



## *Summary of Reportable Injuries in Oklahoma*

### *Intimate Partner Violence Injuries in Oklahoma*

Sheryll Brown, M.P.H.  
Epidemiologist  
Injury Prevention Service  
Oklahoma State Department of Health

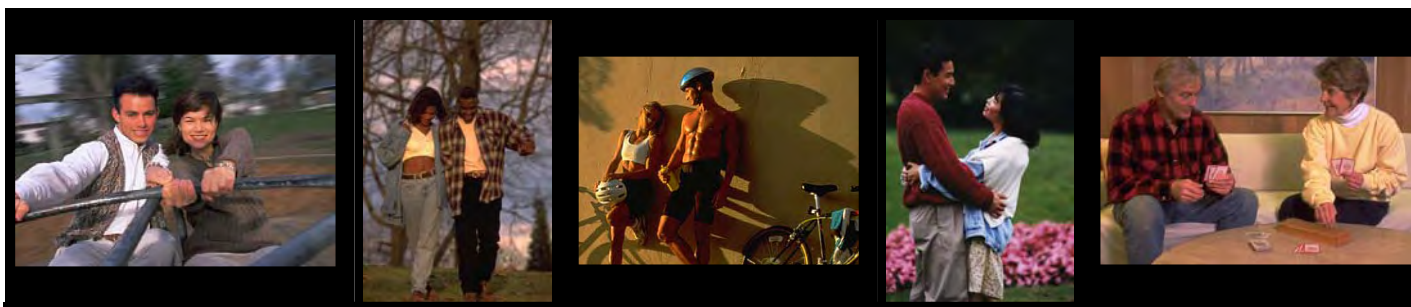
Shelli Stephens-Stidham  
Chief, Injury Prevention Service

Pam Archer, M.P.H.  
Deputy Chief, Injury Prevention Service

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For more information or copies of summary reports on other injuries, please contact:

Injury Prevention Service  
Oklahoma State Department of Health  
1000 N.E. 10<sup>th</sup> Street • Oklahoma City, Oklahoma 73117-1299 • (405) 271-3430  
[www.health.state.ok.us/program/injury/index.html](http://www.health.state.ok.us/program/injury/index.html)



# *Intimate Partner Violence Injuries in Oklahoma*

## **Background**

Intimate partner violence (IPV) injuries became a reportable condition for special study in January 2000. The Oklahoma State Department of Health (OSDH) collected hospital and medical examiner's data on fatal and nonfatal IPV injuries in the Oklahoma City Metropolitan Statistical Area (OCMSA) from July 1, 2000 – December 31, 2001. The results of IPV injury surveillance in the OCMSA were previously reported in *The Summary of Reportable Injuries, Intimate Partner Violence Injuries, 2002*.

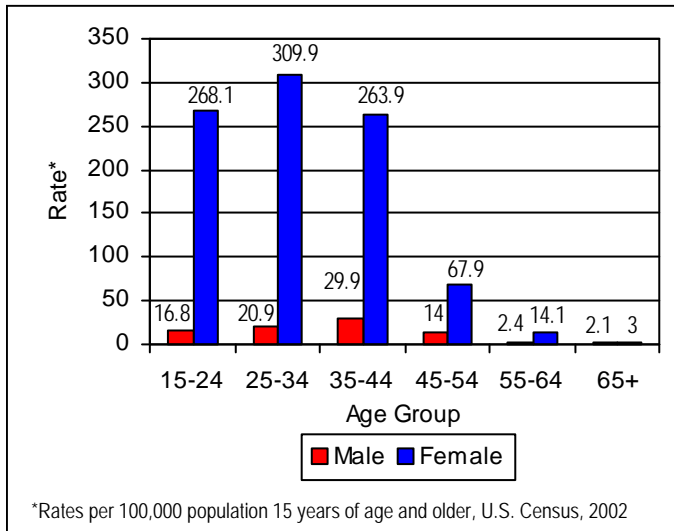
In January 2002, IPV injury surveillance was expanded statewide. Data was collected from inpatient medical records and emergency department (ED) outpatient records for persons 15 years of age and older treated for IPV injuries. Data on *female hospitalizations* for IPV injuries was collected in all hospitals in the state, and data on statewide ED treatments for both *males and females* was collected in a random sample of hospital EDs. Cases of IPV injuries were identified by reviewing all medical records for assaults. Intimate partner violence injuries were defined as injuries inflicted by an intimate partner resulting in death or treatment at a hospital. Intimate partners included current and former marital and non-marital partners, dating partners, and same sex partners. Weighted population estimates were derived from the ED sample using hospital bed size and the total number of annual ED admissions reported by hospitals.<sup>1</sup> Statewide data on fatal IPV was collected through the Office of the Chief Medical Examiner. All state rates were calculated using U.S. Census bridged-race population estimates for 2002, and all OCMSA rates were calculated using the 2000 U.S. Census population. Supplemental information was collected from police reports and newspapers.

The past-year prevalence of IPV, frequency of injury, and services utilized among women 18-44 years of age was determined through the *Women's Health Survey*, a statewide random digit telephone survey that was conducted from 2001–2003.

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<sup>1</sup> Hospitals were the primary sampling units and were randomly selected within strata defined by hospital size (large:  $\geq 100$  beds and small:  $\leq 99$  beds). Data used within each sampled hospital included emergency department utilization data (annual number of ED visits per hospital as reported in the state utilization survey) and the number of emergency department visits due to intimate partner injury. The number of intimate partner injuries and 95% confidence intervals were calculated for each hospital and weighted according to the sample design using PROC SURVEYMEANS in SAS.

**Figure 1. Age- and Gender-Specific Rates of Nonfatal IPV Injuries Treated and Released in EDs, Oklahoma, 2002**

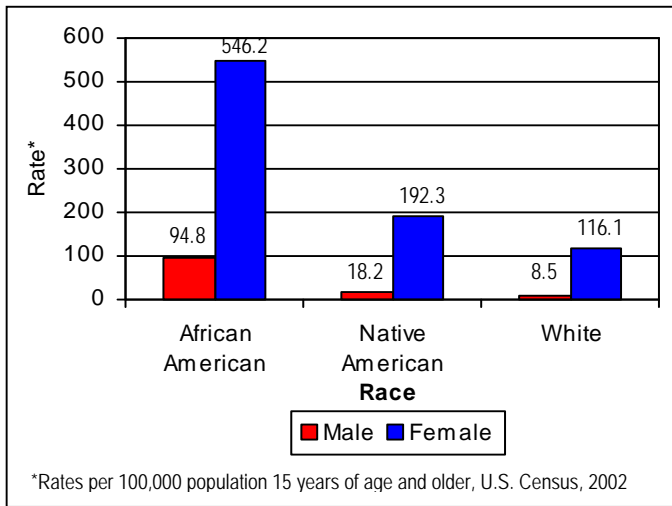


- An estimated 2,457 persons (88.6 per 100,000 population 15 years of age and older) were treated and released from Oklahoma hospital emergency departments for nonfatal IPV injuries during 2002.
- 91% of persons treated were female, with a mean age of 32 years (range of 16 to 66 years), and 9% were male, with a mean age of 36 years (range of 18 to 68 years).
- An additional 81 women (5.7 per 100,000 women 15 years of age and older) were hospitalized with IPV injuries.

The average length of hospitalization was 4 days (range 1-54 days). Two women died within one day following admission.

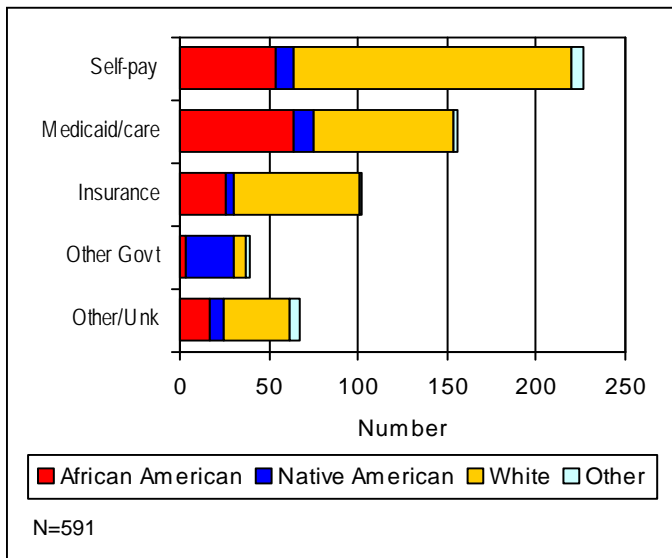
- The vast majority of women treated for IPV injuries in hospitals were 18-44 years of age (78% of women hospitalized and 90% of women treated and released in EDs).
- Over half (54%) of patients treated and released in EDs were single, 29% were married, 14% were divorced or separated, <1% were widowed. The marital status was unknown for 4% of patients.
- The IPV injury rate among females was more than 10 times higher than the rate for males (157.8 and 15.6, respectively).
  - Among females, IPV injury rates peaked at 25-34 years of age (309.9), and declined by 78% after age 44.
  - Among males, IPV injury rates peaked at 35-44 years of age (29.9) and declined by 92% after age 54.

**Figure 2. Race- and Gender-Specific Rates of Nonfatal IPV Injuries Treated and Released in EDs, Oklahoma, 2002**



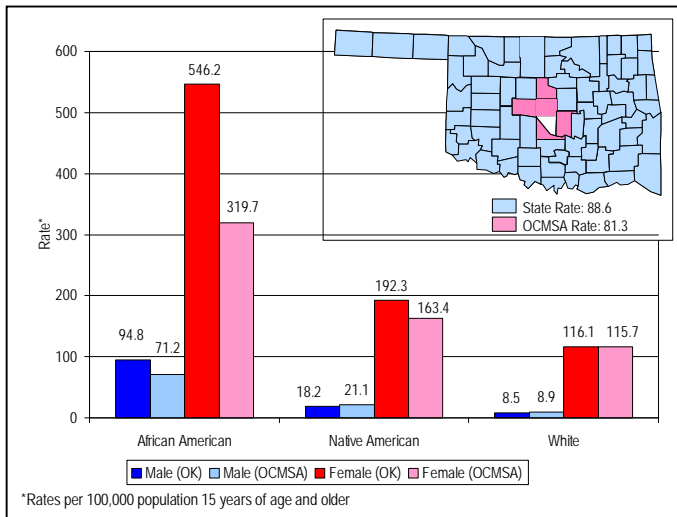
- The highest rate of IPV injury was among African Americans (327.1), followed by Native Americans (107.9), and whites (63.6).
- Non-Hispanics had higher rates of IPV injury compared with Hispanics (90.1 and 59.6, respectively).
- The rate among African American females (546.2) was 2.8 times higher than the rate for Native American females (192.3) and 4.7 times higher than the rate for white females (116.4).
- The rate among African American males (94.8) was over five times higher than the rate for Native American males (18.2) and almost 12 times higher than the rate for white males (8.5).

**Figure 3. Payer Status by Race, IPV Injuries Treated and Released in EDs, Oklahoma, 2002**



- 38% of patients treated for IPV injuries in EDs did not have any form of health insurance (self-pay); 26% of patients were covered by Medicaid/care (<1% of patients had Medicare), 17% had private insurance, 7% had other government health insurance, and for 11% of patients the payer status was not known.
- Payer status differed across racial groups. The proportion of white patients without insurance (self-pay) (45%) was higher than African Americans (33%) or Native Americans (17%), and the proportion of African American patients covered by Medicaid/care (39%) was higher than whites (23%) or Native Americans (11%). The proportion of Native Americans patients with other government health insurance (45%) was higher than whites (2%) or African Americans (2%).

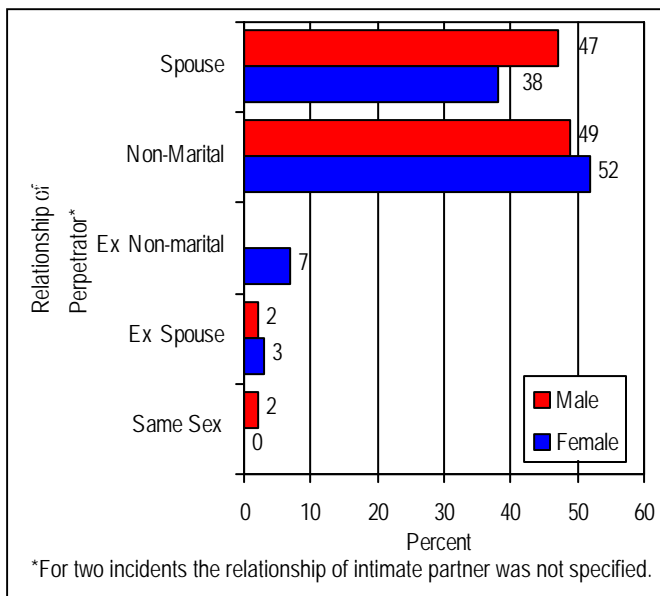
**Figure 4. Comparison of State and OCMSA Rates of IPV Injuries Treated and Released in EDs, 2002**



- The overall nonfatal IPV injury rate for the state (2002) and the OCMSA (July 2000 – December 2001) were similar: 88.6 and 81.3, respectively.
- Gender-specific rates of nonfatal IPV injuries were also similar for the state and the OCMSA.
  - Among females the rate of nonfatal IPV injury was 157.8 for the state and 142.5 for the OCMSA.
  - Among males the rate of nonfatal IPV injury was 15.6 for the state, and 16.1 for the OCMSA.

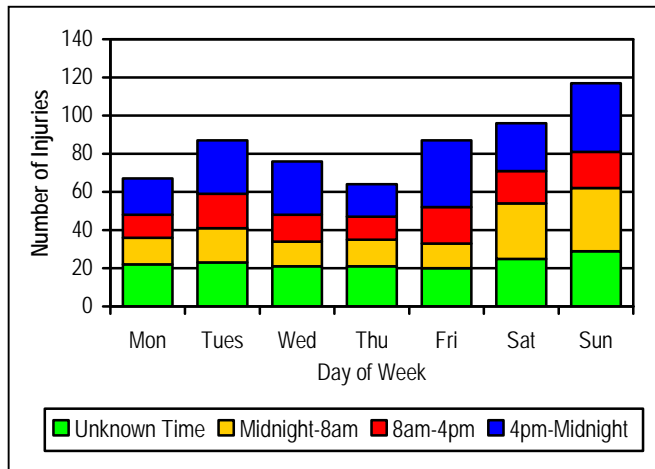
- The state IPV injury rates for both African American males and females were higher than OCMSA rates: among females, 1.7 times higher (546.2 and 319.7, respectively); and among males, 1.3 times higher (94.8 and 71.2, respectively).

**Figure 5. Perpetrator of IPV Assaults Treated and Released in EDs by Patient Gender, Oklahoma, 2002**



- The perpetrator of the IPV assault was a current partner (spouse or non-marital partner) for 90% of females and 98% of males.
  - Former partners were perpetrators in 10% of female and 2% of male IPV cases.
- Same-sex partners were perpetrators in 2% of male IPV cases and <1% of female IPV cases.
- The perpetrator was a non-marital partner more often than a marital partner, 59% and 41%, respectively, whether a current or former partner.

**Figure 6. Nonfatal IPV Injuries by Day of Week and Time of Injury, Oklahoma, 2002**



- The majority of IPV injuries occurred in the evening hours and on weekends.
- Over half (51%) of all IPV cases occurred on a Friday, Saturday, or Sunday.
- 43% of injuries with a known time occurred between the hours of 4 p.m. and midnight, 31% of injuries occurred between midnight and 8 a.m., and 26% of injuries occurred between 8 a.m. and 4 p.m.

**Table 1. Types of IPV Injuries Treated in Hospitals, Oklahoma, 2002**

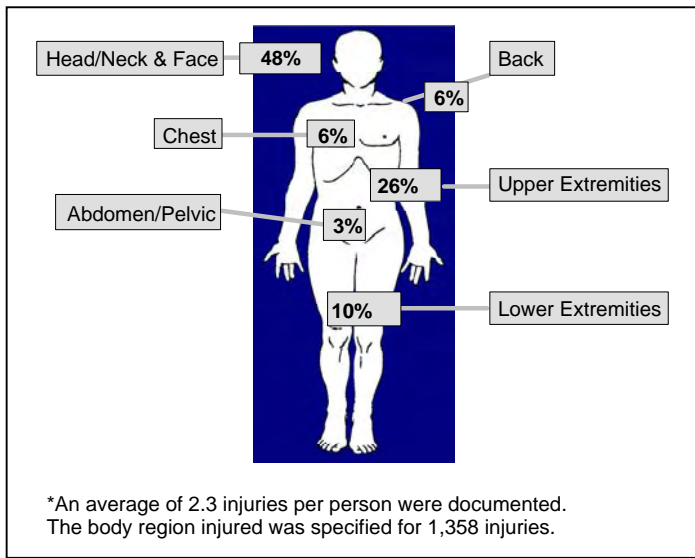
Type of Injury	Hospitalized Females (n=81)	Males and Females Treated in EDs (n=594)
Soft tissue*	57 (70%)	498 (83%)
Strain/sprain	4 (5%)	94 (16%)
Fractures/dislocations	17 (21%)	58 (10%)
Brain	14 (17%)	44 (7%)
Eye injury	0	8 (1%)
Gunshot wound	5 (6%)	0
Internal injuries	4 (5%)	0
Stab wound	3 (4%)	7 (1%)
Other injuries	2 (2%)**	11 (2%***)

Note: Percents add to more than 100% because individuals sustained multiple types of injuries.  
 \*Includes bruises, scrapes, and cuts.  
 \*\*Other injuries included burn (1) and sexual assault (1).  
 \*\*\*Other injuries included sexual assault (4), dental injuries (3), hearing injuries (2), burn (1), and spinal cord injury (1).

- The most common types of injuries were bruises, scrapes, and cuts, followed by strains/sprains, fractures and dislocations, and brain injuries.
- Hospitalized females sustained fractures/dislocations, brain injuries, gunshot wounds, and internal injuries more often than persons treated and released in EDs.
- Among persons treated and released in EDs for IPV injuries, blunt trauma was a mechanism of injury in 72% of cases, followed by being kicked (13%), choked or strangled (9%), stabbed or penetrating trauma (6%), and other mechanisms (8%).

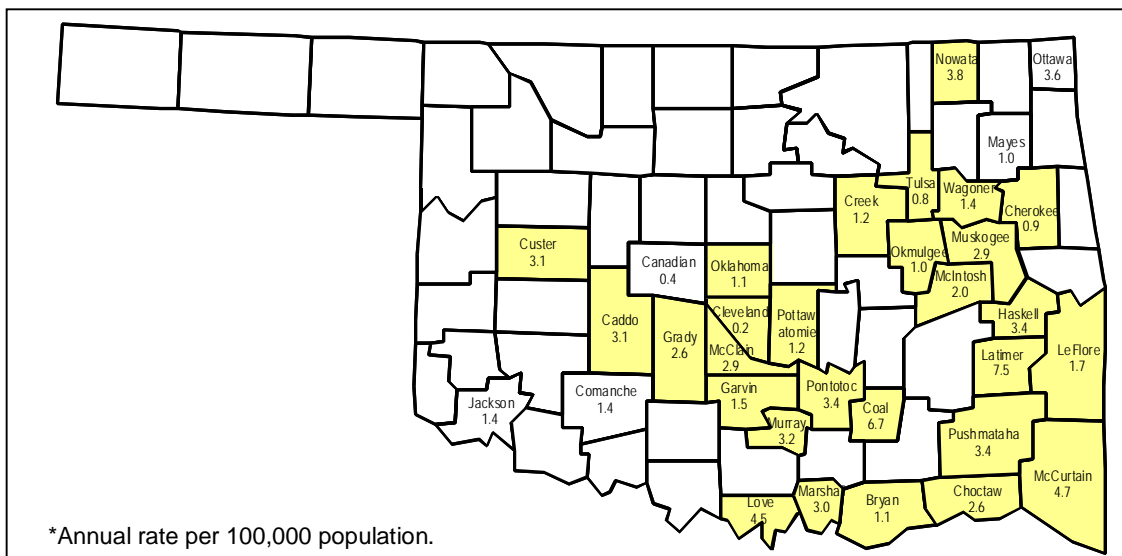
- Weapons were used in 20% of the incidents and the use of weapons was documented more often in male cases of IPV injuries than in female cases of IPV injuries (82% and 13%, respectively). There were no differences in the use of weapons across racial groups.
- The types of weapons used included knives or sharp instruments (27%), household items (26%), club-like objects including baseball bats, clubs, or sticks (10%), bottles (7%), guns (4%), tools (3%), and other objects (23%).
- Weapons were used in 29% of the incidents resulting in hospitalization. The types of weapons used included guns (21%), knives or sharp instruments (17%), baseball bats or boards (17%), tools (17%), household items (13%), cars (8%), and other objects (8%).

**Figure 7. Body Region of IPV Injuries Treated and Released in EDs,\* Oklahoma, 2002**



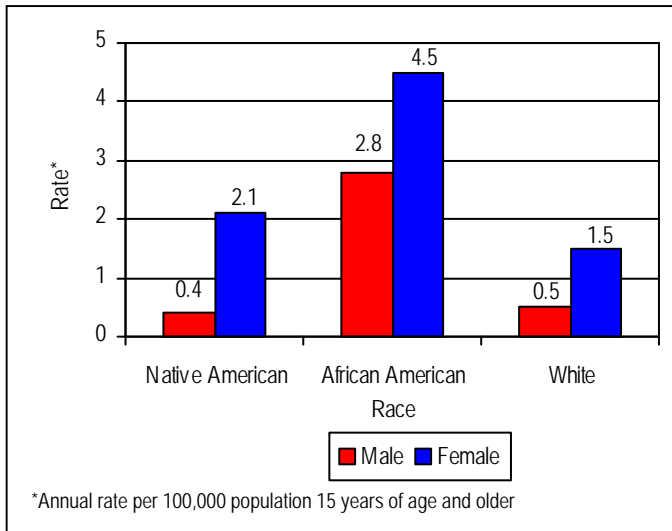
- Nonfatal injuries were most commonly on the head, neck, and face, followed by the upper extremities.
  - 51% of cuts and scrapes, and 46% of bruises documented were to the head, neck, or face.
  - Almost half (47%) of all fractures/dislocations were to the face and 42% were to the upper extremities.
  - Neck and upper extremity strains were the most common type of strain/sprain (37% each) followed by lower extremity and back strains (13% each).

**Figure 8. IPV Death Rates\* by County of Residence, Oklahoma, July 1, 2000 – December 31, 2002**



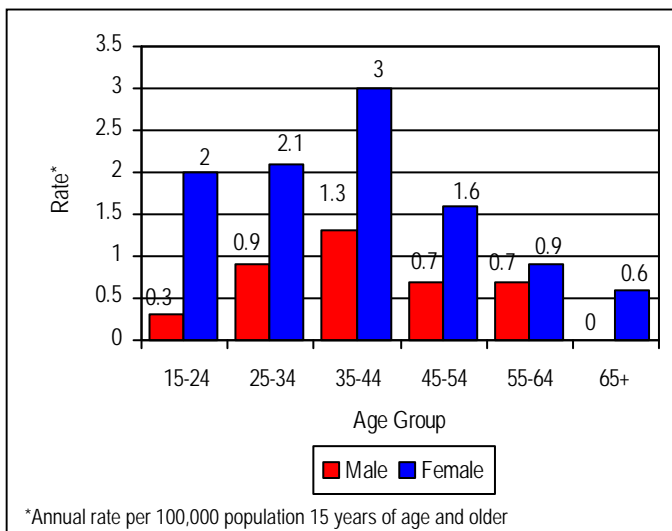
- 84 IPV deaths were identified statewide (annual average = 34 deaths, annual rate = 1.0 per 100,000 population).
- 42 (50%) persons who died were residents of Metropolitan Statistical Area counties including 30 (35%) residents of Oklahoma and Tulsa counties alone.
- 25% (21/84) of the IPV deaths were homicide-suicide incidents. In four of the homicide-suicide incidents, other people were also killed in the incident including 3 children, a mother, another girlfriend, and a friend. The perpetrator in all but one of these incidents was male.
- 45 (54%) deaths were firearm-related and 39 (46%) were non-firearm-related. Females and males were equally likely to die in a firearm event.
- In two (2%) of the deaths, males were killed by a current or former same-sex partner. There were no females killed by a same-sex partner.

**Figure 9. IPV Death Rates by Race and Gender, Oklahoma, July 1, 2000 – December 31, 2002**



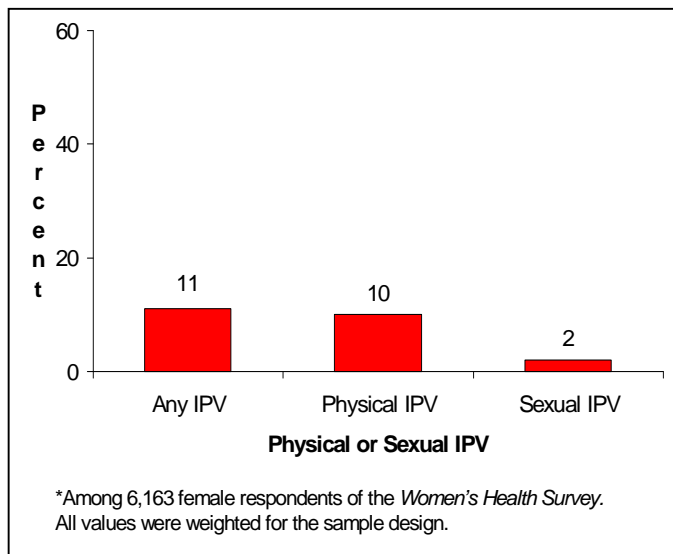
- 74% of victims were female and 26% were male.
  - Three (5%) of the female victims were pregnant.
- The IPV death rate among females was 2.4 times higher than among males.
- The IPV death rate among African Americans (3.6) was 3 times higher than the rate among Native Americans (1.2), and 3.6 times higher than the rate among whites (1.0).

**Figure 10. IPV Death Rates by Age and Gender, Oklahoma, July 1, 2000 – December 31, 2002**



- The mean age of persons who died was 39 years of age; ages ranged from 16-74 years of age. IPV death rates peaked from ages 35 through 44 years for both males and females.
- 52% of the IPV deaths were caused by gunshot wounds, 20% by stabbing or cutting, 8% by blunt trauma, 6% by strangulation, 5% by multiple injuries, and 8% by other causes.
  - Other causes of death included smoke inhalation (1), acute subdural hematoma and other intracranial hemorrhages (3), carbon monoxide intoxication (1), and undetermined causes (2).

**Figure 11. Past-Year Prevalence of Physical/Sexual IPV, Women's Health Survey, Oklahoma, 2001 – 2003\***



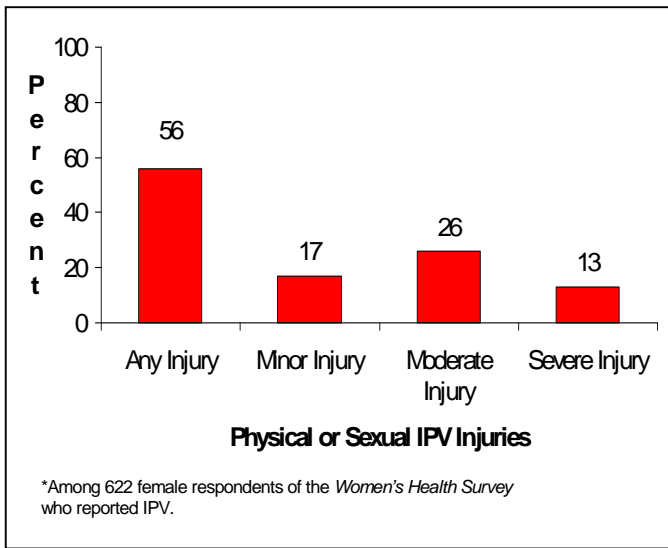
- Only women, 18-44 years of age, who were married or had been in a romantic relationship or on a date with anyone in the past 12 months were surveyed.
  - The average age of respondents was 32 years.
  - 69% were legally married, 26% were single or cohabitating, and 5% were divorced or separated.
  - 75% were white, 9% Native American, 7% Hispanic, 6% African American, and 3% were mixed or other race.
- IPV was defined as threats or acts of physical or sexual violence; 11% of women reported physical and/or sexual IPV in the past year.

**Table 2. Past-Year Prevalence of IPV by Selected Sociodemographic Characteristics, Women's Health Survey, Oklahoma, 2001 – 2003**

Sociodemographic Characteristics	Percent Reporting IPV*
<b>Age (yrs)</b>	
18-24	17%
25-34	11%
35-44	7%
<b>Race</b>	
White	9%
Native American	16%
African American/Black	13%
Hispanic	12%
Mixed	21%
Other	14%
<b>Marital Status</b>	
Married	7%
Cohabiting, not married	15%
Non-live in partner	12%
Divorced	18%
Separated	49%
Single	24%
<b>Federal Poverty Level</b>	
<100%	16%
100-300%	10%
>300%	8%
<b>Education</b>	
< High school graduate	20%
High school graduate/GED	11%
Some college courses	10%
College degree	6%
<b>Employment</b>	
Employed full-time	10%
Employed part-time	9%
Employed intermittently	16%
Unemployed	20%
Homemaker	9%
Disabled	27%
Fulltime Student	12%
*Sample included 6,163 female respondents to the Women's Health Survey. All values were weighted for the sample design.	

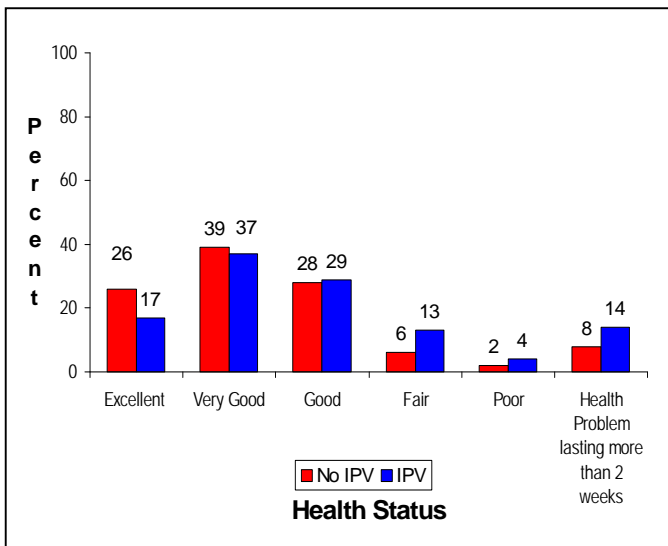
- 73% of the women who reported experiencing IPV had children less than 17 years of age living in the household, 25% received food stamps, 6% received Temporary Assistance to Needy Families, and 27% were living below the federal poverty level (In 2001, the federal poverty level was \$17,650 for a family of four).
- Younger women (18-24 years of age) reported IPV more often than women 25-44 years of age.
- Past-year IPV rates were highest among the following sociodemographic groups:
  - Women who were separated (49%) or single (24%)
  - Disabled (27%) or unemployed (20%)
  - Mixed race (21%), and
  - Had less than a high school education (20%)

**Figure 12. Past-Year Prevalence of Injury Among Women Reporting IPV, Women's Health Survey, Oklahoma, 2001-2003\***



- Over half (56%) of the women who reported IPV in the past year said they had been injured at least once by their partner in the past year; 17% reported minor injuries, 26% reported moderate injuries, and 13% reported severe injuries.
- Among women who reported IPV in the past year, 44% reported scrapes, bruises, or cuts; 36% reported sore muscles, sprains, or strains; 26% reported severe bruising, 14% a black eye, 18% bloody lip or welts on face, 7% reported being knocked unconscious or passing out, and 5% fractured bones or broken nose.

**Figure 13. General Health Status by Presence or Absence of IPV in the Past Year, Women's Health Survey, Oklahoma, 2001-2003**



- Overall, the majority of all women surveyed reported their general health as good, very good, or excellent (92% of women reporting no IPV and 83% of women reporting IPV).
  - Women who experienced past-year IPV reported their health status as fair or poor more than twice as often as women with no IPV in the past year, 17% and 8% respectively.
  - Women who had not experienced IPV in the past year reported their health status as excellent 1.5 times more often than women who had experienced past-year IPV, 26% and 17%, respectively.

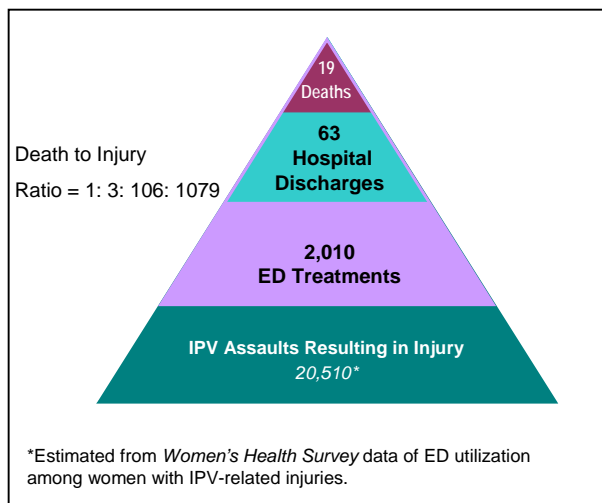
**Table 3. Medical Services Utilization among Women Reporting IPV Injury, Women’s Health Survey, Oklahoma, 2001-2003**

Medical Service	Percent
Needed medical, never received	13
Needed medical, sometimes received	12
Needed medical care, always received	6
Emergency department	10
Admitted overnight to hospital	2
Private doctor or dentist office	11
Urgent care clinic	6
Ambulance or paramedic care	3
*Among women reporting IPV injury (n=330). Values weighted for sampling design.	

- Women who reported injuries resulting from IPV were asked about their use of medical services.
  - 13% reported that in the past year they needed medical care for injuries caused by a partner, but did not seek medical attention; 12% needed care and sometimes received medical care, and 6% needed care and always received medical care for IPV injuries.

- 10% of injured women were treated in an emergency department, 2% were hospitalized overnight, and 3% received ambulance or paramedic care
- 35% of 61 respondents queried reported that a health care provider had asked them about domestic violence some, most, or all of the time when treated for IPV injuries; 65% had never been asked about domestic violence by a health care provider when treated for IPV injuries.

**Figure 14. The Burden of IPV Injury, Women 18-44 Years of Age, Oklahoma, 2002**



- IPV injury surveillance data demonstrates that in Oklahoma for every IPV death among women of childbearing age, three women are hospitalized, 106 women are treated in an emergency department, and 1,079 women are injured by an intimate partner assault. (These estimates are based on available data; however, IPV injuries are likely underreported.)
- The estimated cost of emergency department treatment and hospitalization for IPV assaults among women of childbearing age is \$1.2 million annually. (This estimate is based on an average cost of \$346 for an emergency department visit and \$2,519/day for inpatient hospital stay. Source: *The Cost of Intimate Partner Violence*, Centers for Disease Control and Prevention, 2003).