Falls among this population also lead to a high burden of hospitalization and long-term complications. In 2023 alone, the total medical cost of older adult falls in New Mexico exceeded $1.91 billion.[4]

Understanding the patterns and trends of fall-related deaths and hospitalizations among older adults is critical for designing effective prevention strategies. This report presents selected data from 2019 to 2023 on unintentional fall-related deaths and hospitalizations among New Mexican adults aged 65 and older. A comprehensive report, *Unintentional Fall-Related Injuries among Older Adults in New Mexico, 2019-2023* is available at https://www.nmhealth.org/about/erd/ibeb/ipp/data/

What is already known about this topic?

Older adults are at increased risk of fall-related injuries and deaths due to age-related physiological changes, chronic health conditions, and environmental hazards.

What is added by this report?

This report presents five years of state-specific mortality and hospitalization data on fall-related injuries among New Mexico residents aged 65 and older. It highlights a decline in death rates across most demographic and geographic groups, alongside a concurrent increase in hospitalization rates.

What are the implications for public health practice?

The findings support continued investment in fall prevention programs for high-risk groups, including older adults aged 65 and older. Expanding early intervention, improving regional healthcare access, and strengthening Tribal and rural partnerships are key to reducing fall-related hospitalizations and deaths.

METHODS

This report includes two sources of data. Fall-related death data were obtained from the NM Bureau of Vital Records and Health Statistics (NM-BVRHS), derived from death certificates of NM residents filed with the New Mexico Department of Health (NMDOH).[5] Fall-related deaths were identified using ICD-10 external cause-of-injury codes W00–W19, indicating unintentional falls, and include both underlying and contributing causes of death.

Hospitalization data were collected from the Hospital Inpatient Discharge Database (HIDD), which includes records from every patient who stayed at least 24 hours in a non-federal hospital in New Mexico. Hospitalizations were based on inpatient admissions and include diagnostic, procedural, and demographic information.[6] Unintentional fall-related hospitalizations were identified using the same ICD-10 codes (W00–W19).

This report presents the number and rate of fall-related deaths and non-fatal hospitalizations among NM residents aged 65 and older. Age-adjusted rates were calculated using the direct method, standardized to the 2000 U.S. standard population, across ages groups 65–74, 75–84, and 85+. Age-specific rates were multiplied by standard population weights (65–74: 0.522501, 75–84: 0.354797, 85+: 0.122702) and summed to obtain final rates. Analyses were conducted using SAS and Microsoft Excel.

RESULTS

Mortality Data

Between 2019 and 2023, 85% of unintentional fall-related deaths in New Mexico (1,418 of 1,662) involved older adults. The age-adjusted fall-related death rate declined 41%, from 101.6 to 59.7 per 100,000 population from 2019 to 2023 (Figure 1).

Figure 1: Age-Adjusted Death Rate and Number of Falls Among Older Adult NM Residents (Age 65+) by Year, 2019–2023
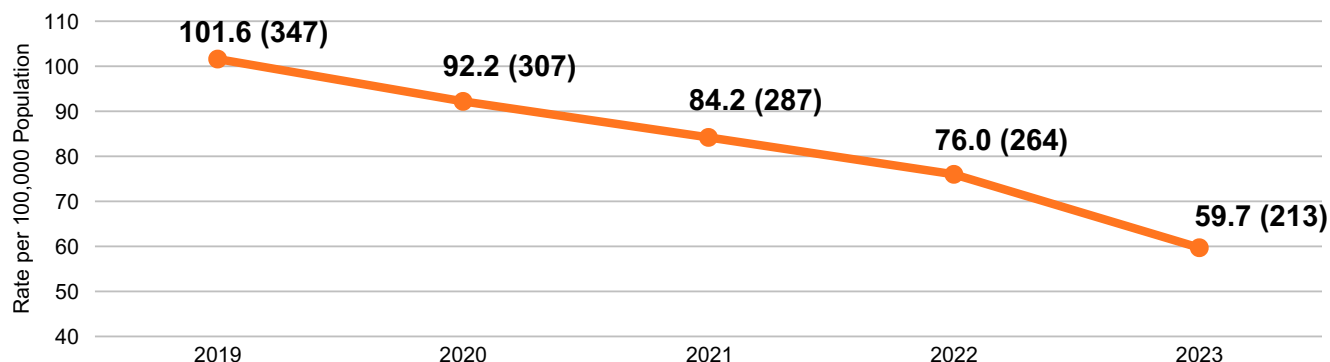
Source: NM-BVRHS, last accessed 4/25/2025

By age group
The crude death rate for falls decreased between 2019 and 2023 for all 3 age groups (65-74, 74-84, 85+).
- 65–74 years: Decreased by 43% (from 19.4 to 11.0 per 100,000 population).
- 75–84 years: Decreased by 45% (from 98.5 to 54.1 per 100,000 population).
- 85+ years: Decreased by 38% (from 460.1 to 283.3 per 100,000 population).

By sex
- Fall-related death rates were consistently higher among males compared to females throughout the five years.
- In 2023, males had 40% higher rate than females (71.4 vs. 50.9 per 100,000 population)

By race/ethnicity
- Non-Hispanic White older adults (age 65+) had a 47% decrease in their age-adjusted death rate (from 110.5 to 58.9 per 100,000 population).
- Hispanic older adults had a 35% decrease (from 94.4 to 61.5 per 100,000 population).
- In contrast, Non-Hispanic American Indian/Alaska Native (AI/AN) older adults experienced a 20% increase (from 63.7 to 76.5 per 100,000 population) (Figure 2).

Figure 2: Age-Adjusted Death Rate for Falls Among Older Adult NM Residents (Age 65+) by Race/Ethnicity and Year 2019–2023
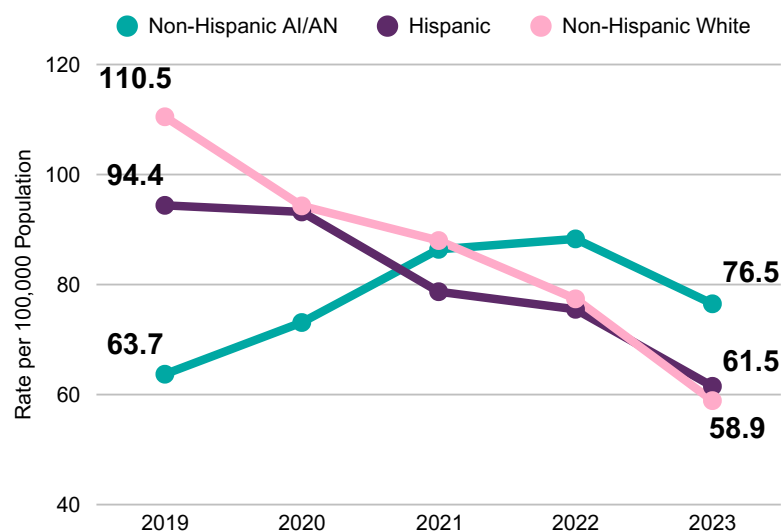
Source: NM-BVRHS, last accessed 4/25/2025

By region
The age-adjusted death rate for falls among older adults decreased for all five regions in New Mexico over the five years:
- The Metro Region decreased by 37% (from 114.2 to 71.7 per 100,000 population).
- The Northeast Region decreased by 43% (from 80.5 to 45.5 per 100,000 population).
- The Northwest Region declined by 17% (from 79.1 to 65.6 per 100,000 population).
- The Southeast Region decreased by 55% (from 116.3 to 52.2 per 100,000 population).
- The Southwest Region decreased by 48% (from 95.8 to 49.4 per 100,000 population).

Hospitalization Data

From 2019 to 2023, older adults accounted for 71% of fall-related hospitalizations (31,355 of 43,971). The age-adjusted hospitalization rate for falls among older adults (65+) increased by 6% (from 1714.1 per 100,000 population in 2019 to 1817.3 per 100,000 population in 2023) (Figure 4).

By age group
- 65–74 years: The crude hospitalization rate for falls increased by 9% (from 809.9 per 100,000 in 2019 to 883.9 per 100,000 in 2023) for older adults aged 65-74.
- 75–84 years: Decreased by 2% (from 2029.0 per 100,000 in 2019 to 1992.4 per 100,000 in 2023).
- 85+ years: Increased by 13% (from 4654.2 per 100,000 in 2019 to 5285.5 per 100,000 in 2023).

By sex
- Fall-related hospitalization rates were consistently higher among females than males between 2019 and 2023.
- In 2023, females had 11% higher rate than males (1899.6 vs. 1713.0 per 100,000 population).

By race/ethnicity
- Non-Hispanic White older adults had an increase of 3% (from 1727.2 to 1781.1 per 100,000 population).
- Hispanic older adults experienced a 12% increase (from 1544.6 per 100,000 in 2019 to 1722.7 per 100,000 in 2023).
- Non-Hispanic AI/AN older adults had a less than 1% increase (from 1336.9 per 100,000 in 2019 to 1340.0 per 100,000 in 2023) (Figure 3).

Figure 3: Age-Adjusted Hospitalization Rate for Falls Among Older Adult NM Residents (Age 65+) by Race/Ethnicity and Year 2019–2023

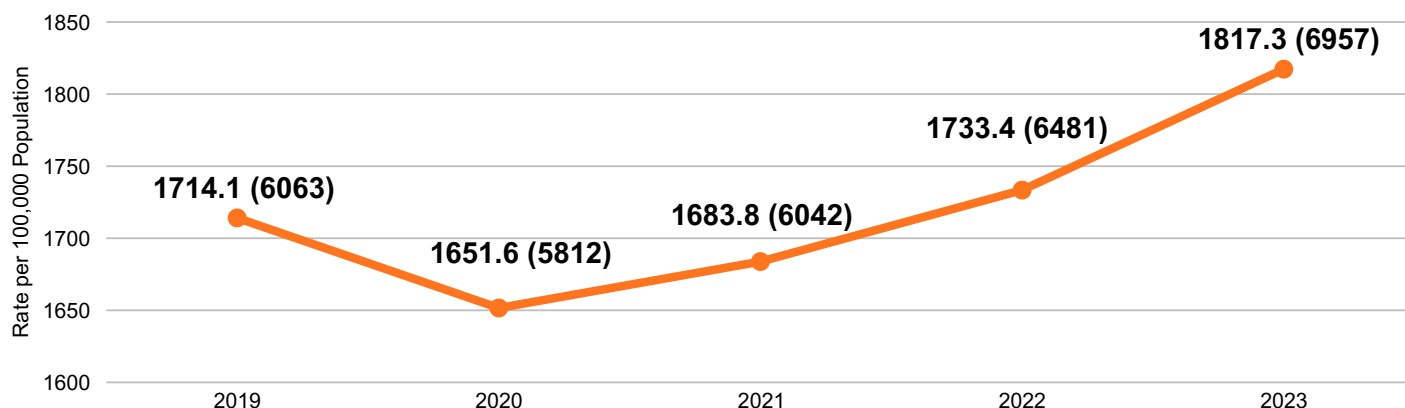Source: HIDD, last accessed 4/4/2025

By region
- The Metro Region increased by 5% (from 1959.9 to 2059.7 per 100,000 population).
- The Northeast Region increased by 5% (from 1673.8 to 1762.6 per 100,000 population).
- The Northwest Region increased by 11% (from 1592.9 to 1765.5 per 100,000 population).
- The Southeast Region increased by 2% (from 1186.7 to 1214.1 per 100,000 population).
- The Southwest Region increased by 7% (from 1623.0 to 1732.0 per 100,000 population).
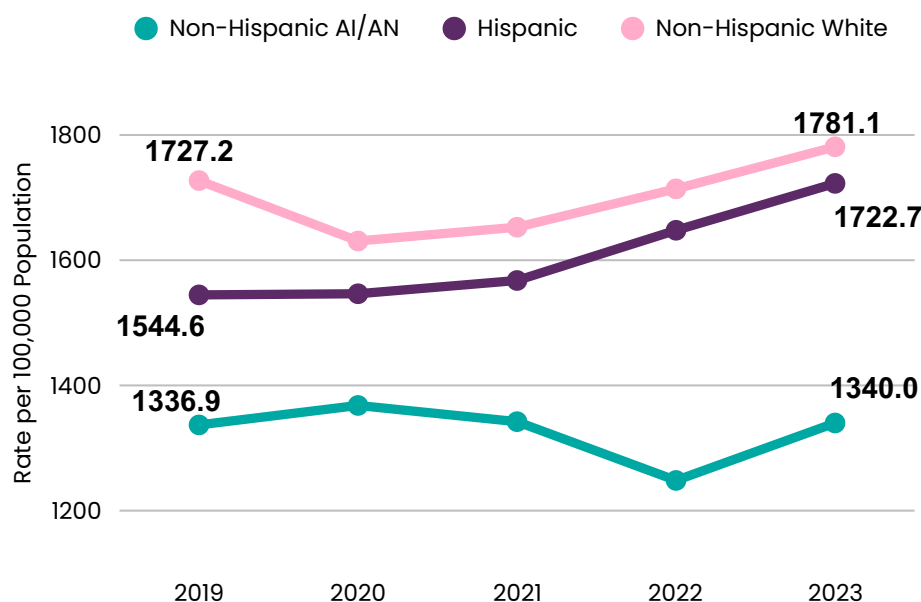
Figure 4: Age-Adjusted Hospitalization Rate and Number for Falls Among Older Adult NM Residents (Age 65+) by Year, 2019–2023

Source: HIDD, last accessed 4/4/2025

DISCUSSION

This report highlights the persistent burden and demographic disparities of unintentional fall-related injuries among older adults in New Mexico from 2019 to 2023. Despite a notable 41% reduction in fall-related death rates among older adults (65+) in New Mexico, hospitalization rates have increased. These trends align with national data, where mortality from falls remains high but has begun to decline,[7] which can be an indicator of improved prevention efforts. Older age is the strongest predictor of fall-related injuries, with adults aged 85+ consistently showing the highest death and hospitalization rates, likely due to physiological decline, reduced muscle strength, impaired balance, and multiple chronic conditions.[8]

Males had consistently higher mortality rates, while females experienced higher hospitalization rates. Older females are more likely to develop osteoporosis, increasing the risk of fractures even from lower-impact falls.[9] Men often have more severe comorbid conditions, such as cardiovascular disease or diabetes, which may worsen outcomes and increase mortality.[10] Delayed care-seeking among men may also lead to more severe complications or death.[11]

Non-Hispanic White older adults had the largest mortality decline but the highest hospitalization rates. In contrast, AI/AN older adults experienced a 20% increase in mortality and the lowest hospitalization rates. AI/AN populations are at higher injury risk due to limited healthcare access, chronic disease burden, and environmental hazards.[12] In contrast, greater healthcare access for Non-Hispanic Whites may facilitate early intervention and timely acute care.[13] Regionally, Metro and Southeast areas had the highest mortality rates in 2019, but Metro saw a 37% decrease by 2023. Hospitalization rates remained highest in Metro, possibly reflecting greater access to both prevention programs and acute care.[14]

This analysis has some limitations. This report does not include emergency department data, which could clarify whether patterns align with deaths or hospitalizations. Additionally, HIDD data does not include federal facilities such as Indian Health Service (IHS), Veterans Affairs (VA), or military hospitals, which results in a systematic undercount of AI/AN, active-duty service members, and veterans served by these facilities.

RECOMMENDATIONS

Fall-related injuries among older adults in New Mexico remain a critical public health issue. Although mortality has declined, rising hospitalizations and persistent disparities among the oldest adults, males, and non-Hispanic AI/AN populations call for targeted prevention efforts. The NMDOH should expand evidence-based programs by increasing resources for promotion, professional training, and community partnerships to enhance protective factors and reduce risks statewide. Regional differences highlight the need for localized strategies and improved healthcare access to ensure equitable outcomes.

This report's focus on deaths and hospitalizations captures severe injuries but overlooks less serious falls, which often precede more serious outcomes. Health professionals such as physical therapists can provide valuable insight into upstream risk factors, but limited funding restricts comprehensive program implementation. Future efforts should prioritize expanding prevention programs that engage a broader range of professionals and community stakeholders. Incorporating emergency department data and information from IHS and VA facilities will further improve surveillance and guide effective, equitable fall prevention strategies across New Mexico.

NMDOH Fall Prevention Programs

The NMDOH offers evidence-based fall prevention programs, such as Tai Chi, Tai Ji Quan, Otago, On the Move, Bingocize, and Matter of Balance. These programs are designed to improve strength, balance, mobility, and confidence in older adults.[15] These diverse programs combine physical exercise, cognitive training, and behavioral strategies to reduce fall risk and may contribute to the decline in fall-related mortality in New Mexico.

Learn more about *Unintentional Fall-Related Injuries among Older Adults in New Mexico, 2019-2023* at
https://www.nmhealth.org/about/erd/ibeb/ipp/data/

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NMHealth Helpline (1-833-796-8773)

988 Suicide and Crisis Lifeline provides free, confidential, 24/7 mental health support in New Mexico. Call or text 988 for help anytime, for anyone, any struggle.