

Injury among Residents of Cochise County, Arizona 2008

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Injury is a public health problem that impacts the lives of thousands of Arizona residents each year. Chronic pain, disability, large medical bills, changes in quality of life, and premature death are just some of the possible effects of injuries. These effects can extend beyond injured individuals to their families and communities. With non-fatal injuries, family members are often required to provide care, which can result in time away from work, loss of income, and increases in stress within the family. At the community level, the financial burden of injuries can include medical expenses, rehabilitation, lost wages, and lost productivity. Most injuries are predictable and preventable. Understanding the causes of injury is an important step toward reducing injury-related morbidity and mortality.

The following report identifies the leading causes of injury among residents of Cochise County in 2008. This report is intended to be used as a guide for strategy development, program implementation, and evaluation. The Arizona Department of Health Services Injury Prevention Program operates under the vision of reducing injuries in Arizona using integrated surveillance and evidence-based interventions. This report was generated to increase awareness of county-specific injury issues and to facilitate opportunities for effective injury prevention activities.

Figure 1. Injury Pyramid for Cochise County Residents, Arizona 2008

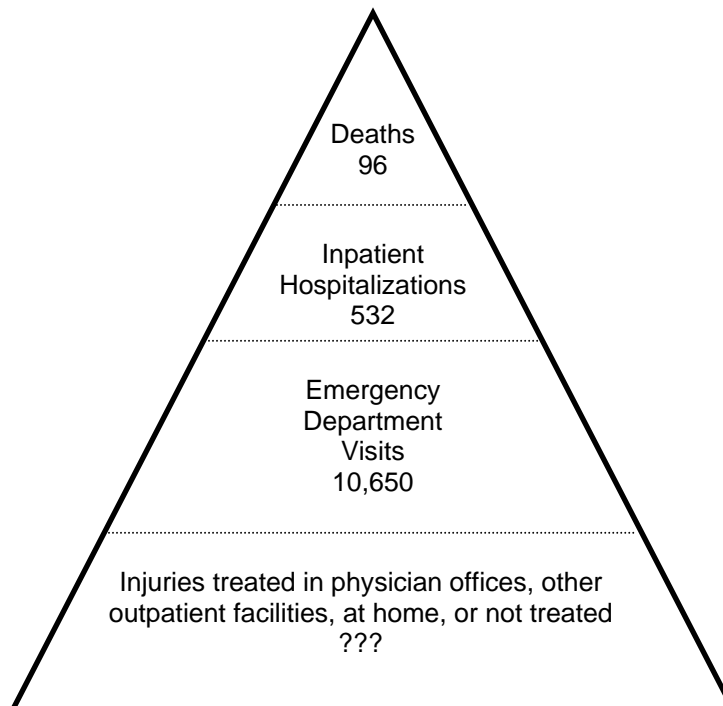
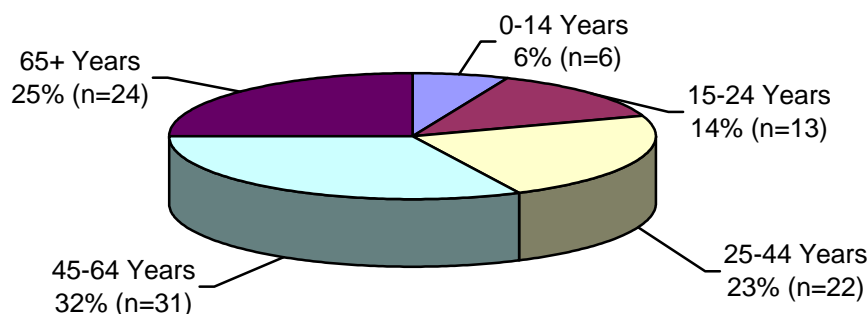


Figure 1 shows an injury pyramid for residents of Cochise County during 2008. This pyramid shows that deaths represent the smallest proportion of injuries. The proportions increase towards the foundation of the pyramid, which is comprised of hospital discharges, emergency department visits, and self care. Although injuries that do not require medical treatment may be the most numerous, no existing datasets capture these types of injuries.

Deaths

In 2008, there were 96 injury-related deaths in Cochise County. Most of these deaths were among males (71 percent, n=68), and females accounted for 29 percent (n=28). The largest percentage of deaths was among individuals 45 to 64 years old (32 percent, n=31). There were 6 injury-related deaths among children 14 years and under (6 percent). Age distributions are shown in Figure 2.

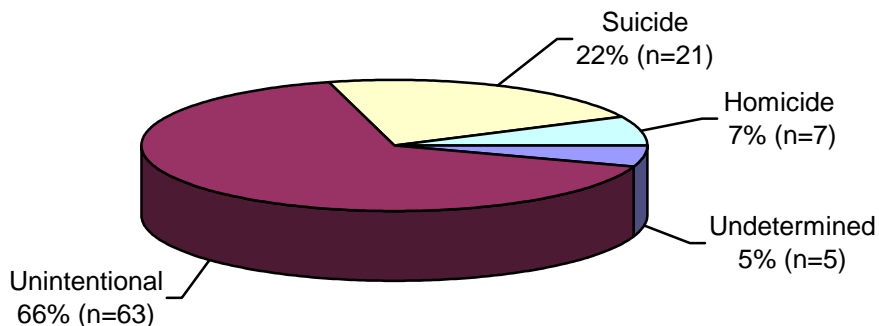
Figure 2. Injury-Related Deaths by Age Group, Cochise County, Arizona 2008 (n=96)



Non-Hispanic Whites accounted for the majority of injury-related deaths in Cochise County (76 percent, n=73), followed by Hispanics (21 percent, n=20). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

For both the state of Arizona and Cochise County, unintentional injury is the leading cause of death among all residents ages 1 to 44 years.¹ Sixty-six percent of injury-related deaths in Cochise County were due to unintentional injuries (n=63); 22 percent were suicides (n=21); 7 percent were homicides (n=7); 5 percent were of undetermined intent (n=5). Figure 3 shows injury-related deaths by intent.

Figure 3. Injury-Related Deaths by Intent, Cochise County, Arizona 2008 (n=96)



1. Arizona Health Status and Vital Statistics 2008.

Cochise County Injury-Related Deaths Compared to Other Arizona Counties

Table 1 shows the intent of injury-related deaths for residents of Cochise County compared to residents of the rest of Arizona. The leading intent of injury-related deaths was unintentional for both Cochise County and the remaining counties, accounting for the majority of injury-related deaths. Cochise County had a smaller percentage of homicides (7 percent) than the rest of Arizona.

Cochise County (n=96)		Arizona, excluding Cochise County (n=3,857)	
Intent	Percent of Total	Intent	Percent of Total
Unintentional	66	Unintentional	64
Suicide	22	Suicide	22
Homicide	7	Homicide	11
Undetermined	5	Undetermined	2

The most common cause of unintentional injury-related deaths in Cochise County was motor vehicle traffic crashes (44 percent, n=28). Nineteen percent of unintentional injury deaths were due to poisonings (n=12). The causes of unintentional injury-related deaths during 2008 in Cochise County are shown in Table 2.

Cause	Number	Percent
Motor vehicle traffic	28	44%
Poisoning	12	19%
Fall	7	11%
Other/unspecified	7	11%
Fire/hot object	3	5%
Other transport	3	5%
Suffocation	3	5%
Total	63	100%

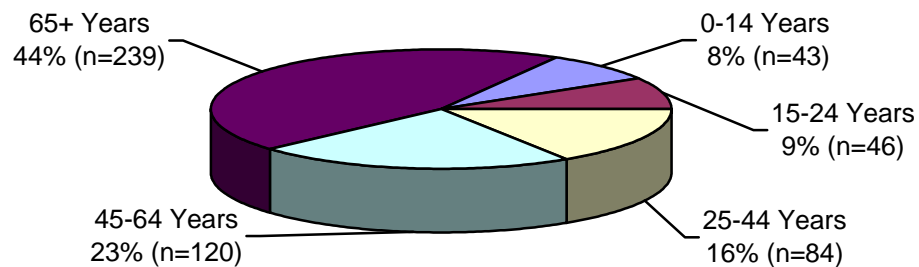
Motor vehicle traffic crashes

Males accounted for 64 percent of unintentional motor vehicle traffic-related deaths (n=18) and females accounted for 36 percent (n=10). Twenty-nine percent were among individuals ages 15 to 24 years (n=8); 36 percent were among individuals ages 25 to 64 years (n=10); and 25 percent were among individuals 65 years and older (n=7). For most of the motor vehicle traffic-related deaths, the location of the injured person was not specified on the death certificate (79 percent, n=22).

Non-Fatal Inpatient Hospitalizations

In 2008, there were 532 non-fatal inpatient hospitalizations due to injury among residents of Cochise County. Forty-five percent were among males (n=242) and 55 percent were among females (n=290). Forty-four percent of the hospitalizations were among individuals 65 years and older (n=239). Figure 4 shows injury-related inpatient hospitalizations by age group among residents of Cochise County.

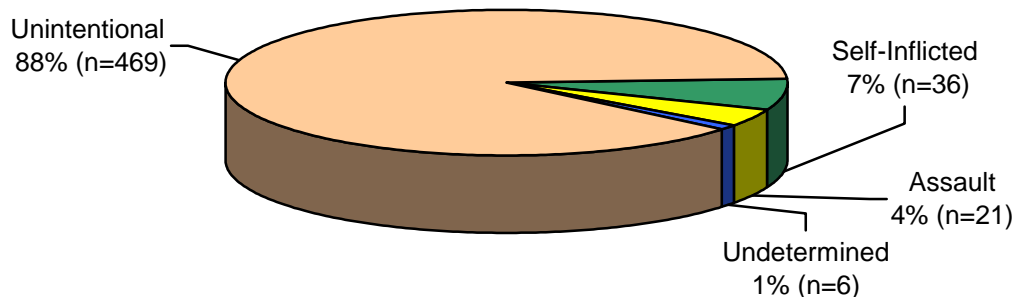
Figure 4. Injury-Related Inpatient Hospitalizations by Age Group, Cochise County, Arizona 2008 (n=532)



There were 406 injury-related hospitalizations among White, Non-Hispanic residents of Cochise County (76 percent). The second highest number was among Hispanic individuals (18 percent, n=98). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

Eighty-eight percent of the inpatient hospitalizations were unintentional (n=469); 7 percent were due to self-inflicted injuries (n=36); 4 percent were due to assaults (n=21); and 1 percent were of undetermined intent (n=6). There were no inpatient hospitalizations due to legal intervention. Figure 5 shows injury-related hospitalizations by intent.

Figure 5. Injury-Related Inpatient Hospitalizations by Intent, Cochise County, Arizona 2008 (n=532)



Cochise County Injury-Related Hospitalizations Compared to Other Arizona Counties

Table 3 shows the intent of injury-related hospitalizations for residents of Cochise County compared to residents of the rest of Arizona. **The leading intent of injury-related hospitalizations was unintentional for both Cochise County and the remaining counties, accounting for the majority of injury-related hospitalizations.** Cochise County had a smaller percentage of hospitalizations due to assaults (6 percent) than the remainder of Arizona (6 percent), and a smaller percentage of suicides (7 percent) than the remainder of Arizona (10 percent).

Cochise County (n=532)		Arizona, excluding Cochise County (n=32,577)	
<u>Intent</u>	<u>Percent of Total</u>	<u>Intent</u>	<u>Percent of Total</u>
Unintentional	88	Unintentional	82
Self-Inflicted	7	Self-Inflicted	10
Assault	4	Assault	6
Undetermined	1	Undetermined	2

The most common causes of unintentional inpatient hospitalizations in Cochise County were falls (57 percent, n=266) and motor vehicle traffic crashes (13 percent, n=61). Table 4 shows the causes of unintentional inpatient hospitalizations among residents of Cochise County.

Cause	Number	Percent
Fall	266	57%
Motor vehicle traffic	61	13%
Other/unspecified	38	8%
Poisoning	36	8%
Transport	18	4%
Nature/environment	16	3%
Overexertion	12	3%
Fire/hot object	9	2%
Struck by/against	8	2%
Other pedal-cyclist	5	1%
Total	469	100%

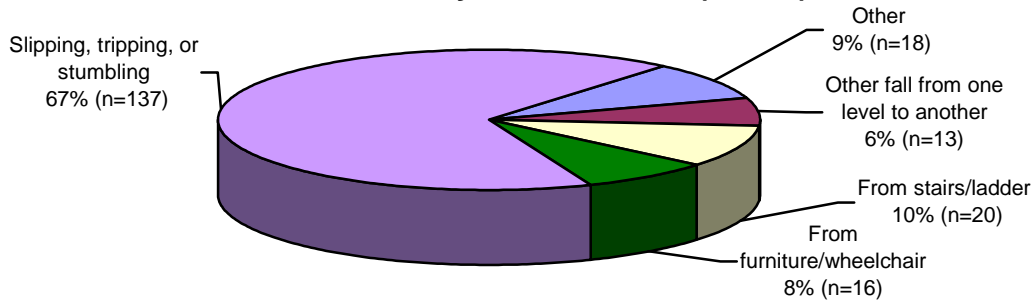
Falls

Males accounted for 31 percent of unintentional fall-related hospitalizations (n=82) and females accounted for 69 percent (n=184). Five percent of fall-related hospitalizations were among children 14 years and younger (n=14); 1 percent were among individuals ages 15 to 24 years (n=3); 22 percent were among individuals ages 25 to 64 years (n=58); and 72 percent were among individuals 65 years and older (n=191).

For 23 percent of the unintentional fall-related hospitalizations, information regarding contributing event was not specified in the hospital discharge database (n=62). Among

the hospitalizations for which contributing event was specified, 67 percent were due to slipping, tripping, or stumbling (n=137). Figure 6 shows fall-related hospitalizations due to contributing event.

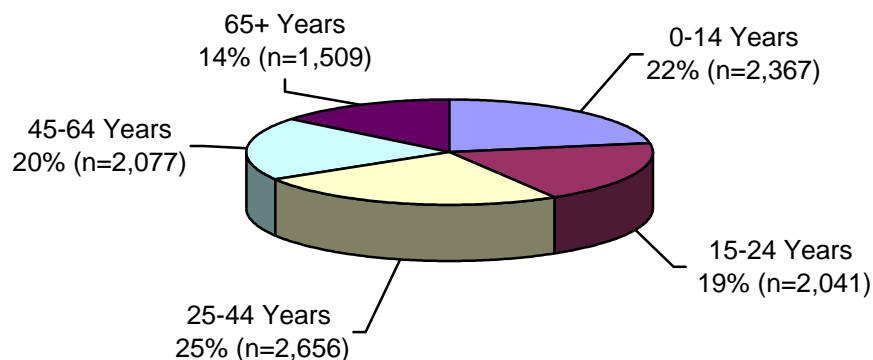
Figure 6. Inpatient Hospitalizations due to Unintentional Falls by Contributing Event, Cochise County, Arizona 2008 (n=204)



Non-Fatal Emergency Department Visits

In 2008, there were 10,650 injury-related emergency department visits among residents of Cochise County. Males accounted for 55 percent of these visits (n=5,837) and females accounted for 45 percent (n=4,812). The largest percentage of visits was among individuals ages 25 to 44 years (25 percent, n=2,656). Figure 7 shows injury-related emergency department visits by age group.

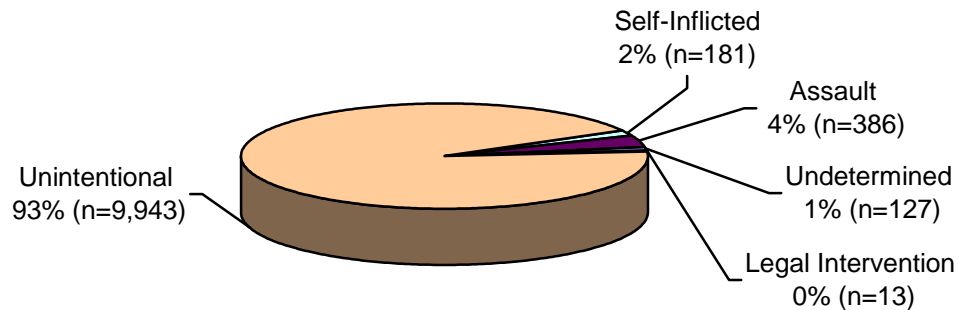
Figure 7. Injury-Related Emergency Department Visits by Age Group, Cochise County, Arizona 2008 (n=10,650)



There were 6,724 injury-related hospitalizations among White, Non-Hispanic residents of Cochise County (63 percent). The second highest number was among Hispanic individuals (30 percent, n=3,144). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

Ninety-three percent of the emergency department visits were due to unintentional injuries (n=9,943); 4 percent were due to assault (n=386); 2 percent were due to self-inflicted injuries (n=181); and 1 percent were of undetermined intent (n=127). There were thirteen emergency department visits due to legal intervention. Figure 8 shows emergency department visits by intent.

Figure 8. Injury-Related Emergency Department Visits by Intent, Cochise County, Arizona 2008 (n=10,650)



Cochise County Injury-Related Emergency Department Visits Compared to Other Arizona Counties

Table 5 shows the intent of injury-related emergency department visits for residents of Cochise County compared to residents of the rest of Arizona. The leading intent of injury-related visits was unintentional for both Cochise County and the remaining counties, accounting for the majority of injury-related visits. Overall, Cochise County and the rest of Arizona had similar percentages of visits due to self-inflicted injuries and assaults.

Table 5. Intent of Injury-Related Emergency Department Visits, Cochise County Compared to Other Arizona Counties, 2008			
Cochise County (n=10,650)		Arizona, excluding Cochise County (n=364,053)	
Intent	Percent of Total	Intent	Percent of Total
Unintentional	93	Unintentional	93
Self-Inflicted	2	Self-Inflicted	2
Assault	4	Assault	5
Undetermined	1	Undetermined	< 1

The most common causes of unintentional emergency department visits in Cochise County were falls (32 percent, n=3,181) and struck by/against injuries (14 percent, n=1,398). Table 6 shows the causes of unintentional injury-related emergency department visits for Cochise County residents in 2008.

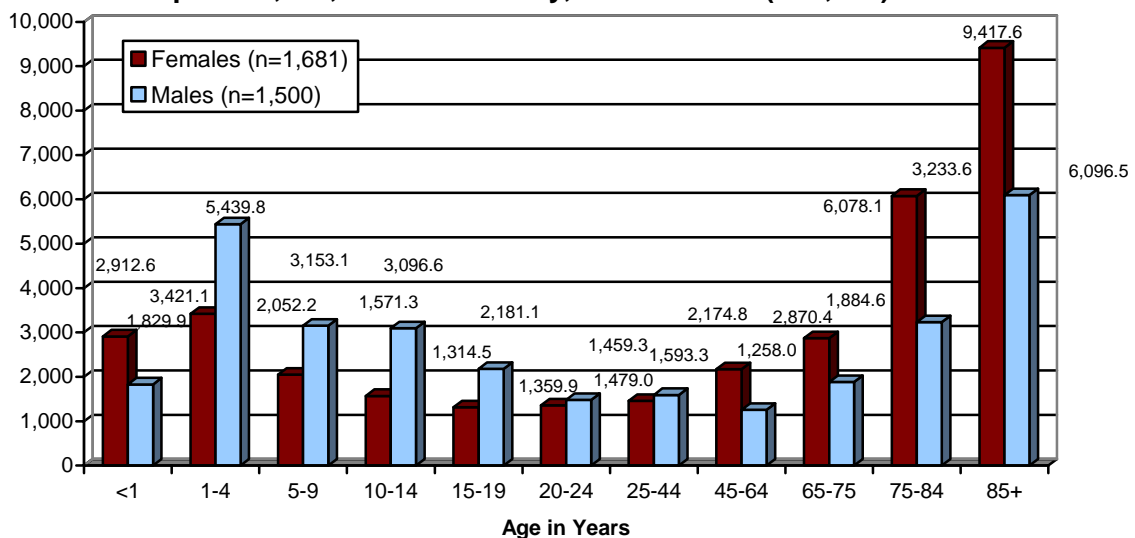
Cause	Number	Percent
Fall	3,181	32%
Struck by/against	1,398	14%
Other/unspecified	1,283	13%
Overexertion	1,057	11%
Cut/pierce	968	10%
Motor vehicle traffic	784	8%
Nature/environment	559	6%
Transport	239	2%
Fire/hot object	165	2%
Poisoning	155	2%
Other pedal cycle	154	2%
Total	9,943	100%

Falls

There were 3,181 emergency department visits due to unintentional falls. Males accounted for 47 percent of these visits (n=1,500) and females accounted for 53 percent (n=1,681). Individuals ages 25 to 64 years had the highest percentage of unintentional fall-related emergency department visits (35 percent, n=1,102). Twenty-seven percent of visits were among children 14 years and younger (n=854); 11 percent were among individuals ages 15 to 24 years (n=335); and 28 percent were among individuals 65 years and older (n=890).

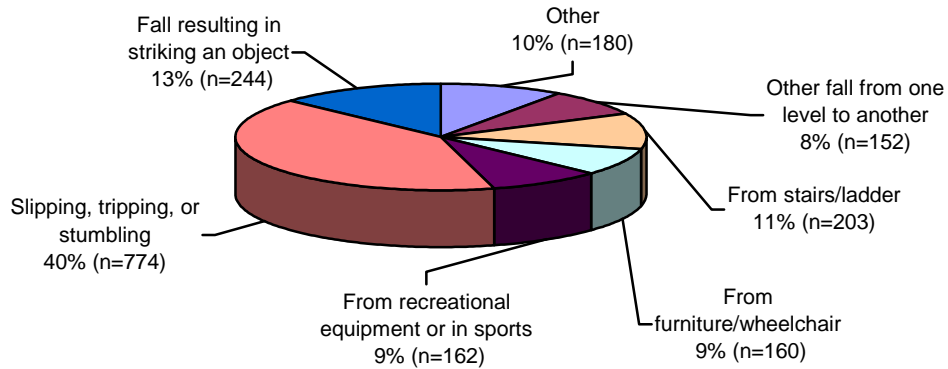
The highest rates of unintentional fall-related emergency department visits were among older adults. Females 85 years and older had a rate of 9,417.6 fall-related emergency department visits per 100,000 residents. Figure 9 shows emergency department visit rates of unintentional falls by age group and sex.

Figure 9. Unintentional Fall-Related Emergency Department Visit Rates per 100,000, Cochise County, Arizona 2008 (n=3,181)



For 41 percent of the unintentional fall-related emergency department visits, information regarding contributing event was not specified in the emergency department database (n=1,306). Among the emergency department visits for which contributing event was specified, 40 percent of falls were due to slipping, tripping, or stumbling (n=774). Figure 10 shows emergency department visits due to unintentional falls by contributing event.

Figure 10. Emergency Department Visits due to Unintentional Falls by Contributing Event, Cochise County, Arizona 2008 (n=1,875)



Summary

In 2008, there were 96 injury-related deaths in Cochise County, and the largest percentage of deaths was among individuals 45 to 64 years of age (32 percent, n=31). The majority of these deaths were due to unintentional injuries (66 percent, n=63). The most common cause of unintentional injury deaths was motor vehicle traffic crashes (44 percent, n=28). For residents of Cochise County, unintentional injury is the leading cause of death for individuals ages 1 to 44 years.¹ Twenty-two percent of injury-related deaths in Cochise County were suicides (n=21); 7 percent were homicides (n=7); and 5 percent were of undetermined intent (n=5).

There were 532 non-fatal inpatient hospitalizations due to injury among residents of Cochise County. Forty-five percent of the hospitalizations were among individuals 65 years and older (n=239). Eighty-eight percent of the hospitalizations were due to unintentional injuries (n=469); 7 percent were due to self-inflicted injuries (n=36); 4 percent were due to assaults (n=21); and 1 percent were of undetermined intent (n=6). The most common cause of unintentional inpatient hospitalizations was falls (57 percent, n=266).

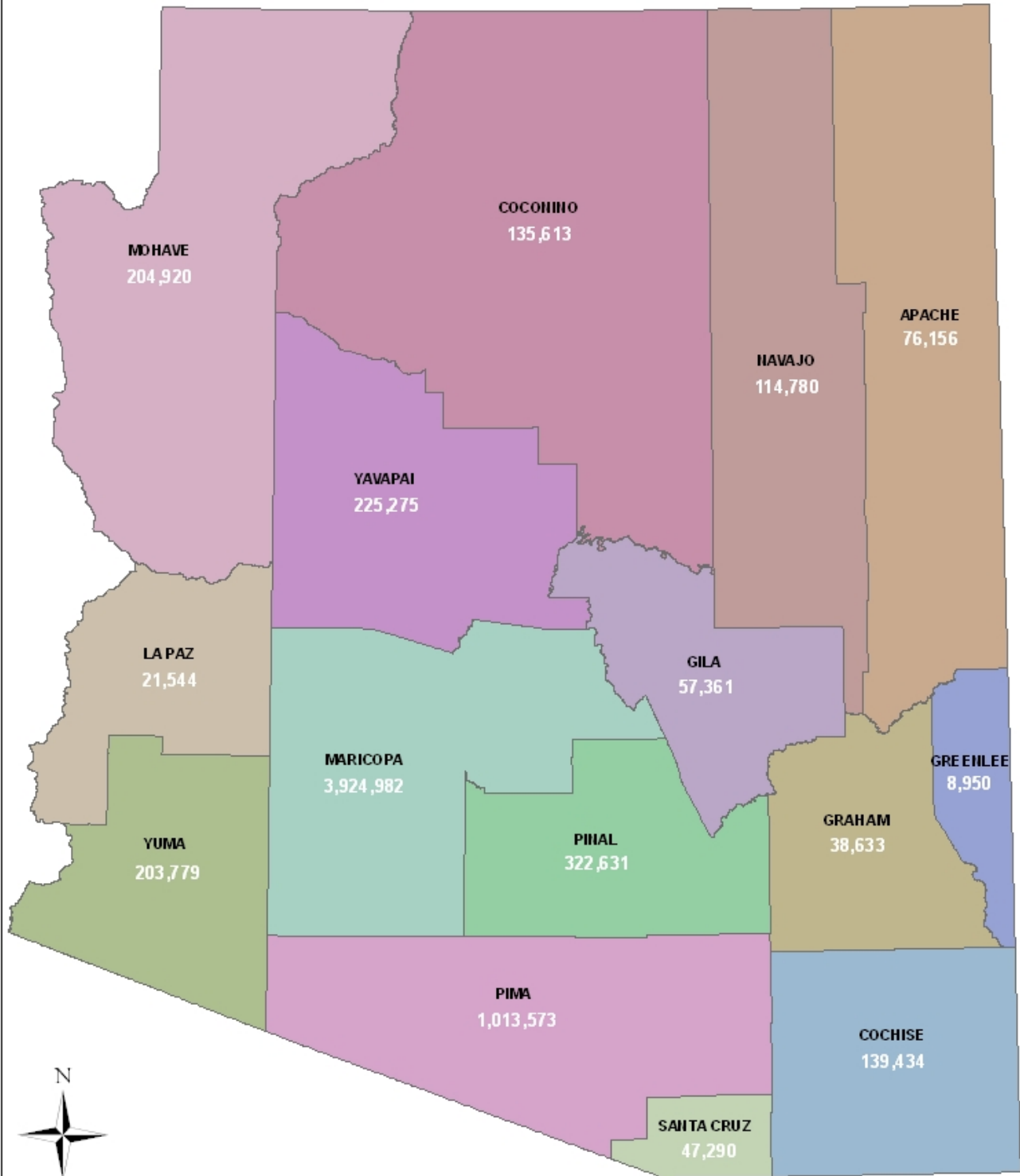
There were 10,650 injury-related non-fatal emergency department visits among residents of Cochise County in 2008. The largest percentage of visits was among individuals ages 25 to 44 years (25 percent, n=2,656). Ninety-three percent of the emergency department visits were due to unintentional injuries (n=9,943); 4 percent were due to assaults (n=386); 2 percent were due to self-inflicted injuries (n=181); and 1 percent were of undetermined intent (n=127). The most common cause of unintentional emergency department visits was falls (32 percent, n=3,181).

Source for deaths: 2008 Death Certificate Database

Source for hospitalizations: 2008 Inpatient Hospital Discharge Database

Source for emergency department visits: 2008 Outpatient Emergency Department Database

Arizona Counties with Population, 2008



1 in = 44 miles

Source: Arizona Health Status and Vital Statistics 2008