



## *Summary of Reportable Injuries in Oklahoma*

### *Fatal and Nonfatal Self-Inflicted Injuries in Oklahoma, 2002-2004*

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# Fatal & Nonfatal Self-Inflicted Injuries in Oklahoma, 2002-2004

## Background

Statewide surveillance for fatal and nonfatal self-inflicted injuries was initiated in July 2001. Data on persons who were hospitalized for a self-inflicted injury were collected from medical records that had an external cause of injury code (E code) for a self-inflicted injury (E950-E959). Data were also collected from the Office of the Chief Medical Examiner on persons with suicide as their manner of death. This summary includes data on fatal and nonfatal self-inflicted injuries that occurred during 2002-2004. Information is presented on all self-inflicted injuries followed by data on fatal and nonfatal self-inflicted injuries separately to portray the differences in epidemiologic and other characteristics. Rates were calculated using 2002-2004 Census bridged-race data.

**Table 1. Epidemiologic Characteristics of Fatal and Nonfatal Self-Inflicted Injuries, Oklahoma, 2002-2004**

Characteristic	Number	Percent	Average Annual Rate per 100,000 Population
Age Range 8-99 Years Mean 36 years Median 35 years			
Age Group			
05-14	297	4%	20.7
15-24	1993	25%	124.8
25-34	1743	21%	125.7
35-44	1944	24%	130.8
45-54	1270	16%	87.4
55-64	476	6%	45.3
65+	389	4%	28.1
Gender			
Female	4348	54%	8.2
Male	3764	46%	7.3
Race			
White	6823	84%	78.2
Native American	574	7%	60.2
Black	517	6%	59.8
Asian	31	0%	17.2
Other/Unknown	167	3%	
Marital Status			
Divorced	917	11%	
Married	2092	26%	
Separated	170	2%	
Single	3529	44%	
Widowed	160	2%	
Unknown	1244	15%	
Employed (16+ years of age)	1640	22%	15.6
Alcohol Involvement	1999	25%	19.0

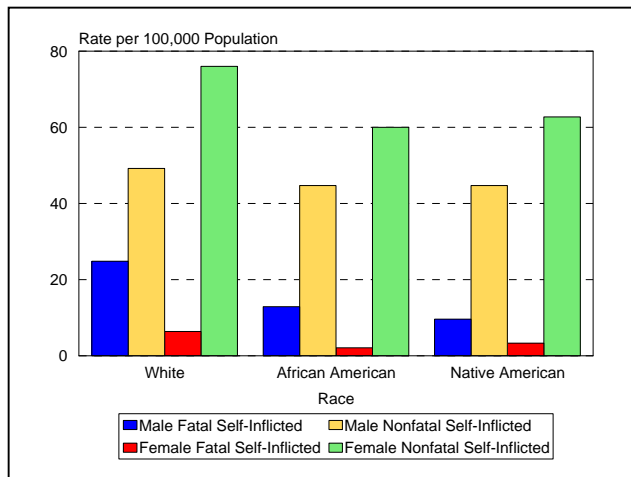
- 8112 self-inflicted injuries occurred from 2002-2004; 1483 (18%) died.
- The overall rate of injury was 76.8 per 100,000 population.
- Persons 15-44 years had the highest injury rates.
- The rate of injury was highest among whites and lowest among Asians.

**Table 2. Primary Method of Fatal and Nonfatal Self-Inflicted Injuries, Oklahoma, 2002-2004**

Characteristic	Number	Percent	Average Annual Rate per 100,000 Population
Primary Method of Injury			
Drowning	9	<1%	0.1
Fire	32	<1%	3.0
Gas/Poison	102	1%	1.0
Firearms	997	12%	9.5
Hanging/Strangulation	325	4%	3.1
Jump	38	<1%	0.4
Motor Vehicle	21	<1%	0.2
Solid/Liquid Poison	5781	71%	55.0
Stabbing	716	9%	6.8
Suffocation	4	<1%	0.1
Walk	3	<1%	0.1
Other/Unknown Method	84	3%	1.0

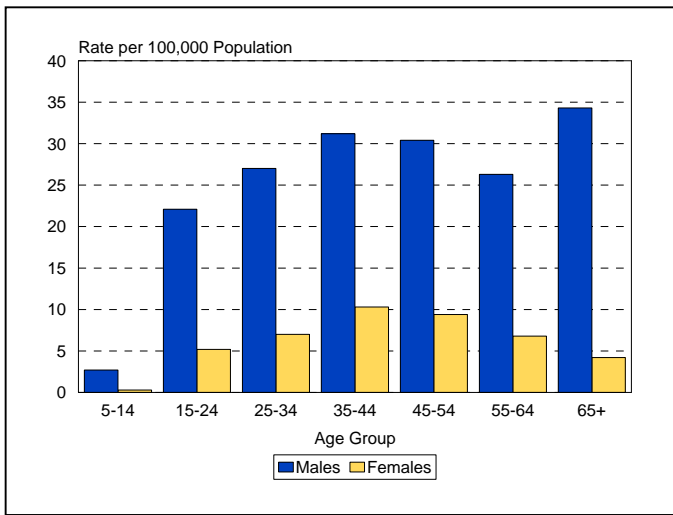
- The dominant method of injury was solid or liquid poisoning, used by 71% of all persons (rate 55.0 per 100,000 population).
- Firearms were the second leading method (12%) for all persons followed by stabbing (9%).

**Figure 1. Rates of Fatal and Nonfatal Self-Inflicted Injuries by Race and Gender, Oklahoma, 2002-2004**



- The rate of fatal injuries was highest among white males (24.8), followed by African American (12.8) and Native American (9.6) males.
- The rate of nonfatal injuries was highest among white females (76.0), followed by Native American (62.7) and African American (60.0) females.
- The ratio of nonfatal to fatal injuries was 2.1:1 for males and 13.2:1 for females.
- White males and females had the highest rate of fatal and nonfatal injuries.

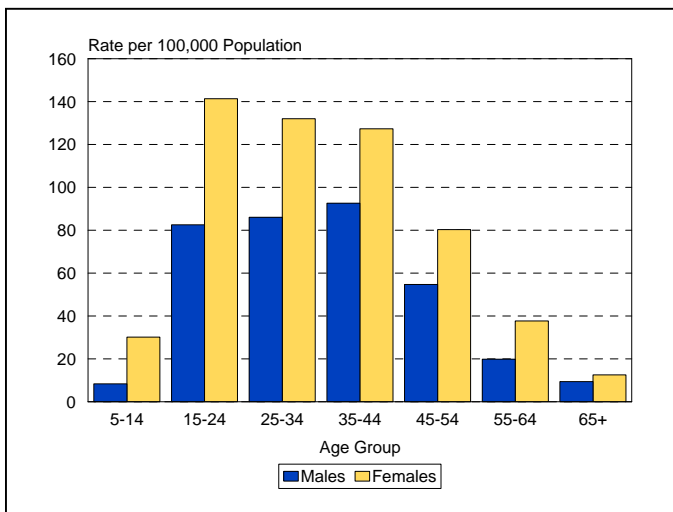
**Figure 2. Fatal Self-Inflicted Injury Rates by Age Group and Gender, Oklahoma, 2002-2004**



- Rates of fatal injury were higher among males, with male to female ratios ranging from 3:1 for persons aged 35-44 years to 8:1 for persons 65 years and older.
- The average age of persons with fatal injuries was 44 years, with a range of 9-93 years for males and 14-89 years for females.
- Fatal injury rates increased with age among males with a slight decrease at 45-64 years.
- Among females, fatal injury rates increased with age until 35-44 years and then declined.

- Rates were highest among males 65 years and older; among females, persons under 15 years and 65 years and older had the lowest rates.
- 80% of fatal injuries occurred among males.

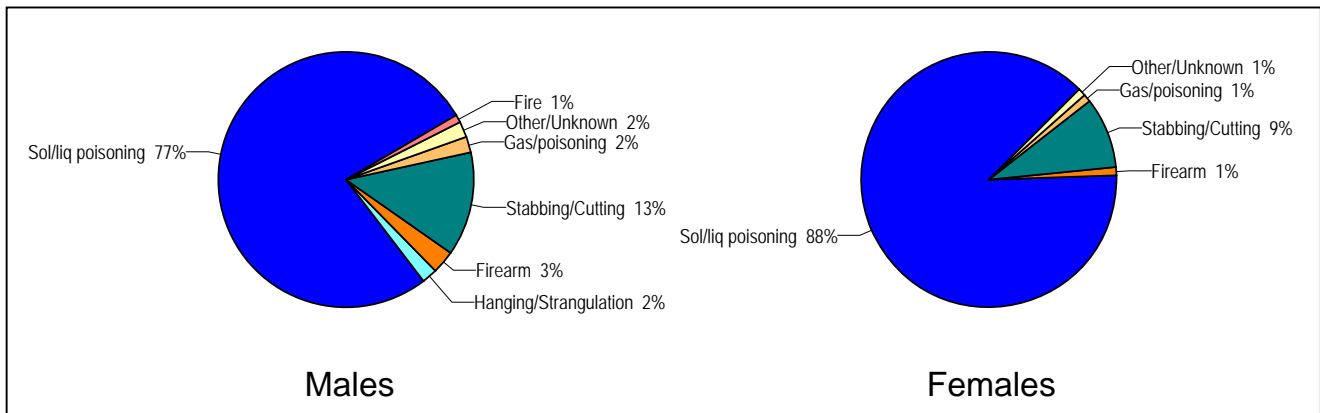
**Figure 3. Nonfatal Self-Inflicted Injury Rates by Age Group and Gender, Oklahoma, 2002-2004**



- Rates of nonfatal injury were higher among females, ranging from 12.5 among persons 65 years and older to 141.3 among persons 15-24 years.
- The average age of persons with a nonfatal injury was 34 years, ranging from 8-96 years for males and 9-99 years for females.
- Rates were highest for persons 15-44 years of age; rates for females declined after 24 years and males after 44 years.
- Rates were lowest for persons under 15 years and 65 years and older.

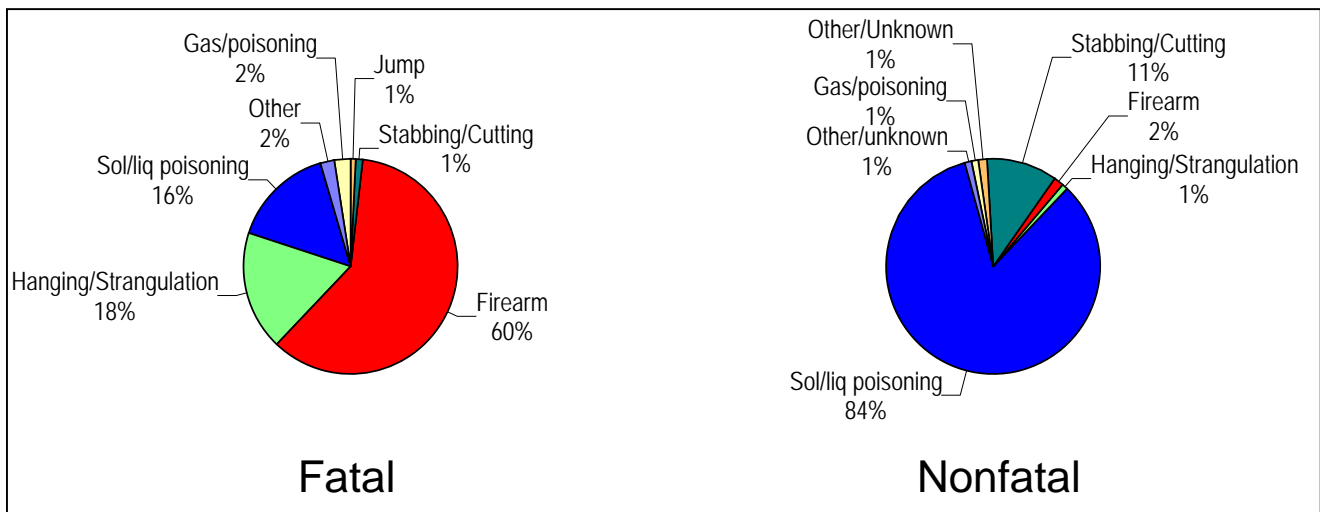
- 61% of nonfatal self-inflicted injuries were among females; the female rate was 76.0 compared to a rate of 50.0 for males.

**Figure 4. Methods Used in Nonfatal Self-Inflicted Injuries by Gender, Oklahoma, 2002-2004**



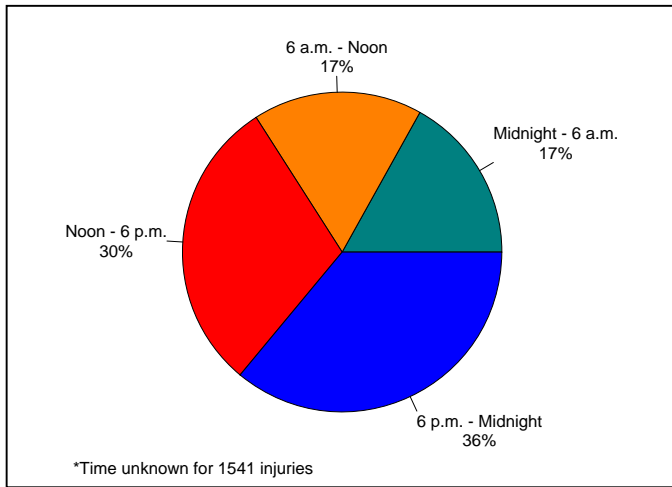
- The leading method used in nonfatal injury by females (88%) and males (77%) was solid and liquid poisoning.
- Firearms were used 3 times more by males than females.
- Stabbing was the second leading method used by both males and females.
- For persons who used two methods (3%), solid/liquid poisoning was the leading method accompanied by stabbing for males and females.
- Hanging or strangulation was used twice as often among males.

**Figure 5. Methods Used in Fatal and Nonfatal Self-Inflicted Injuries, Oklahoma, 2002-2004**



- A total of 6651 persons incurred a nonfatal self-inflicted injury and 1461 sustained a fatal injury during 2002-2004 (annual rates 13.6 and 60.7 per 100,000 population, respectively).
- The leading methods for fatal injury were firearms, hanging/strangulation, and poisoning.
- The leading methods for nonfatal self-inflicted injury were solid/liquid poisoning and stabbing.
- For each fatal self-inflicted injury there were 4.5 hospitalized nonfatal self-inflicted injuries.

**Figure 6. Time\* When Nonfatal Self-Inflicted Injuries Occurred, Oklahoma, 2002-2004**



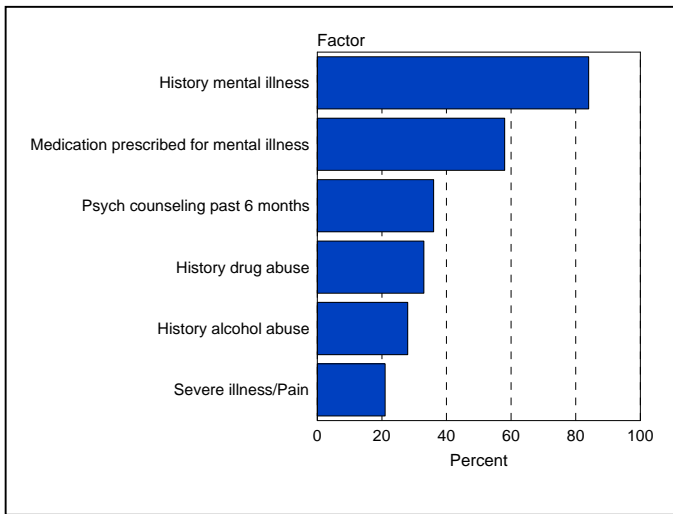
- The time of occurrence was known for 81% of nonfatal self-inflicted injuries.
- The lowest percentage of injuries occurred from midnight to noon.
- The highest percentage of injuries occurred between 6 p.m. and midnight.
- The time of nonfatal self-inflicted injuries was similar for males and females.

**Table 3. Three Leading Methods of Fatal Self-Inflicted Injuries by Age Group, Oklahoma, 2002-2004**

Age Group	Leading Method (%)	Second Leading Method (%)	Third Leading Method (%)
5-14	Hanging/Strangulation (55%)	Firearm (45%)	
15-24	Firearm (61%)	Hanging/Strangulation (23%)	Solid/liquid Poisoning (8%)
25-34	Firearm (55%)	Hanging/Strangulation (31%)	Solid/liquid Poisoning (11%)
35-44	Firearm (51%)	Solid/liquid Poisoning (24%)	Hanging/Strangulation (22%)
45-54	Firearm (56%)	Solid/liquid Poisoning (26%)	Hanging/Strangulation (13%)
55-64	Firearm (74%)	Solid/liquid Poisoning (20%)	Hanging/Strangulation (5%)
65+	Firearm (86%)	Hanging/Strangulation (7%)	Solid/liquid Poisoning (6%)
All age groups	Firearm (61%)	Hanging/Strangulation (14%)	Solid/liquid Poisoning (15%)

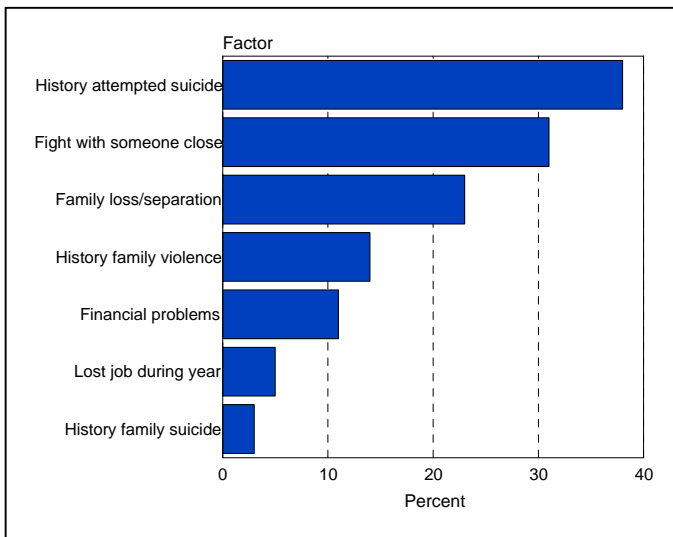
- Firearms were the leading method used in fatal injuries among all age groups except children aged 5-14 years.
- The second leading method used in fatal injuries was hanging/strangulation for persons 15-34 years of age and for persons 65 years and older.
- For persons 35-64 years of age, the second leading method of fatal injury was solid/liquid poisoning.
- Overall, firearms accounted for almost two-thirds of all fatal self-inflicted injuries.

**Figure 7. Medical History Factors among Persons with a Nonfatal Self-Inflicted Injury, Oklahoma, 2002-2004**



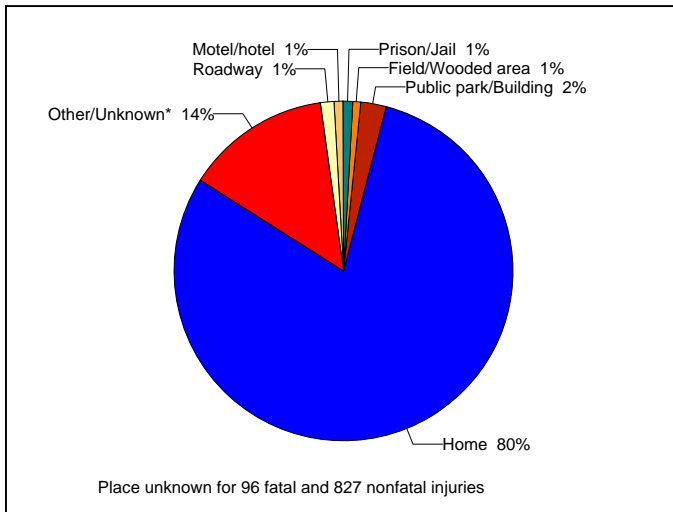
- 83% of persons with nonfatal self-inflicted injuries had a medical history of mental illness.
- 55% of persons had medication prescribed for mental illness.
- 36% of persons had received psychological/psychiatric counseling during the previous 6 months.
- A history of alcohol and drug use was reported among 28% and 33% of persons with nonfatal injuries, respectively.
- 21% of persons were suffering from a serious illness or pain.

**Figure 8. Social/Psychological History Factors among Persons with a Nonfatal Self-Inflicted Injury, Oklahoma, 2002-2004**



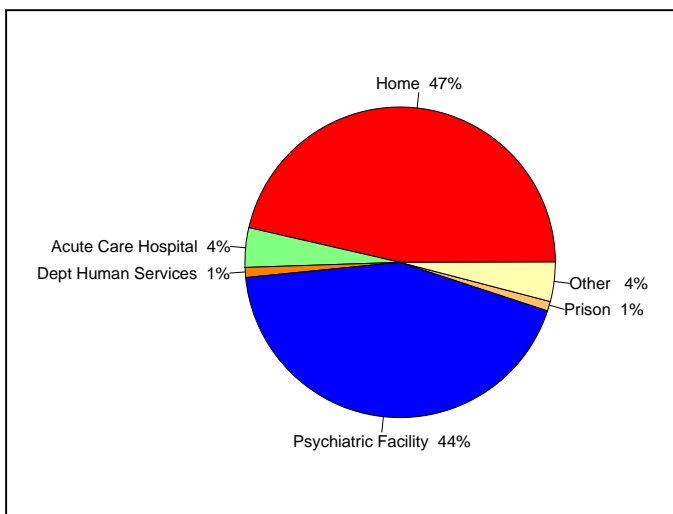
- 38% of persons had a history of nonfatal self-inflicted injury; 3% had a history of family suicide.
- Having a fight with someone close was a factor in 31% of nonfatal self-inflicted injuries.
- Financial problems or loss of a job were factors in 11% and 5% of nonfatal self-inflicted injuries, respectively.
- Loss or separation of a family member was a factor in 23% of nonfatal injuries.

**Figure 9. Place of Fatal and Nonfatal Self-Inflicted Injuries, Oklahoma, 2002-2004**



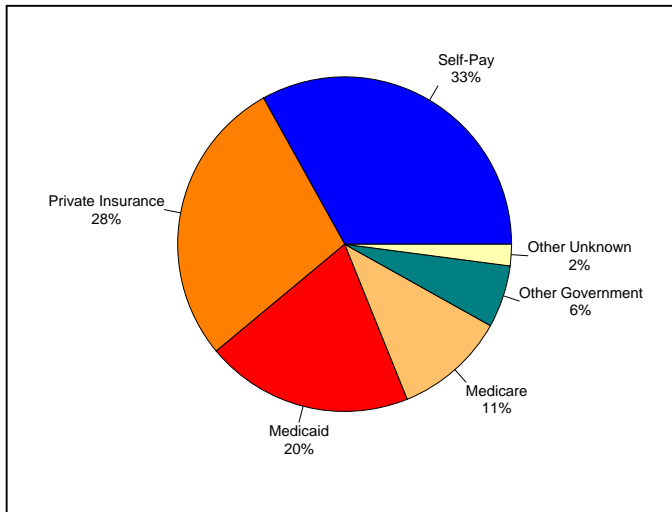
- The predominant location for fatal (80%) and nonfatal (80%) injuries was in and around the home.
- Public parks and buildings were the second leading location for self-inflicted injuries.
- The ratio of fatal to nonfatal injuries that occurred in fields and wooded areas was 5.4:1.
- The proportion of injuries for each place was similar among males and females, except for field/wooded area which was higher in males.

**Figure 10. Nonfatal Self-Inflicted Injuries by Discharge Status, Oklahoma, 2002-2004**



- Nearly half of persons with nonfatal self-inflicted injuries were discharged home and 44% were discharged to a psychiatric facility.
- Persons 65 years and older and 5-14 year olds had lower percentages of discharge to home (28% and 43% respectively).
- 4% of persons were discharged to another short-term hospital.
- 2% of persons left against medical advice; 1% were discharged to jail or prison.

**Figure 11. Primary Methods of Hospital Payment for Persons with a Nonfatal Self-Inflicted Injury, Oklahoma, 2002-2004**



- Self-pay was the predominant method of payment for nonfatal self-inflicted injuries.
- 28% of acute care stays were paid by private insurance.
- Medicaid (20%) and Medicare (11%) were the principal methods of government-funding; an additional 6% was paid by other government funds.
- Payment sources for persons discharged to home or to psychiatric facilities were similar.



**Table 4. Fatal and Nonfatal Self-Inflicted Injury Rates by County of Residence, Oklahoma, 2002-2004**

County	Average Annual Population	Number of Cases 2002-2004	Average Annual Rate
Bryan	37,301	141	126.0
Beckham	19,548	67	114.3
Ottawa	32,795	112	113.8
Kay	47,224	159	112.2
Choctaw	15,390	47	101.8
McCurtain	34,093	104	101.7
Pittsburg	44,048	133	101.0
Washington	49,104	148	100.5
Tulsa	569,754	1,715	100.3
Latimer	10,583	31	97.6
Oklahoma	676,665	1,901	93.6
Jackson	27,278	75	91.7
Muskogee	70,326	192	91.0
Pawnee	16,853	46	91.0
Pushmataha	11,714	31	88.2
Cherokee	43,781	113	86.0
Pottawatomie	66,916	172	85.7
Creek	68,712	176	85.4
Greer	5,886	14	79.3
<b>State of Oklahoma</b>	<b>3,506,074</b>	<b>8,077</b>	<b>76.8</b>
Okmulgee	39,820	90	75.3
Lincoln	32,304	73	75.3
Sequoyah	40,080	88	73.2
Roger Mills	3,227	7	72.3
Pontotoc	34,949	75	71.5
Le Flore	48,891	104	70.9
Mayes	39,007	82	70.1
Carter	46,566	96	68.7
Murray	12,675	26	68.4
McIntosh	19,829	39	65.6
Garvin	27,239	52	63.6
Adair	21,528	41	63.5
Rogers	77,189	147	63.5
Craig	14,831	28	62.9
Seminole	24,592	46	62.4
Custer	25,178	47	62.2
Grady	47,470	88	61.8
Marshall	13,708	25	60.8
Comanche	110,858	201	60.4
Stephens	42,665	76	59.4
Wagoner	61,781	110	59.3
Payne	69,490	123	59.0
Haskell	11,978	21	58.4
Kingfisher	14,063	24	56.9
Caddo	30,082	50	55.4
Harmon	3,060	5	54.5
Okfuskee	11,657	19	54.3
Hughes	14,004	22	52.4
Osage	45,195	70	51.6
Johnston	10,461	16	51.0
Kiowa	9,949	15	50.3
Harper	3,412	5	48.8
McClain	28,595	41	47.8
Canadian	93,165	133	47.6
Atoka	14,141	20	47.1
Washita	11,407	16	46.8
Woods	8,669	12	46.1
Blaine	11,410	15	43.8
Cleveland	218,681	282	43.0
Ellis	3,968	5	42.0
Noble	11,266	14	41.4
Tillman	8,869	11	41.3
Logan	35,598	44	41.2
Nowata	10,749	13	40.3
Delaware	38,569	44	38.0
Garfield	57,212	64	37.3
Beaver	5,522	6	36.2
Dewey	4,615	5	36.1
Jefferson	6,510	6	30.7
Cotton	6,517	6	30.7
Texas	20,089	18	29.9
Coal	5,964	5	27.9
Grant	4,946	4	27.0
Cimarron	2,962	2	22.5
Major	7,441	5	22.4
Love	8,993	6	22.2
Woodward	18,624	10	17.9
Alfalfa	5,883	2	11.3

\*Average annual rates per 100,000 population were computed using bridged-race population estimates summed for 3 years of data.

County of residence unknown for 35 persons.