



Reporting Brief on Unintentional Fall
Injuries and Deaths Among Arizonans in
2023

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Intended Audience

This report is aimed primarily at those actively involved in promoting the health and wellness of Arizonans, including healthcare providers, community service providers, researchers, policymakers, and other stakeholders.

How to Use This Report

This data brief is intended to provide quick, timely updates on trends related to mortality and incidence of unintentional falls in Arizona. It highlights notable changes from 2019 to 2023 and

identifies populations at increased risk, offering actionable insights for surveillance and prevention planning.

Race/Ethnicity Categorization

Race/ethnicity categories used in this report are mutually exclusive. For example, individuals identifying as both 'White' and 'Hispanic or Latino' are classified as 'Hispanic/Latino.' Population rates for the 'Other' and 'Unknown' categories were not reported due to the absence of a reliable denominator.

Disclaimer

Population and age-adjusted rates were calculated by the direct method of age adjusting using the 2000 U.S. Census population and the population denominators as publicized on the ADHS, Population Health and Vital Statistics website, and can be found [here](#). Frequencies, percentages, and rates based on non-zero counts less than 6 have been suppressed as those rates tend to have poor reliability, to discourage misinterpretation or misuse of rates or counts that are unstable, and to protect confidentiality.

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Executive Summary

In 2023, unintentional injuries or accidents from falls, drug overdoses, and motor vehicle crashes were the third leading cause of death in the United States and the leading cause of death among Americans aged 1 to 44 years.¹ Among adults aged 65 and above, falls are the leading cause of both deaths and traumatic brain injuries, affecting 14 million older adults annually. According to the U.S. Census (2020), Arizona ranks 12th in the nation for the size of its 65+ population, with older adults making up 18.7% of the State's population compared to the national average of 16.8%.² Given the larger older adult population in Arizona, fall surveillance is an important public health prevention effort in the State.

In 2023, Arizona recorded a total of 1,291 deaths from unintentional falls. Since 2021, the state has experienced a 42.1% increase in fall-related fatalities, continuing a trend where its mortality rate consistently exceeds the national average. Although the U.S. has also seen a steady rise in unintentional fall deaths since 2019, it is unclear whether this will continue in 2023, as national data is not yet available. In Arizona, residents aged 85 and older are disproportionately affected, with a fall mortality rate of 351.7 per 100,000 people, which is significantly higher than in other age groups.

In 2023, most fall deaths (66.0%) occurred at home, followed by other locations (14.2%) and residential facilities such as assisted living (12.9%). American Indian/Alaska Native people experienced the highest fall death rates, even though White, non-Hispanic individuals accounted for the majority of fall-related deaths in the state. Residents from Maricopa County experienced the majority of fall deaths, but residents from rural counties like Santa Cruz and Apache have higher death rates when adjusted for population size.

In Arizona, unintentional falls led to 149,705 emergency department visits, and 23,897 hospitalizations in 2023. While ED visits stayed steady, hospitalizations rose, especially among those aged 65 and older. Women, mainly those 85 and older, have higher hospitalization rates. Conversely, men under 24 years of age visit the ED more often due to falls. The highest hospitalization rates are seen among American Indian/Alaska Native individuals and White, non-Hispanic populations.

Slips, trips, or stumbles are the most common types of fall-related injuries resulting in hospitalization or emergency department visits. Rural counties like Gila and La Paz have the highest rates of both ED visits and hospitalizations caused by unintentional falls.

In 2023, the total cost of treating unintentional falls in Arizona exceeded \$3.8 billion, with most expenses attributed to hospitalization (61.9%). Federal payers (Medicare and Medicare Risk) bore the largest share of these costs, totaling over \$2.4 billion.

This report emphasizes the urgent need for targeted actions to prevent unintentional falls, especially among vulnerable groups such as the older adult and minority communities.

Data Sources

Vital Records (Death Certificates)

The Arizona Department of Health Services compiles original death certificate transcripts of deaths. These compiled data were used to calculate the mortality rate due to unintentional falls among Arizonans.

Hospital Discharge Data (HDD)

ADHS collects [hospital discharge data](#) (HDD) records for emergency department visits and hospitalizations from all Arizona-licensed hospitals. This collection is required by Arizona Revised Statute (A.R.S.) § 36-125-05, and Arizona Administrative Code Title 9, Chapter 11, Articles 4 and 5. Submission of hospital discharge records for federal (e.g., military) and tribal facilities is voluntary. HDD represents 100% of reporting hospital and inpatient Arizona medical facility encounters based on ICD-10 billing codes. These data were used to calculate inpatient hospitalizations and emergency department visits among Arizona residents. Inpatient hospitalizations and emergency department visits were counted based on patient's residence.

Web-based Injury Statistics Query and Reporting System (WISQARS)

[WISQARS](#) is an interactive, online database developed and maintained by the Centers for Disease Control and Prevention (CDC). It provides access to a wide range of injury-related data in the United States, including both fatal and nonfatal injuries, violent deaths, and cost estimates. Where relevant, WISQARS data were used to compare Arizona's rates to the nation.

Methodology

Analytic Methods

The term 'unintentional' is used to refer to injuries that were unplanned. According to the World Health Organization, a fall is a sudden descent that results in the person coming to rest on the ground or floor or other lower level.³ Fall-related injuries can be fatal or non-fatal, with the majority being non-fatal. Death records are analyzed for the presence of unintentional fall-related death codes in the cause of death field. Injury fatality ICD-10 codes used in the report include W00-W19.

Hospital and emergency department records were analyzed using the injury discharge subset, focusing on non-fatal, unintentional fall-related injuries. Injuries in this category were identified based on specific ICD-10-CM codes listed in any diagnostic field. These codes included the following: V00.11-V00.89 (with 6th character=1), W00-W15, W16 (only when the 6th character was 2, except for W16.4 and W16.9 which required a 5th character=2), W17, W18.1, W18.2, W18.3, and W19. Definitions for each of these ICD-10 codes are listed in the Appendix.

Rates

The statistics shared in this report include frequencies, proportions, and rates. Age-adjusted rates are used throughout this report to make fairer comparisons between groups with different age, race, and county population distributions. Age-adjusted rates were calculated using the population denominators for each specified population count and year using the 2020 US population standard. The process of age-adjustment or population-adjustment by the direct method changes the amount that each group

contributes to the overall rate in the community. The rate of mortality, hospitalizations, emergency visits, and hospital discharge rates was calculated as the number of deaths or instances among Arizonans at a given point in time, divided by the number of Arizonians.

$$Rate = \frac{Number\ of\ Falls}{Number\ of\ Population\ Group\ in\ Time} * 100,000$$

Rates are presented as the number of fall events per 100,000 population.

Population Denominators

The 2022 ADHS [population denominators](#) were developed using the finalized population estimates of Arizona residents from the Arizona Office of Economic Opportunity. These denominators were used to calculate population-based prevalence rates.

Unintentional Fall Mortality Data

Trends 2019-2023

Since 2021, the age-adjusted rate of unintentional fall-related fatalities in Arizona has increased by 42.1%. While Arizona's mortality rate has consistently been higher than the national average, the United States has also seen a steady rise in unintentional falls since 2019.

FIGURE 1

Comparison of Unintentional Fall Mortality Age-Adjusted Rate per 100,000 Population in Arizona & U.S., 2019-2023

Data Source: ADHS Vital Statistics & CDC WISQARS

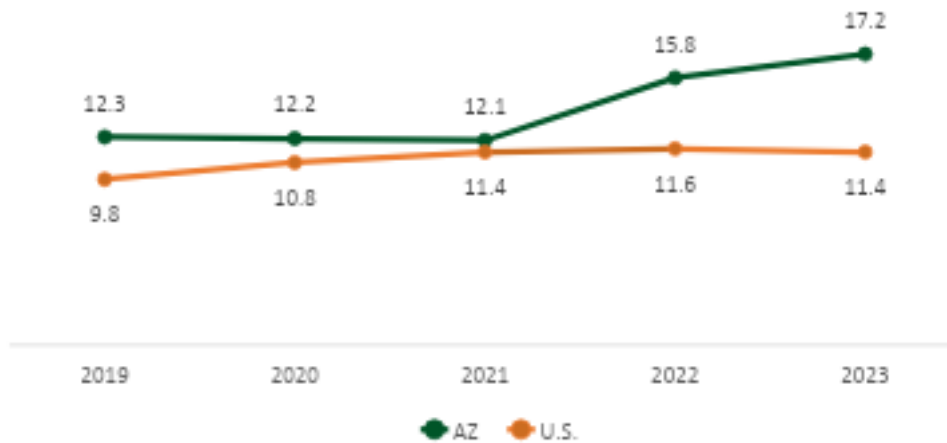


TABLE A

Proportion of Unintentional Fall Deaths in Arizona, 2019-2023

Data Source: ADHS Vital Statistics

Year	Counts of Fall Deaths	Percent of Fatalities Caused by Unintentional Falls
2019	1,114	1.8%
2020	1,127	1.4%
2021	1,146	1.4%
2022	1,172	1.5%
2023	1,291	1.8%

Demographics

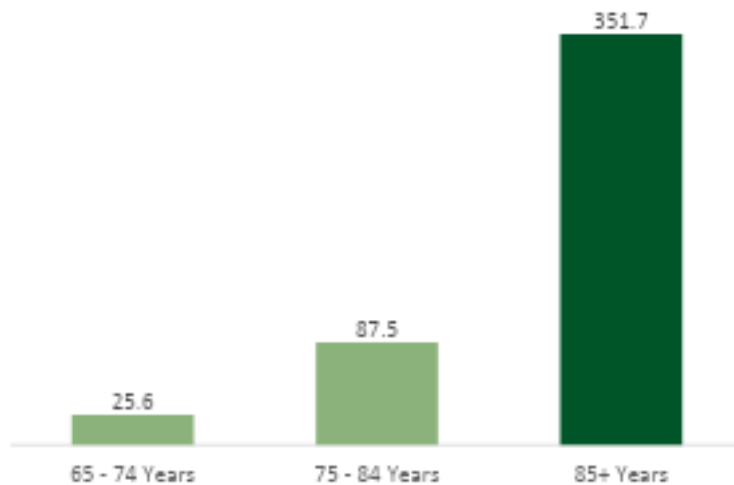
Age

In Arizona, residents who are 85 years and older are significantly more likely to die due to a fall than other age groups. This age group has a fall mortality rate of 351.7 per 100,000 population. The lowest age-adjusted unintentional fall mortality rates were for residents aged 0 to 54 (1.3 per 100,000 residents) and 55 to 64 (9.9 per 100,000 residents).

FIGURE 2

Age-Adjusted Unintentional Fall Mortality Rate per 100,000 Population by Age Group in Arizona, 2023

Data Source: Arizona Vital Statistics



Approximately 87.6% of fall-related deaths in Arizona occurred among residents aged 65 and older. Although the 85+ population comprises only 2.1% of the state's population, they account for the highest proportion of fall-related deaths (42%) among all age groups. Those aged 75 to 84 and 65 to 74 make up the second (29.8%) and third highest (15.8%) proportion of fall-related deaths, respectively (5.9% and 10.6% of the population, respectively).

FIGURE 3

Comparison of Fall-Related Deaths and Population Distribution by Age Group in Arizona, 2023

Data Source: Arizona Vital Statistics

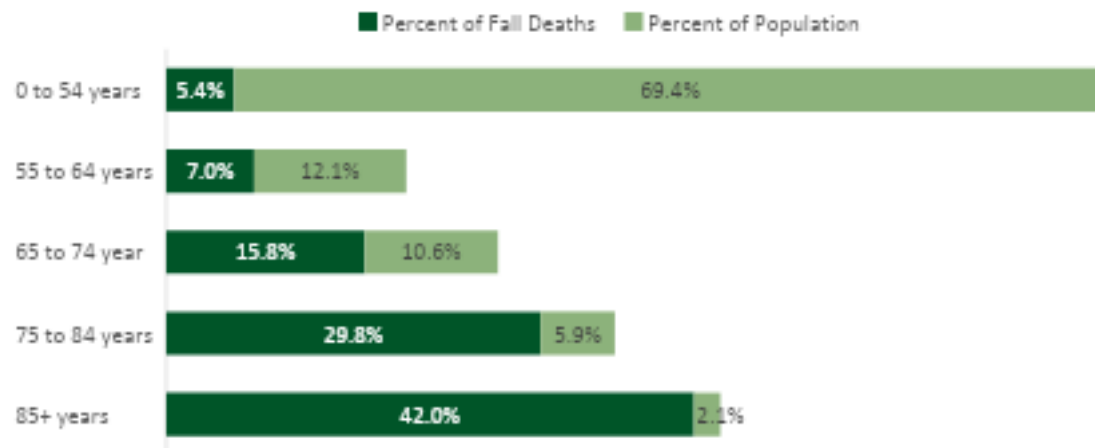


TABLE B

Proportion of Fall-Related Deaths and Population Distribution by Age Group in Arizona, 2023

Data Source: ADHS Vital Statistics

Age Groups	Percent of Fall Deaths	Percent of Population
0 to 54 years	5.4%	69.4%
55 to 64 years	7.0%	12.1%
65 to 74 years	15.8%	10.6%
75 to 84 years	29.8%	5.9%
85+ years	42.0%	2.1%

Sex

In 2023, the age-adjusted rate of fall deaths was higher among males (15.1 per 100,000 population) than among females (11.2 per 100,000 population).

TABLE C

Proportion of Fall Deaths by Sex and Age Group in Arizona, 2023

Data Source: ADHS Vital Statistics, Death Certificates

Age Groups	Counts of Fall Deaths		Percent of Fall Deaths	
	Males	Females	Males	Females
0 to 54 years	52	18	74%	26%
55 to 74 years	58	32	64%	36%
65 to 74 years	124	80	61%	39%
75 to 84 years	198	187	51%	49%
85+ years	240	302	44%	56%

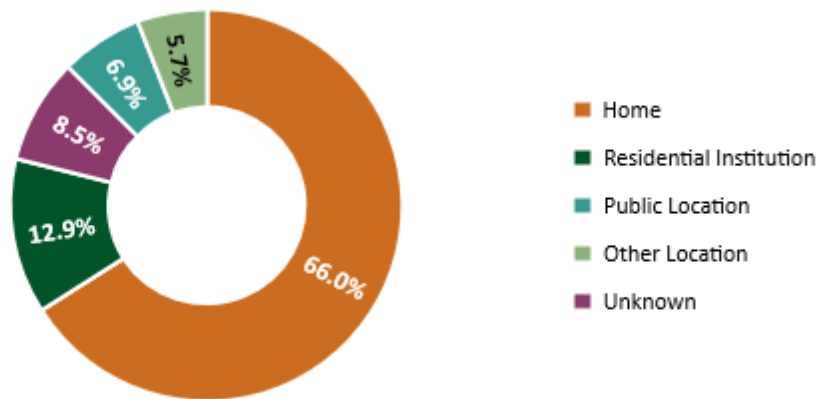
Location

In 2023, the majority (66.0%) of fatal, unintentional falls occurred at the decedent's home. The second most common location was other locations (14.2%), which included categories such as other specified (n=63) and unknown (n=110). Unintentional fall deaths in residential institutions accounted for 12.9%, including those in assisted living facilities, memory care, and other senior living homes.

FIGURE 4

Location of Death Due to an Unintentional Fall Among Arizona Residents, 2023

Data Source: ADHS Vital Statistics



Race and Ethnicity

American Indian and Alaska Native individuals had the highest fall mortality rate (20.5 per 100,000 population), despite representing only 3.8% of fall-related deaths. Meanwhile, White, non-Hispanic people had the second highest fall mortality rate (13.3 per 100,000 population), but accounted for the majority of fall deaths (80.8%) in Arizona compared to other racial and ethnic groups.

FIGURE 5

Unintentional Fall Mortality Rate Stratified by Race and Ethnicity in Arizona, 2023

Data Source: ADHS Vital Statistics

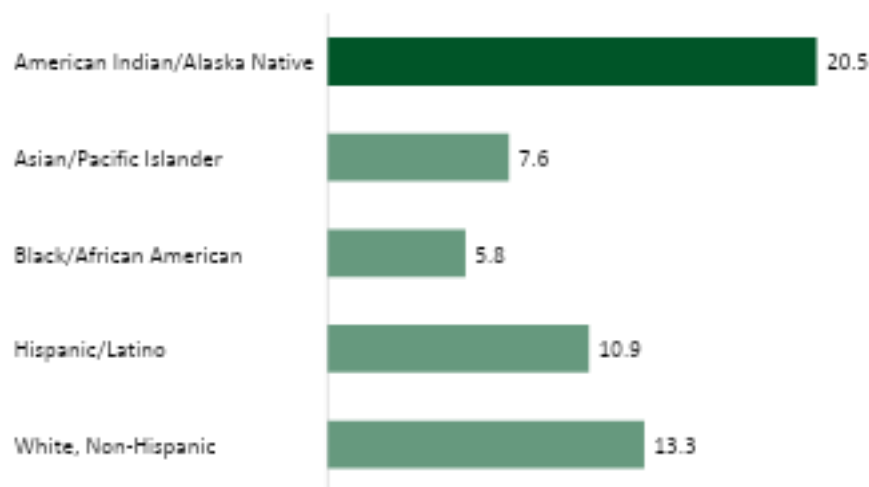


TABLE D

Proportion of Unintentional Fall Deaths by Race and Ethnicity in Arizona, 2023

Data Source: AZ Vital Statistics

Race and Ethnicity	Number of Fall Deaths	Percent of Fall Deaths
American Indian/ Alaska Native	50	3.8%
Asian	19	1.5%
Black	15	1.2%
Hispanic	154	11.9%
White, Non-Hispanic	1,043	80.8%
Unknown/Missing	10	0.8%
Total	1,291	100%

County

While most deaths occurred in Maricopa County (59.1%), Arizona's rural counties, such as Santa Cruz (19.9 per 100,000 population), Apache (18.7 per 100,000 population), and Navajo (15.5 per 100,000 population), have higher rates when adjusting for population size. In Santa Cruz County, 19.1% of the county's population is aged 65 years or older. Greenlee and La Paz counties were suppressed due to low case counts.

FIGURE 6

Age-Adjusted Unintentional Fall Mortality Rate by County in Arizona, 2023

Data Source: AZ Vital Statistics

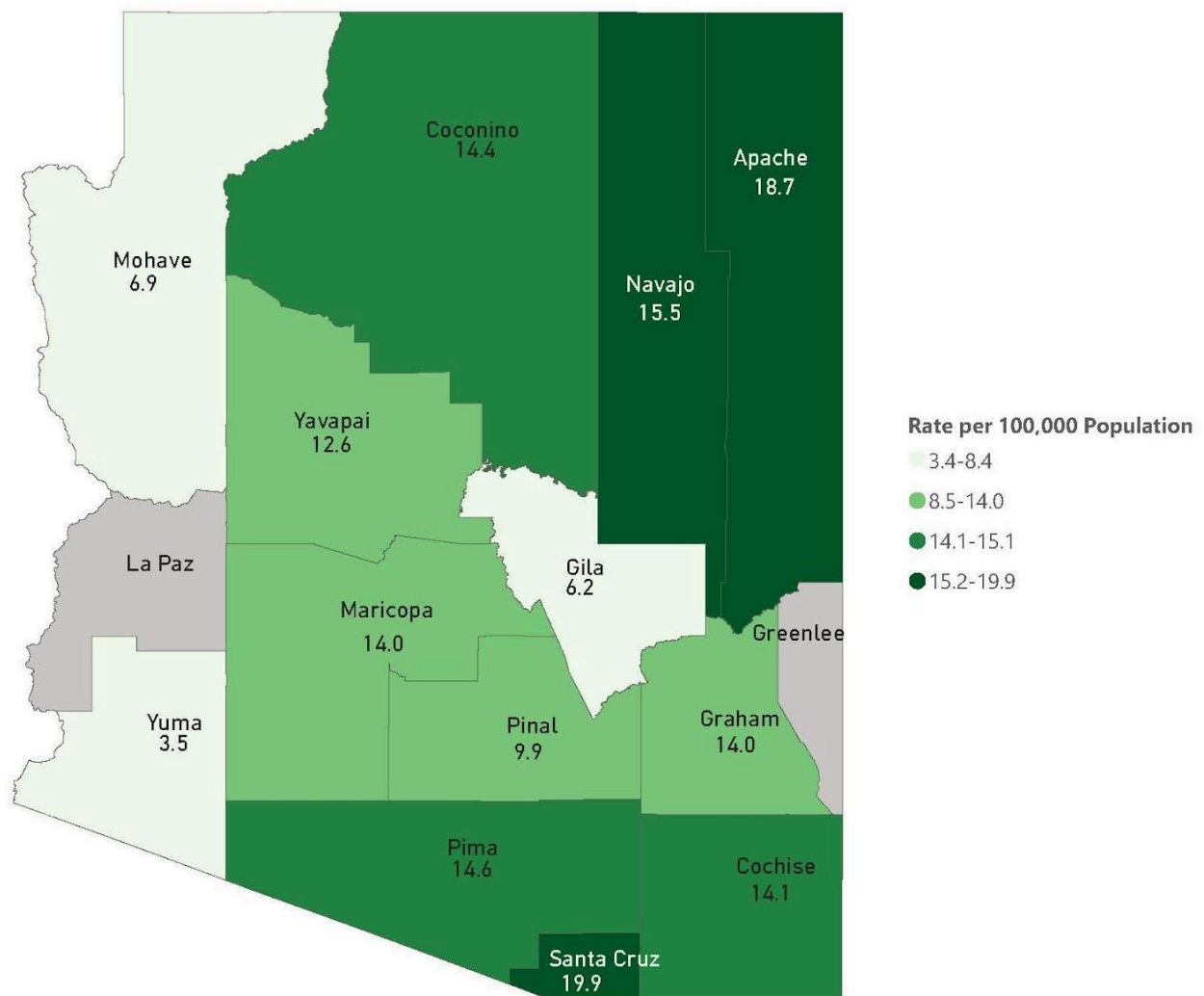


TABLE E

Proportion of Unintentional Fall Deaths by County in Arizona, 2023

Data Source: AZ Vital Statistics

Arizona County	Count of Fall Deaths	Percent of Fall Deaths	Percent of County Population >= 65 years
Apache	13	1.0%	16.5%
Cochise	28	2.2%	23.8%
Coconino	18	1.4%	13.9%
Gila	7	0.5%	30.1%
Graham	6	0.3%	14.3%
Greenlee	*	*	13.8%
La Paz	*	*	41.7%
Maricopa	763	59.1%	15.9%
Mohave	32	2.5%	32.0%
Navajo	20	1.5%	19.5%
Pima	237	18.4%	20.9%
Pinal	63	4.9%	21.6%
Santa Cruz	14	1.1%	19.1%
Yavapai	68	5.3%	33.7%
Yuma	12	0.9%	20.1%

Non-Fatal Unintentional Fall Hospitalizations and Emergency Department Visits

Emergency Department (ED) and Hospitalization Trends 2019 – 2023

Arizona residents of all ages had 149,705 emergency department visits and 23,897 hospitalizations due to unintentional falls. While the number of ED visits caused by unintentional falls has remained steady (3.0% increase between 2022 and 2023), the number of hospitalizations has risen by 32.3% since 2020. Overall, unintentional falls made up 6.2% of emergency department visits in 2023 and only 3.3% of hospitalizations.

FIGURE 7

Number of Unintentional Fall-Related Hospitalizations and Emergency Department Visits in Arizona, 2019 – 2023

Data Source: ADHS Hospital Discharge Data

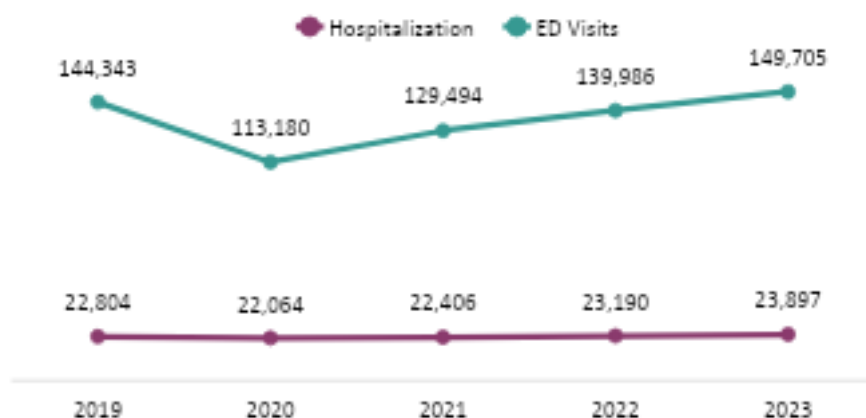
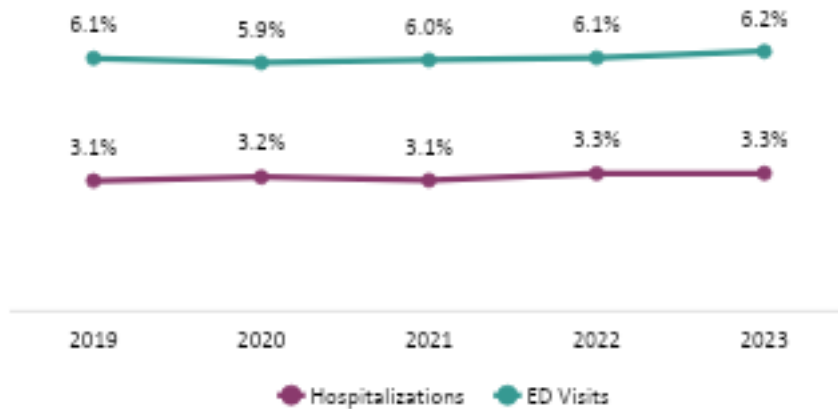


FIGURE 8

Percent of Unintentional Fall-Related Hospitalizations and Emergency Department Visits in Arizona, 2019-2023

Data Source: ADHS Hospital Discharge Data



Hospitalizations

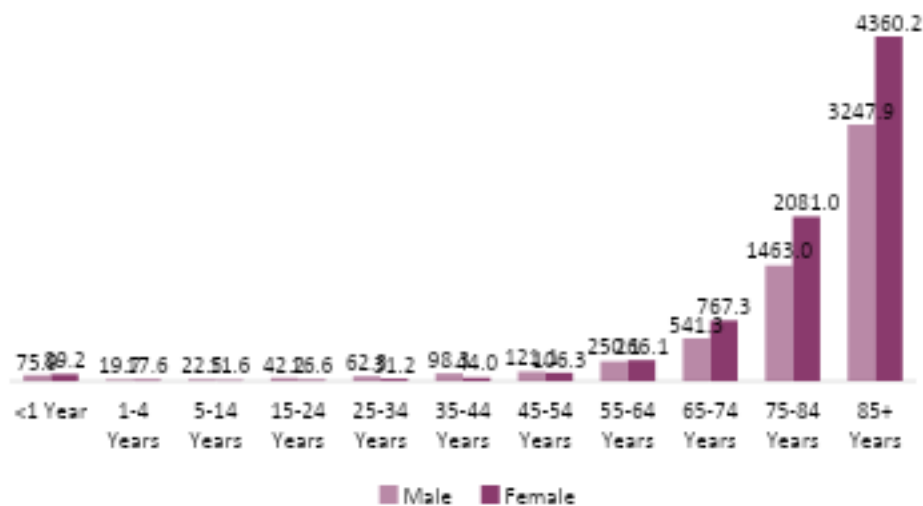
Age

Higher hospitalization rates are observed in individuals aged 65 and older. The rate of hospitalizations caused by unintentional falls is highest among those 85 and above, especially females, with a rate of 4,360.2 per 100,000 population.

FIGURE 9

Age-Adjusted Unintentional Fall Hospitalization Rates by Sex and Age, 2023

Data Source: ADHS Hospital Discharge Data



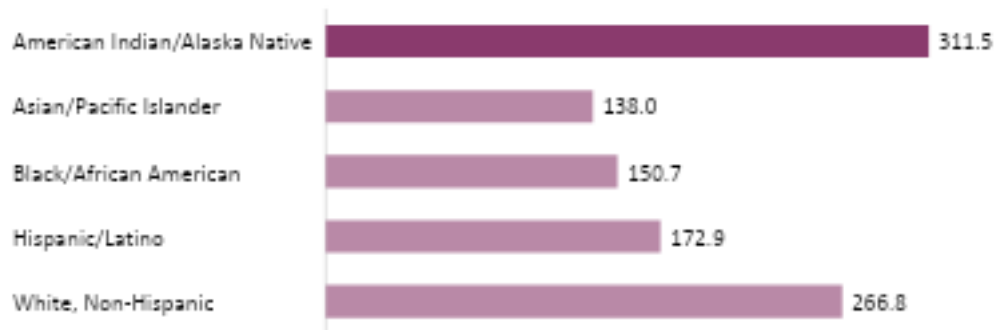
Race and Ethnicity

American Indian/Alaska Native individuals (311.5 per 100,000 population) have the highest age-adjusted hospitalization rate, followed by White, non-Hispanic (266.8 per 100,000 population), and Hispanic (172.9 per 100,000 population).

FIGURE 10

Age-Adjusted Unintentional Fall Hospitalization Rates by Race and Ethnicity, 2023

Data Source: ADHS Hospital Discharge Data



County

Gila County had the highest rate of unintentional fall hospitalizations at 302.7 per 100,000 residents, followed by Yavapai County at 299.2 per 100,000 residents. Gila County's population includes 30.1% of residents aged 65 and older.

FIGURE 11

Age-Adjusted Unintentional Fall Hospitalization Rates per 100,000 Population by County, 2023

Data Source: ADHS Hospital Discharge Data

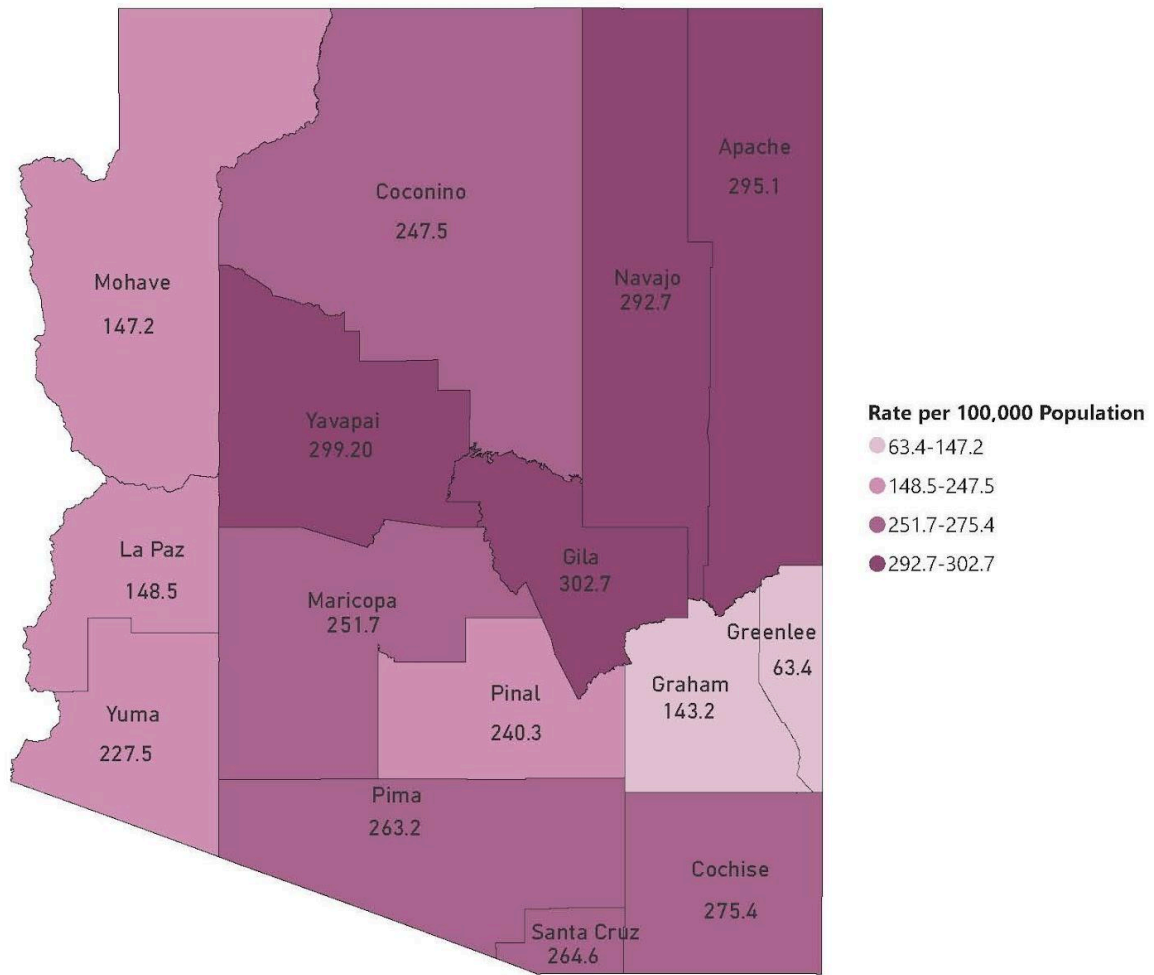


TABLE F

Proportion of Hospitalizations by County in Arizona, 2023

Data Source: ADHS Hospital Discharge Data

County	Counts of Non-Fatal Hospitalizations	Percent of Non-Fatal Hospitalizations	Percent of County Population ≥ 65 years
Apache	222	0.9%	16.5%
Cochise	523	2.2%	23.8%
Coconino	345	1.4%	13.9%
Gila	292	1.2%	30.1%
Graham	59	0.2%	14.3%
Greenlee	7	0.03%	13.8%
La Paz	62	0.3%	41.7%
Maricopa	13,629	56.1%	15.9%
Mohave	667	2.7%	32.0%
Navajo	398	1.6%	19.5%
Pima	4,120	17.0%	20.9%
Pinal	1,561	6.4%	21.6%
Santa Cruz	165	0.7%	19.1%
Yavapai	1,505	6.2%	33.7%
Yuma	718	3.0%	20.1%
Total in Arizona	24,273	100%	18.6%

Emergency Department (ED) Visits

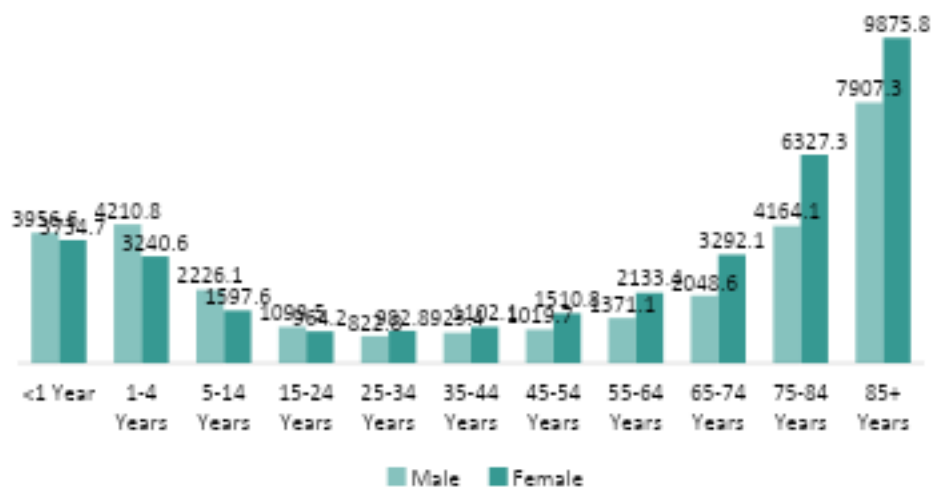
Age

In 2023, the highest rate of unintentional fall injuries was observed among females aged 85 years and older at 9,875.8 per 100,000 population and males at 7,907.3 per 100,000 population. Males under the age of 24 have higher rates of unintentional fall-related ED visits than females, but after age 25, females surpass males in fall-related ED visit rates. This shift highlights a greater vulnerability to falls among females in middle and older age groups.

FIGURE 12

Age-Adjusted Unintentional Fall-Related ED Visit Rates, 2023

Data Source: ADHS Hospital Discharge Data



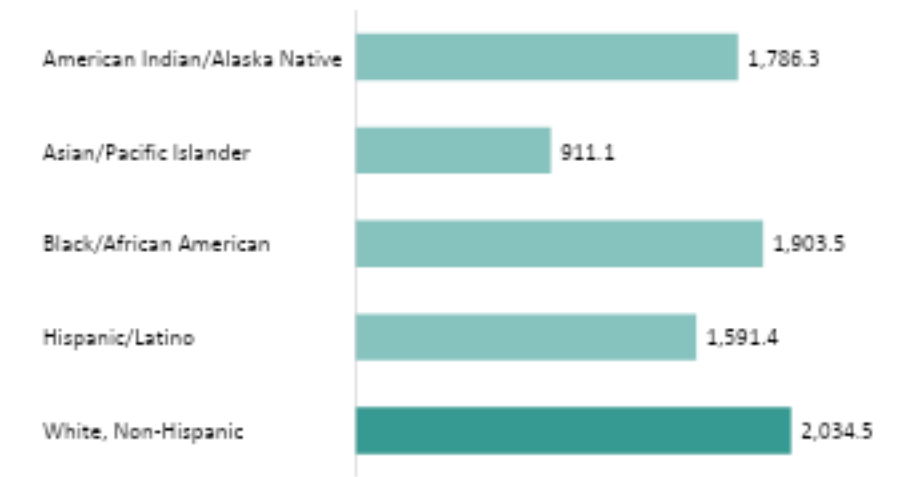
Race and Ethnicity

White, non-Hispanic individuals (2,034.5 per 100,000 population) had the highest age-adjusted emergency department visit rate, followed by Black/African American individuals (1,903.5 per 100,000 population), and American Indian/Alaska Native individuals (1,786.3 per 100,000 population).

FIGURE 13

Age-Adjusted Unintentional Fall ED Visit Rates by Race and Ethnicity, 2023

Data Source: ADHS Hospital Discharge Data



County of Residence

Gila County had the highest rate of ED visits due to unintentional falls at 2,872.0 per 100,000 population, followed by La Paz County with 2,786.3 per 100,000 population.

FIGURE 14

Age-Adjusted Unintentional Fall ED Visit Rates per 100,000 by County, 2023

Data Source: ADHS Hospital Discharge Data

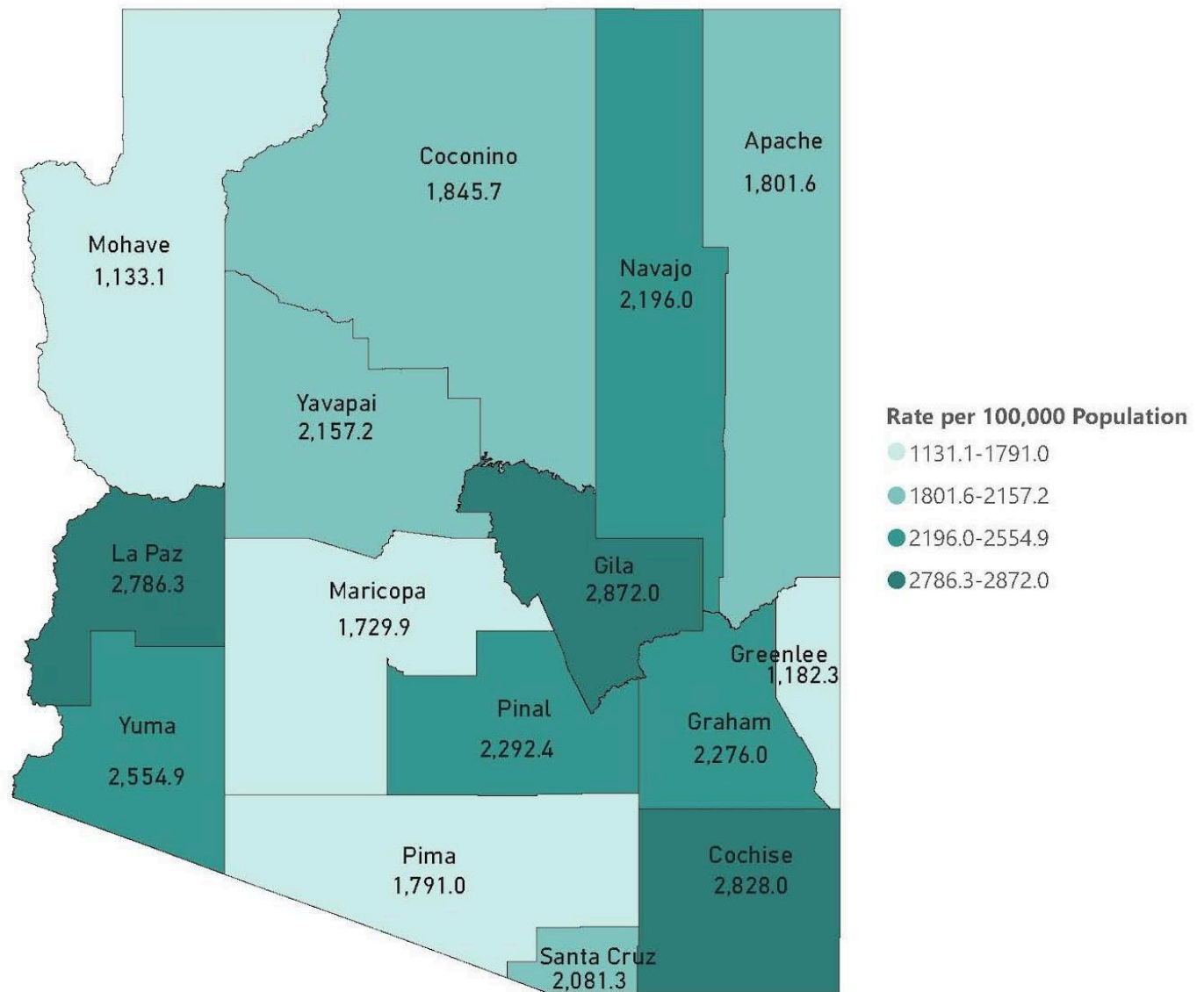


TABLE G

Proportion of ED Visits by County in Arizona, 2023

Data Source: ADHS Hospital Discharge Data

Arizona County	Count of Fall ED Visits	Percent of Fall ED Visits	Percent of County Population >= 65 years
Apache	1,270	0.8%	16.5%
Cochise	4,087	2.7%	23.8%
Coconino	2,623	1.8%	13.9%
Gila	1,869	1.2%	30.1%
Graham	925	0.6%	14.3%
Greenlee	120	0.1%	13.8%
La Paz	566	0.4%	41.7%
Maricopa	83,704	55.9%	15.9%
Mohave	5,546	3.7%	32.0%
Navajo	2,590	1.7%	19.5%
Pima	21,269	14.2%	20.9%
Pinal	11,448	7.6%	21.6%
Santa Cruz	1,145	0.8%	19.1%
Yavapai	6,661	4.5%	33.7%
Yuma	5,832	3.9%	20.1%
Total in Arizona	149,655	100%	18.6%

Types of Falls

There are different types of unintentional falls that can lead to injury across all ages. The top three causes of fall-related injuries for hospitalizations and ED visits include: 1) Fall on same level from slipping, tripping, and stumbling (34.3% and 44.0%, respectively), 2) Other slipping, tripping, and stumbling (36.6% and 19.5%, respectively), and 3) Unspecified falls (11.5% and 11.3%, respectively). These categories of falls are determined based on ICD-10 codes W00-W19; for further definitions, refer to the appendix.

FIGURE 15

Types of Unintentional Falls in 2023 Resulting in Hospitalization and ED Visits, 2023

Data Source: ADHS Hospital Discharge Data, 2023

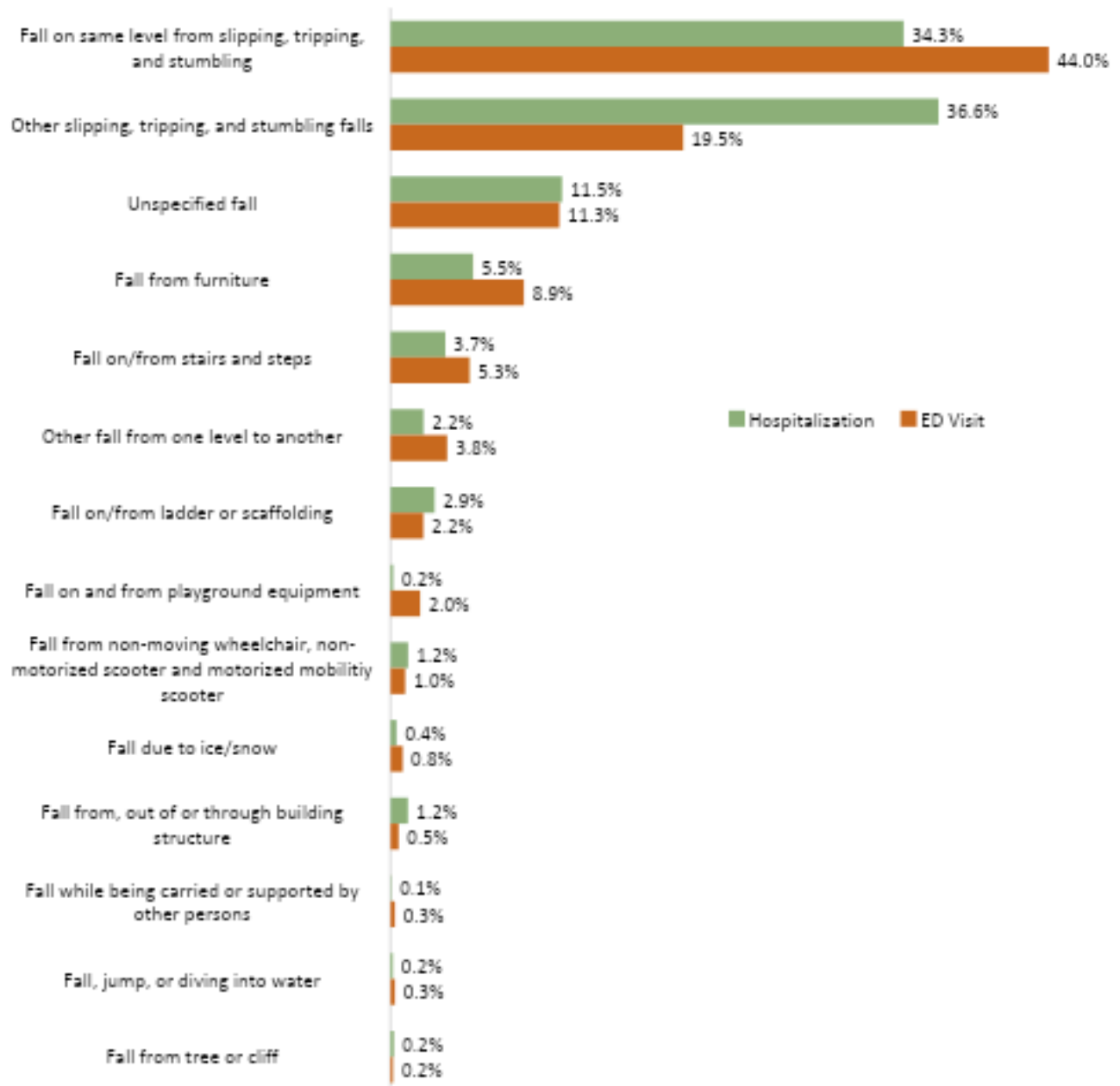


TABLE H

Top Three Types of Falls by County in Arizona, 2023

Data Source: ADHS Hospital Discharge Data

County	Type of Fall	Number of Falls	Percentage of Falls
Apache	Fall on Same Level	609	41.7%
	Other Slip	284	19.5%
	Fall Due to Ice/Snow	93	6.4%
Cochise	Fall on Same Level	1,889	41.4%
	Other Slip	1,281	28.1%
	Unspecified Fall	340	7.5%
Coconino	Fall on Same Level	950	33.3%
	Other Slip	683	24.0%
	Fall Due to Ice/Snow	313	11.0%
Gila	Fall on Same Level	915	42.8%
	Other Slip	436	20.4%
	Unspecified Fall	213	10.0%
Graham	Fall on Same Level	420	44.0%
	Other Slip	199	20.8%
	Other Fall Different Level	66	6.9%
Greenlee	Fall on Same Level	61	48.0%
	Other Slip	23	18.1%
	Other Fall Different Level	9	7.1%
La Paz	Fall on Same Level	335	53.9%
	Other Slip	137	22.0%
	Other Fall Different Level	35	5.6%
Maricopa	Fall on Same Level	37,377	39.3%
	Other Slip	21,839	23.0%
	Unspecified Fall	11,199	11.8%
Mohave	Fall on Same Level	3,062	49.7%
	Other Slip	1,245	20.2%
	Unspecified Fall	460	7.5%
Navajo	Fall on Same Level	1,030	35.4%
	Other Slip	661	22.7%
	Unspecified Fall	312	10.7%
Pima	Fall on Same Level	10,009	40.0%
	Other Slip	5,284	21.1%
	Unspecified Fall	3,829	15.3%
Pinal	Fall on Same Level	6,158	48.1%
	Other Slip	2,299	18.0%
	Unspecified Fall	1,460	11.4%
Santa Cruz	Fall on Same Level	508	39.1%
	Other Slip	317	24.4%
	Unspecified Fall	164	12.6%
Yavapai	Fall on Same Level	3,446	42.9%
	Other Slip	1,814	22.6%
	Unspecified Fall	791	9.8%
Yuma	Fall on Same Level	4,192	64.4%
	Other Slip	956	14.7%
	Fall from Bed	286	4.4%

Cost

In 2023, the total amount charged to patients from hospitalizations and emergency department visits treating unintentional falls totaled over \$3.8 billion. The majority, 61.9%, of these costs were attributed to hospitalization visits.

FIGURE 16

Comparison of Total Cost of Hospitalizations and ED Visits Due to Unintentional Falls Among Arizonans, 2023

Data Source: ADHS Hospital Discharge Data

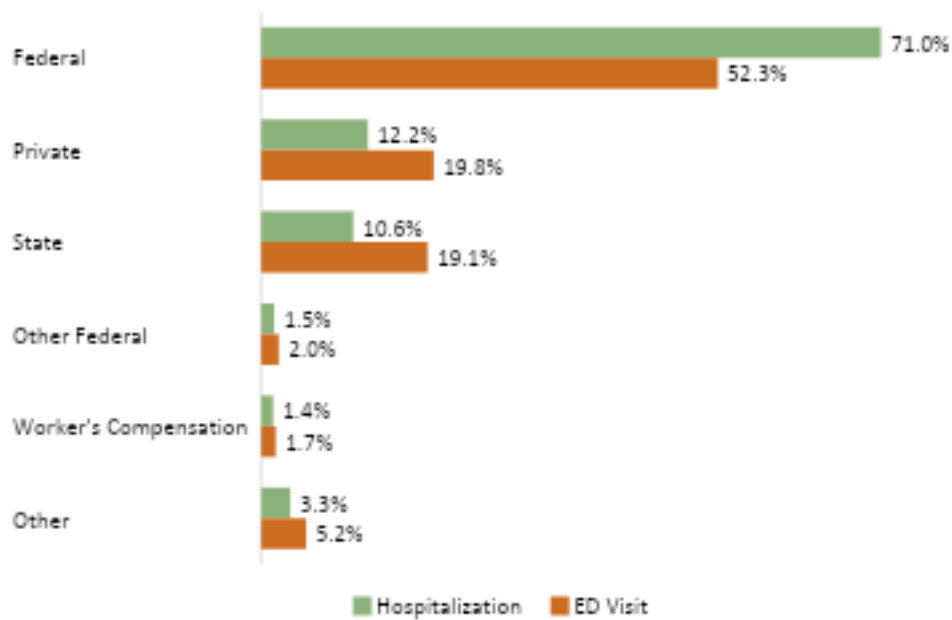


The majority of expenses paid for hospitalizations and emergency department visits were paid by federal payers. Federal hospitalization expenses totaled \$1.68 billion for hospitalizations and \$76 million for emergency department expenses. Categorization of payer type can be found in the Appendix.

FIGURE 17

Cost Comparison of Hospitalizations and ED Visits by Payer Type, 2023

Data Source: ADHS Hospital Discharge Data



Limitations

It is important to recognize that the definition and reporting of an unintentional fall can differ among care providers, which may cause discrepancies in how unintentional falls are recorded in death and hospital records. This report depends on ICD-10 codes to classify fall-related injuries; however, these codes can sometimes be imprecise or inconsistent, leading to possible underreporting or misclassification of fall-related deaths and injuries. Additionally, hospital discharge data does not fully capture the severity of injuries from unintentional falls, limiting the ability to evaluate long-term outcomes or symptoms. The absence of qualitative data also restricts a more comprehensive understanding of the circumstances around the fall, including key factors that may have contributed to the injury or fatality. Moreover, it is important to note that this report does not include records from federal facilities such as the military or the Indian Health Services. Without those records, the number of hospitalizations and emergency department visits from populations utilizing those facilities is limited.

Conclusion

The rising rate of unintentional fall-related fatalities in Arizona, which has increased by 42.1% since 2021, highlights a significant public health issue that demands immediate attention. This increase, coupled with the higher-than-national-average mortality rate, emphasizes the urgent need for focused interventions, especially as the U.S. continues a steady rise in fall-related deaths. Arizona's older adult population, particularly those aged 85 and older, faces a disproportionate risk, with fatality rates significantly surpassing those in younger age groups. In addition to the older population, racial disparities also exist, with American Indian/Alaska Native individuals experiencing the highest fall mortality rates.

Fatal falls often happen at home, but rural counties in Arizona have higher rates when adjusted for population, adding another layer to the problem. Emergency visits and hospital stays related to falls continue to put pressure on the healthcare system, with a noticeable rise in hospitalizations since 2020. The financial cost is high, with over \$3.8 billion spent on treating fall injuries, mostly due to hospitalization expenses. A significant portion of federal insurance spending on unintentional falls can be attributed to the fact that older adults, particularly seniors aged 65 and over, account for the majority of these incidents. As the aging population grows, the high rate of falls among older adults places increasing financial pressure on federal healthcare programs such as Medicare.

To address this, Arizona's State Plan on Aging outlines several strategic actions, including promoting falls prevention awareness, supporting evidence-based fall risk reduction programs, and enhancing data collection and collaboration among state and community organizations. These efforts will focus on reducing modifiable risk factors such as chronic conditions, environmental hazards, and substance use, while also promoting interventions to improve balance, strength, and physical activity. See the appendix for details on the Arizona State Plan on Aging.

Ultimately, reducing the impact of unintentional falls in Arizona requires a comprehensive approach that combines awareness, prevention programs, and targeted interventions. By emphasizing these strategies, Arizona can work toward decreasing fall-related deaths and enhancing the quality of life for its aging residents, while also reducing the rising financial and healthcare costs linked to these injuries.

Appendix

ICD-10 Codes for Unintentional Falls

The following ICD-10 codes were utilized in the analysis for all non-fatal and fatal unintentional fall-related hospitalizations and emergency department visits. These codes were defined by the CDC in the [State Injury Indicators Report](#).

ICD-10 Code	Definition
V00.1-V00.8 with 6 th character=1 (Only used in non-fatal analyses)	Falls related to pedestrian conveyance
W00	Fall due to ice and snow
W01	Fall on same level due from slipping, tripping, and stumbling
W03	Other fall on same level due to collision with another person
W04	Fall while being carried or supported by other persons
W05	Fall from non-moving wheelchair, nonmotorized scooter and motorized mobility scooter
W06	Fall from bed
W07	Fall from chair
W08	Fall from other furniture
W10	Fall on and from playground equipment
W11	Fall on and from ladder
W12	Fall on and from scaffolding
W13	Fall from, out of or through building or structure
W14	Fall from tree
W15	Fall from cliff
W16 with 6 th character =1, W16.42, W16.92	Fall, jump or diving into water
W17	Other fall from one level to another
W18	Other slipping, tripping and stumbling falls
W19	Unspecified fall

Payer Type Categorization

Hospital discharge data includes the variable 'Payer Type'; each was then categorized respectively.

Payer Category	Description
Federal	Medicare, Medicare Risk
Private Insurance	Commercial, HMO, PPO
State	AHCCCS Medicaid
Other Federal	Tricare, Indian Health Service
Worker's Compensation	Worker's Compensation
Other	Charity, Self-Pay, Other

ADHS Falls Prevention Initiatives

Arizona State Plan on Aging (2023 - 2026)

ADHS is tasked with the following actions under the [State Plan on Aging](#):

- **Support Media Campaigns:** Collaborate with other state agencies to promote media campaigns and awareness efforts targeting the older adult population.
- **Governor's Annual Proclamations:** Secure Governor's annual proclamations for the following health awareness months:
 - Healthy Aging & Falls Prevention Awareness Month (September)
 - National Alzheimer's Disease Awareness Month (November, in coordination with the Arizona Alzheimer's Association).
- **Governor's Advisory Council on Aging (GACA):** Actively participate as a member of the Council to advise on aging-related issues.
- **Health Data Profile:** Develop a biennial health data profile for 2021 & 2023 data to provide a comprehensive overview of the health status of Arizona's older adult population.
- **Arizona Health Improvement Plan (AzHIP):** Partner with statewide and community organizations to align efforts with the AzHIP Pandemic Recovery and Resilience Action Plan, enhancing public health resources, training, and support for family caregivers.
- **Taskforce Against Senior Abuse (TASA):** Serve on the Advisory Board and contribute to workgroups focused on preventing senior abuse.
- **Falls Prevention Coalition:** Support the Coalition's efforts by providing falls and unintentional injury data for their website.



Promotion of Modifiable Fall Risk Factors

Falls are usually caused by the combined effect of multiple risk factors. The more risk factors a person has, the higher their chance of falling. However, many of these risks can be minimized or lowered, reducing the overall risk of a fall. Key areas to focus on include:

- I. **Chronic Condition Management:** Prevention and effective management of chronic conditions such as arthritis, cardiovascular disease, stroke, diabetes, Alzheimer's disease, and other related dementias are essential to reducing fall risk.
- II. **Fear of Falling:** Implement evidence-based programs designed to address and reduce the fear of falling, which can lead to physical limitations and further risk.
- III. **Environmental Hazards:** Remove environmental factors that increase the risk of falls, such as unstable or uneven walking surfaces, missing stair handrails, lack of bathroom grab bars, poor lighting, other objects or tripping hazards, and weather conditions like snow and ice.

- IV. **Substance Use:** Address risks associated with alcohol consumption, polypharmacy (the use of multiple medications), and psychoactive or other medications that may impair balance or coordination.
- V. **Balance and Strength:** Promote interventions to improve balance and strengthen muscles, which are critical for preventing falls.
- VI. **Sleep Habits:** Encourage the adoption of healthy sleep patterns, as poor sleep can impact physical function and increase fall risk.
- VII. **Sensory Impairments:** Monitor and address vision and hearing issues, as these can significantly impact a person's ability to navigate their environment safely.
- VIII. **Physical Activity:** Combat muscle weakness and promote regular physical activity to enhance strength, flexibility, and overall mobility.

ADHS AZ State Trauma Registry Data

An interactive dashboard that provides information using both hospital discharge data and the Arizona State Trauma Registry to give a comprehensive analysis of falls. Visit the dashboard [here](#).

Other Initiatives

- Partnership between the ADHS Office of Injury and Violence Prevention, Office of Chronic Disease and Population Health, and the Bureau of Assessment and Evaluation to publish the Annual Unintentional Falls Report.
- Provide ongoing support to the state's Falls Prevention Coalition and its local chapters, fostering statewide efforts to reduce fall risk.
- Engage Arizona Community Health Workers (CHWs) in Falls Prevention training and initiatives to enhance community outreach and education.
- Engage the statewide Injury Prevention Advisory Council (IPAC) in understanding data and informing interventions.
- Assist the County Health in Arizona Policy Initiative (HAPI) Programs in implementing evidence-based falls prevention strategies such as, *Matter of Balance*, *Tai Chi*, *Geri-Fit*, and other community awareness programs.
- Ensure that falls prevention activities are integrated into statewide caregiver initiatives, such as Caregiver Summits and The Alzheimer's Disease and Related Dementia's (ADRD) State Plan, to support caregivers in reducing fall risks for those they care for.

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