Injuries in Oklahoma, 2004

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Magnitude of the Problem

Approximately 2300 Oklahomans die every year from an injury, including more than 1600 unintentional (accidental) deaths, 500 suicides, and more than 200 homicides.[1] In 2004, injuries accounted for 1 of every 13 deaths in Oklahoma; nonfatal injuries accounted for 1 of every 13 hospital days and 1 of every 14 hospital discharges. Also, for every $10 Oklahomans spent on healthcare, $1 was used for injury expenses.[2]

Injuries are the leading cause of death and lifelong disability among persons 1-44 years of age in Oklahoma. Injuries account for more premature deaths before 65 years of age than cancer, heart disease, stroke, and diabetes combined. Oklahoma's death rates due to motor vehicle crashes, drownings, fire/burns, suicide and homicide are higher than the national average.[1]

In 2004, the leading causes of injury death in Oklahoma were motor vehicle crashes (732), drugs/poisonings (525), firearms (454), fire/burns (69), and drownings (65). Males were 2.5 times more likely to die from injuries than females. Of the fatal motor vehicle traffic crashes in Oklahoma, 36% were alcohol-related. Fifty-five percent of fatal crash victims were not using safety belts or child restraint devices. [3]

According to the 2004 United States (U.S.) Census population estimates, the population of Oklahoma constituted 1.2% of the entire U.S. population. Oklahoma has the second highest Native American population in the nation and a lower proportion of African Americans than the national average (Table 1). [4]

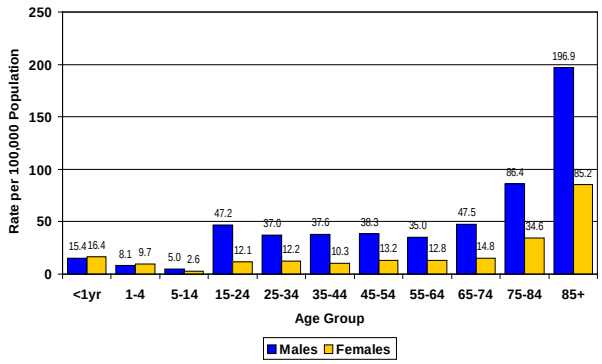
Table 1. Selected Demographic Characteristics of Oklahoma vs. United States, 2004 U.S. Census Population Estimates

		Oklahoma		United States	
		Number	Percent	Number	Percent
Total Population		3,523,546		293,656,842	
Males		1,740,632	49%	144,479,166	49%
Females		1,782,914	51%	149,177,676	51%
Race	White	2,769,507	79%	236,100,101	80%
	African American	271,313	8%	37,588,076	13%
	Native American	285,407	8%	2,936,568	1%
	Other/two or more races	197,319	5%	17,032,097	6%
Under 5 years		242,125	7%	19,968,665	7%
Under 18 years		859,745	24%	73,414,210	25%
Over 65 years		465,108	13%	36,413,448	12%

Traumatic Brain Injury Death Rates

Traumatic brain injuries (TBI) are among the most likely injuries to cause death or permanent disability. Approximately 1.4 million people sustain a TBI in the U.S. annually. Of these, 50,000 people die, accounting for one-third of all injury deaths. Additionally, 80,000 to 90,000 people experience the onset of long-term or lifelong disability associated with a TBI.[5] Motor vehicle crashes, firearms, and falls are the leading causes of TBI.[6] Firearm-related incidents account for 10% of all TBIs, but 44% of TBI-related deaths.[7] In Oklahoma, 878 persons died as a result of TBI in 2004. Although persons 15-24 years of age accounted for the highest number of injuries, persons 85 years and older had the highest death rate followed by persons 75-84 years and 65-74 years. Males were nearly three times more likely to die from a TBI than females, and they accounted for 72% of the TBI deaths. The death rate was higher for males than females among all age groups except children under five years of age.

Figure 1. Traumatic Brain Injury Death Rates by Age and Gender, Oklahoma, 2004

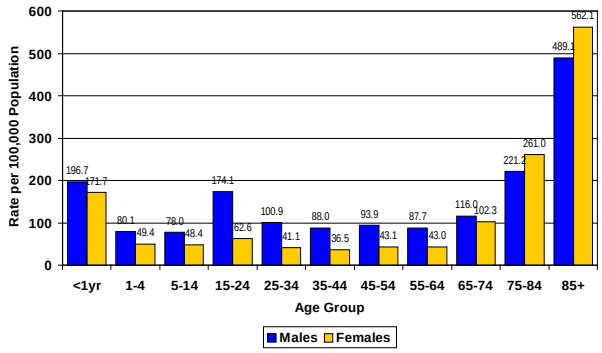


Source: Oklahoma Vital Statistics

Traumatic Brain Injury Hospitalizations

A total of 3,328 persons were hospitalized in Oklahoma for a TBI during 2004. Although the number of TBI-related hospitalizations was highest among persons 15-24 years of age, the hospitalization rate was highest for persons 85 years and older, followed by persons 75-84 years and infants less than a year old. The rates of TBI hospitalization were higher for males in all age groups except for persons 75 years and older.

Figure 2. Traumatic Brain Injury Hospitalization Rates by Age and Gender, Oklahoma, 2004

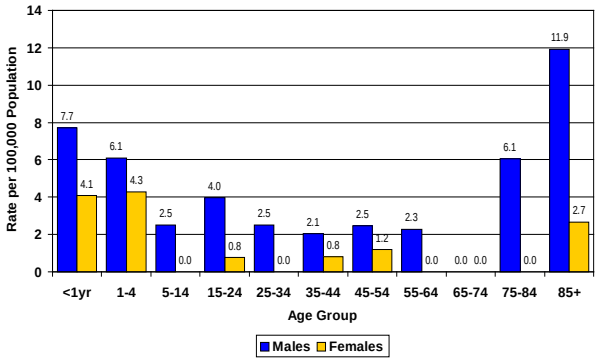


Source: Hospital Discharge Data

Drowning Death Rates

Drowning is the sixth leading cause of unintentional injury death for all ages combined in the U.S. and in Oklahoma. Additionally, it is the second leading cause of injury death among children 1-14 years of age and third among persons 15-24 years.[1] In 2004, 65 drownings occurred in Oklahoma, the majority of which were unintentional (95%). The highest death rates were among the oldest and youngest age groups. Men were at higher risk than women (4:1) and accounted for 80% of all drownings. Death rates for males were higher than females across all age groups except 65-74 years of age.

Figure 3. Drowning Death Rates by Age and Gender, Oklahoma, 2004

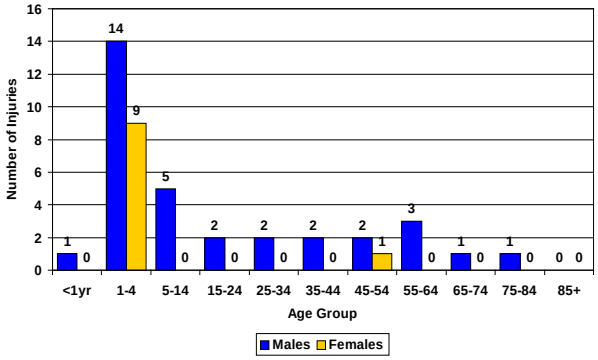


Source: Oklahoma Vital Statistics

Drowning/Near Drowning Hospitalizations

For every drowning death among children under 15 years in the U.S. in 2003, there were five children who received treatment in an emergency department for a nonfatal submersion injury. More than half of these children were hospitalized.[1] Nonfatal drownings can result in brain damage that can cause long-term disabilities, such as memory problems, learning disabilities, and permanent loss of basic functioning.[5] In 2004, 43 Oklahomans were hospitalized due to near-drowning incidents. The 1-4 year age group had the highest number of hospitalizations. Overall, males accounted for 77% of the injuries. The number of hospitalizations for males was more than three times higher than for females.

Figure 4. Drowning/Near Drowning Hospitalizations by Age and Gender, Oklahoma, 2004

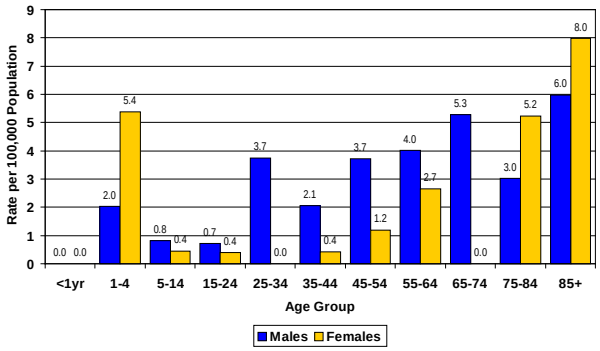


Source: Hospital Discharge Data

Fire/Burn Death Rates

In 2005, an American died in a fire about every two hours. Residential fires accounted for four of every five fire deaths. Nationwide, fire departments responded to 396,000 home fires, which claimed the lives of more than 3,000 Americans (excluding firefighters) and injured approximately 14,000.[8] Most of the fire deaths were due to inhalation of smoke or toxic gases.[9] Smoking was the leading cause of fire-related deaths, while cooking was the primary cause of residential fires.[10] In 2004, fire-related injuries claimed the lives of 69 people in Oklahoma. Although 45-64 year-olds had the highest number of fire/burn deaths, persons 75 years and older had the highest fire/burn death rates, followed by 1-4 year-olds. Males were nearly two times more likely to die in a fire than females and accounted for 65% of fire/burn deaths in Oklahoma. However, females 1-4 years old and females 75 years and older had higher fire-related death rates than males in these age groups.

Figure 5. Fire/Burn Death Rates by Age and Gender, Oklahoma, 2004

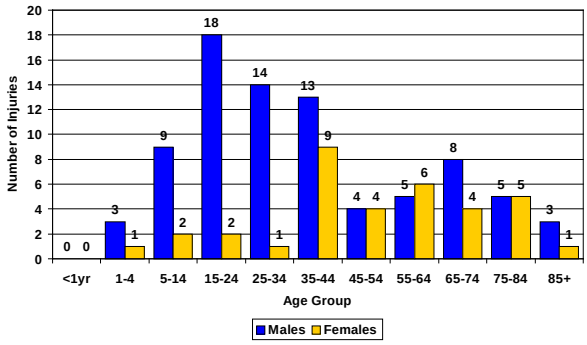


Source: Oklahoma Vital Statistics

Fire/Burn Injury Hospitalizations

In 2005, someone was injured from a fire-related incident every 29 minutes in the U.S. For every person who died from a fire, 4.5 others were injured.[8] In Oklahoma, 117 persons were hospitalized due to injuries sustained from a fire in 2004. Persons 65 years and older had the highest rate of hospitalization. Males were more likely to be hospitalized due to a fire/burn injury than females, except for 55-64 year-olds.

Figure 6. Fire/Burn Injury Hospitalizations by Age and Gender, Oklahoma, 2004

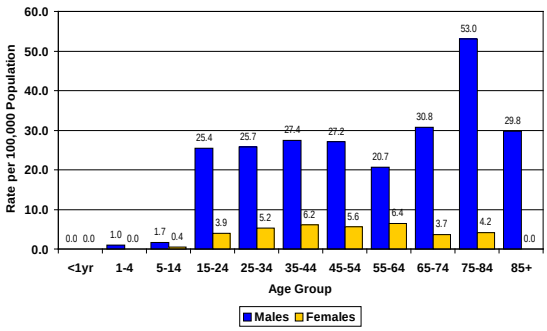


Source: Hospital Discharge Data

Firearm Death Rates

In the U.S., almost 30,000 individuals die annually as a result of firearm-related incidents. Firearms are the second leading cause of injury-related deaths behind motor vehicle crashes in the U.S. as well as in Oklahoma.[1] In Oklahoma alone, there were 454 deaths resulting from a firearm-related injury in 2004. Persons 35-44 years of age had the highest number of fatal injuries, while persons 75-84 years of age had the highest death rate. Ninety-eight percent of firearm-related deaths among persons 75 years and older were suicides. The firearm-related death rate for males was five times higher than for females, and males accounted for 84% of firearm-related deaths.

Figure 7. Firearm Death Rates by Age and Gender, Oklahoma, 2004

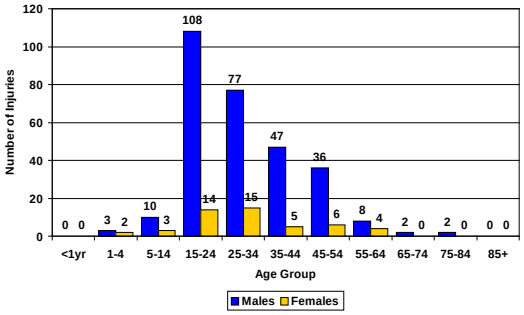


Source: Oklahoma Vital Statistics

Firearm Injury Hospitalizations

In Oklahoma, 343 people were hospitalized as a result of firearm injuries in 2004. Persons in the 15-24 year age group had the highest number of firearm-related injuries, followed by persons 25-44 years of age. Males accounted for 85% of hospitalizations due to firearm-related injuries. Males ages 15-24 were nearly eight times more likely to be hospitalized as a result of firearm-related injuries than their female counterparts.

Figure 8. Firearm-related Hospitalizations by Age and Gender, Oklahoma, 2004

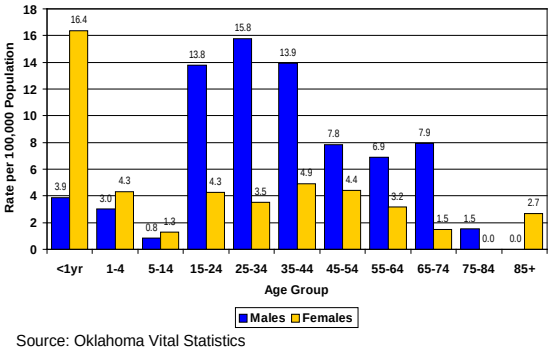


*Excludes 1 person where gender was unknown.
Source: Hospital Discharge Data

Homicide Rates

Homicide is the second leading cause of all deaths among persons 15-24 years of age and the 14th leading cause of all deaths in the U.S. In Oklahoma, homicide is the third most common cause of deaths overall among persons ages 1-4 and 15-24 years.[1] In 2004, 219 persons died due to injuries related to homicide incidents. The highest rate of homicides was among persons 25-34 years old. Males accounted for 72% of the deaths and had a mortality rate three times higher than the rate of females.

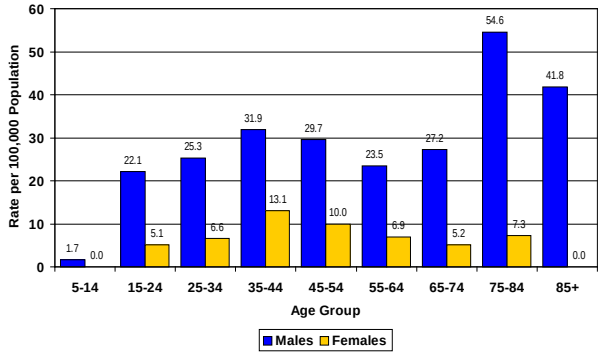
Figure 9. Homicide Rates by Age and Gender, Oklahoma, 2004



Source: Oklahoma Vital Statistics

Suicide Death Rates

Figure 10. Suicide Rates by Age and Gender, Oklahoma, 2004

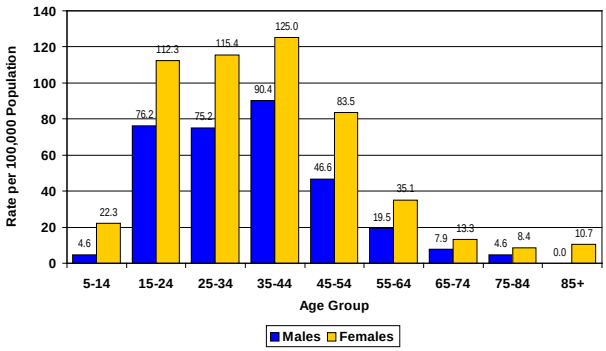


Source: Oklahoma Vital Statistics

Suicide is the 11th leading cause of death among all Americans[1] and the eighth leading cause of death among males in the U.S.[11] It is the second most common cause of all deaths among 25-34 year-olds and the third among persons 10-24 years of age.[1] Suicide is the 10th leading cause of death among all Oklahomans, second among persons 15-34 years of age, and third among 10-14 year-olds.[1] In 2004 alone, suicide claimed the lives of 503 Oklahomans. The highest suicide rate was among 75-84 year-olds. Males had a higher suicide rate than females for all ages and accounted for 78% of the deaths. Men were 3.5 times more likely to die from suicide than women.

Suicide Attempt Hospitalizations

Figure 11. Rates* of Suicide Attempt Hospitalizations by Age and Gender, Oklahoma, 2004

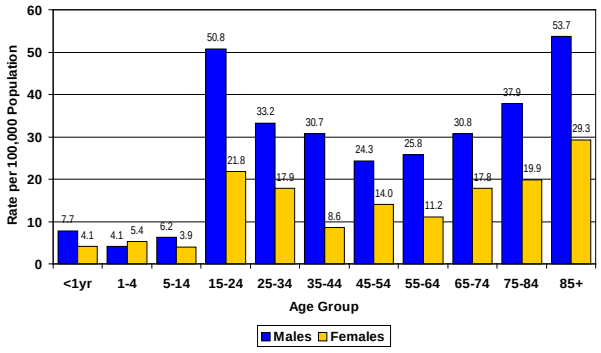


Source: Hospital Discharge Data
*Some rates are based on fewer than 10 cases.

In 2002, in the U. S., 132,353 individuals were hospitalized following suicide attempts and nearly 117,000 were treated in an emergency department and released.[5] Women reported suicide attempts during their lifetime about three times more often than men in 2002.[12] In Oklahoma, 1,997 individuals were hospitalized following a suicide attempt in 2004. Suicide attempt rates were highest among persons aged 35-44 years followed by 25-34 and 15-24 year-olds. Females were more likely to attempt suicide than males among all ages. The most common method of attempted suicides was poisoning (94%).

Motor Vehicle Crash Death Rates

Figure 12. Motor Vehicle Injury Death Rates by Age and Gender, Oklahoma, 2004

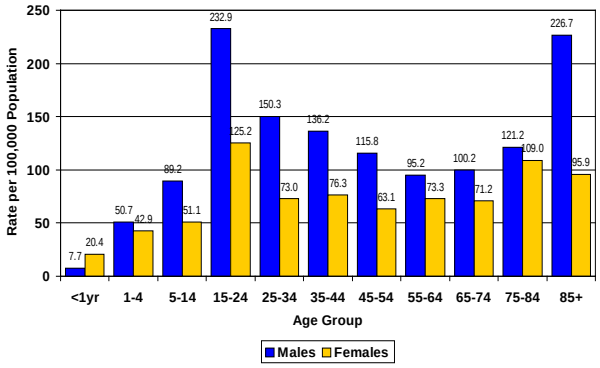


Source: Oklahoma Vital Statistics

Motor vehicle crashes are the leading cause of death and disability among persons 1-34 years of age in U.S. Two out of five deaths among U.S. teens are the result of a motor vehicle crash. Motor vehicle crashes are the leading cause of death among persons 1-44 years of age in Oklahoma.[1] Motor vehicle crashes claimed the lives of 732 Oklahomans in 2004. Although the highest number of deaths was among persons aged 15-24 years, persons 85 years and older had the highest rate of motor vehicle crash deaths. Sixty-eight percent of the deaths overall occurred among males. Males were twice as likely to die in a motor vehicle crash than females. However, females 1-4 years of age were more likely to die in a crash than males in this age group.

Motor Vehicle Crash Hospitalizations

Figure 13. Rates of Motor Vehicle Injury Hospitalizations by Age and Gender, Oklahoma, 2004



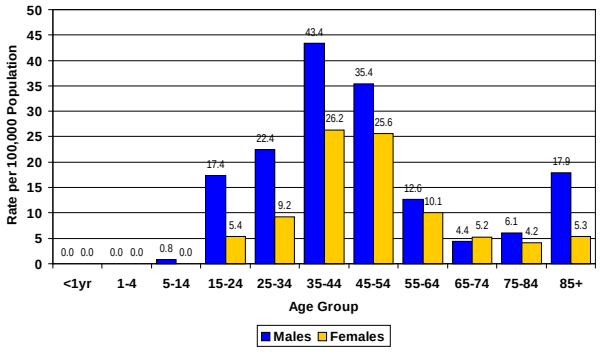
Source: Hospital Discharge Data

In 2004, five individuals were hospitalized for every person who died from a motor vehicle crash in Oklahoma. The highest rate of hospitalization was among persons aged 15-24 years, followed by persons 85 years and older. Males were more likely to be hospitalized as a result of injuries sustained from a motor vehicle crash than females in all age groups, except for infants less than one year of age.

Poisoning Death Rates

In 2004, poison control centers across the U.S. reported more than 2.4 million human poisoning exposures and an average of one poisoning exposure every 13 seconds. The majority (84%) of poisoning exposures were unintentional. Of the 2.4 million human exposures, 1,183 poisoning deaths were reported. Nearly 93% of poisoning exposures occurred at a residence, and more than 51% occurred among children younger than six years old. Fifty-six percent of poisoning fatalities occurred among persons 20-49 years of age.[13] Poisoning was the second leading cause of unintentional injury deaths among all Oklahomans. In 2004, poisonings took the lives of 525 Oklahomans, with the highest rate among individuals 35-44 years of age. Of these, 75% were unintentional, 15% intentional, and 10% were of other or unknown intent. Males were more likely to die due to poisoning than females, accounting for 63% of the deaths.

Figure 14. Poisoning Death Rates by Age and Gender, Oklahoma, 2004

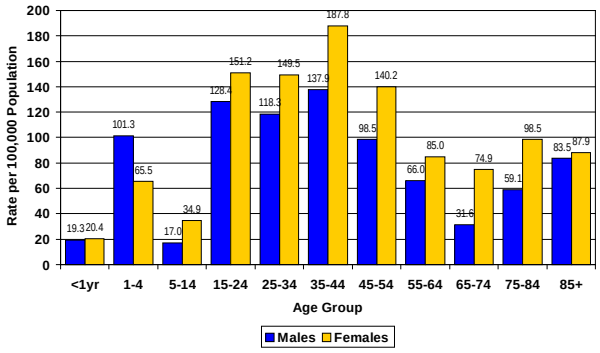


Source: Oklahoma Vital Statistics

Poisoning Hospitalizations

In 2004, in the U.S., more than 528,000 persons were treated for a poisoning exposure in a health care facility with approximately 156,000 requiring hospitalization.[13] In 2004, there were 3,654 hospitalizations due to poisoning-related injuries in Oklahoma. The highest rate for hospitalization was among individuals 35-44 years old. Females had a higher rate of hospitalization than males for all age groups, except for individuals 1-4 years old.

Figure 15. Poisoning Hospitalization Rates* by Age and Gender, Oklahoma, 2004



Source: Hospital Discharge Data
*Some rates are based on fewer than 10 cases.

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