Violence Data Brief
Intimate Partner Violence 1998-2003

Background

Intimate partner violence (IPV) is a serious public health problem that can result in physical injury and also leads to other health and social problems. One in four women in the U.S. and one in fourteen men report experiencing physical or sexual violence by an intimate partner. [1,2,3] Yet it is difficult to get local data to describe the problem.

This data brief presents information on hospital-treated (inpatient and emergency department) injuries due to IPV. The data presented in this brief represent a fraction of victims as not all cases of IPV result in an injury, and victims often do not seek hospital treatment when injured.[4]

This data brief provides more detailed and current information on hospital-treated IPV compared to an earlier data brief (Violence Data Brief Intimate Partner Violence 1998-2001, No. 1 November 2002 www.health.state.mn.us/injury). Readers are advised and strongly encouraged to use this updated version for reference and disregard the earlier version.

Numbers and Rates

Hospital data from 1998 to 2003 indicate that at least 6,234 Minnesota residents received hospital treatment for IPV-related injuries. The crude IPV injury rate (per 100,000) was 25.2. The rate after adjusting for age was 25.5. There did not appear to be a change in trend of hospital-treated IPV injuries from 1998 to 2003.

An examination of medical records between 2000 and 2003 suggest that only half of IPV-related injuries were identified as such. Insufficient documentation by the healthcare provider or inaccurate explanation by the victim may be reasons cases were not fully detected.

Age and gender

Nearly all victims (96 percent) were female. Overall, the crude IPV incidence rate was about 20 times higher in females (48.9) than in males (2.6). In addition, there was a statistically significant difference in the average age of male (35.7 years) and female (31.7 years) victims. Among females, the peak incidence of IPV occurred between ages 20 and 24 and incidence diminished gradually with increasing age (**figure 1**). Among males, the peak incidence seemed to occur between ages 30 and 34.

Highlights…

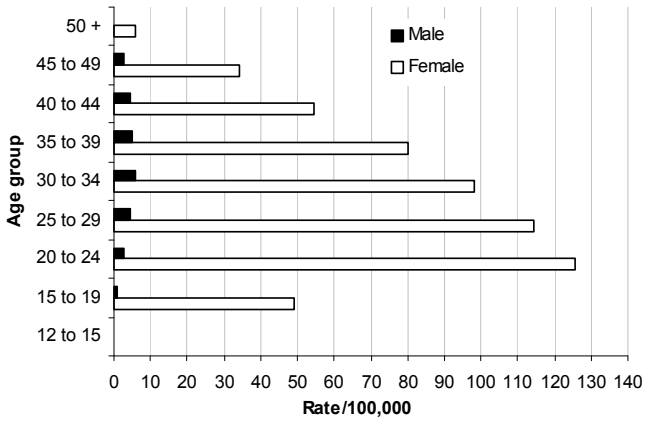
- At least, 6,234 Minnesota residents aged 12 and older were victims of IPV from 1998 through 2003. An average of about 1,039 cases per year
- IPV rate was about 20 times higher in females than those in males
- Peak incidence of IPV occurred between ages 20 and 24 in females, and between ages 30 and 34 in males
- The total hospital charge for IPV-related injury was $2,673,098 from 1999 through 2002.

Definitions:

Intimate partner violence (IPV) is defined as a physical or sexual assault by an intimate partner.

An intimate partner is a current or former spouse, boyfriend, girlfriend, or date. Same sex partners are included. Victims had to be 12 years of age or older and a Minnesota resident

Figure1: IPV age-specific rates by gender, Minnesota 1998-2003



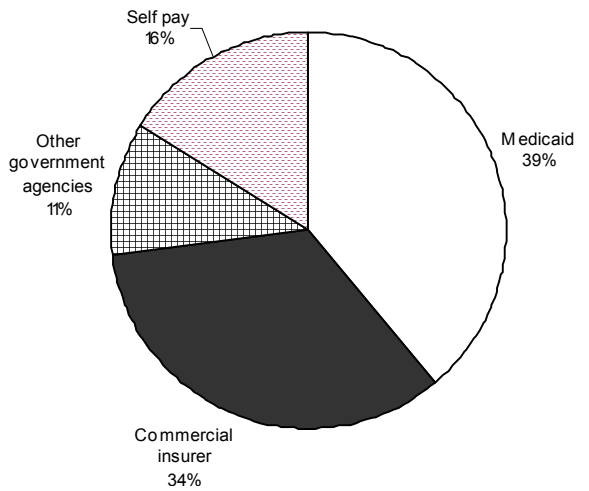
Residence
Victims of hospital-treated IPV injury were concentrated (70 percent) in the seven county metropolitan area[5] of the state. The annualized IPV rate was 23.1 in the 7-county
metro versus 10.6 in the other non-metro counties.

Medical treatment and hospital charges
The majority (96 percent) of IPV victims received outpatient care for their injuries.[6] About two-thirds (61 percent) of the incidents involved an unspecified injury. The most common types of injury were contusions and superficial injuries, which were sustained in 64 percent of the incidents. Other most frequent injuries were: open wound (21 percent), sprains and strains (11 percent), fractures (9 percent), and internal injuries (4 percent).

About one third (35 percent) of injuries were located on head and neck, 20 percent on the extremities, seven percent on the torso, 3 percent on the spine/back and 35 percent were not classified by location. When the mechanisms of injury were indicated in the medical records, the majority were listed as "choking", "pushing", "kicking", and "struck with fists". The use of a weapon of any kind was not common.

The median hospital charges were $394 and $6,719 for emergency department and inpatient consultations, respectively. These were paid for by Medicaid (39 percent); commercial health insurers (34 percent); other government agencies such Medicare, Champus-military, Worker's Comp, General Assistance Medical Care (11 percent); and 16 percent were self–pay **(figure 2)**.

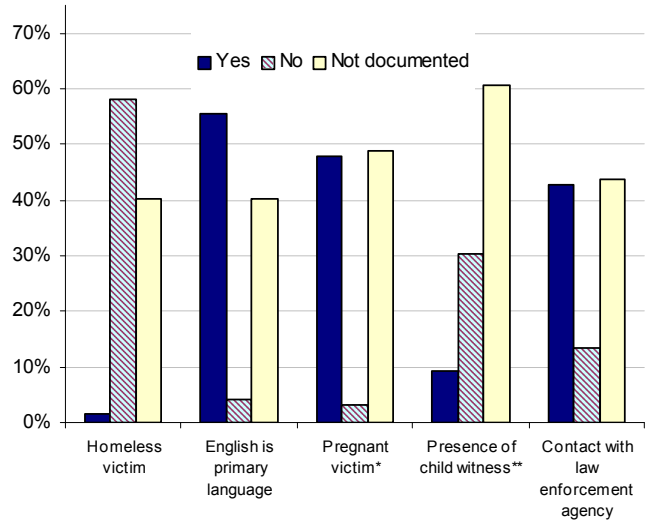
Figure 2. Health insurance status of hospital treated IPV victims, Minnesota 1998-2003



Perpetrator information[7]
There was a single perpetrator in 97 percent of cases where this information was available. Males were also indicated as the perpetrators in the majority of these cases. One quarter of victims had been abused by the same perpetrator in the past. About 28 percent of victims were cohabitating with the perpetrator at the time of the incident. There was documentation of suspected alcohol/drug use by 82 percent of perpetrators.

Additional information on victims of hospital-treated IPV injuries is presented in **figure 3.**

Figure 3. Additional information[1] on intimate partner violence, Minnesota 2001



[1] The information presented in this chart was generated from abstracted medical records of IPV victims (n=1,491) during 2001
* Based on 1,432 female victims
** Any person age 18 or under that witnessed the assault

Fatalities[8]
Additional information on deaths resulting from IPV is provided to lend more insight into scope and burden of IPV in Minnesota. Between 1999 and 2003, 117 MN residents were victims of an intimate partner homicide. The majority of victims were female (86 percent). Thirty-five of the deaths were part of a murder-suicide.[9] A firearm was used to kill 44 percent of victims; other common mechanisms used were sharp force, blunt force, and choking.

Resources for victims
Victims or anyone with concerns are encouraged to seek assistance or referral from the Minnesota 24-Hour Domestic Violence Crisis Line (1-866-233-1111). Or RAINN, a national sexual abuse hotline that automatically refers to local program by caller's area code (1-800-656-4673).

Methodology
Data presented in this data brief were generated from hospital discharge records provided by Minnesota Hospital Association (MHA). While the majority of hospitals were included in these data, not all hospitals submit data to MHA. These data originated from about 90 percent of Minnesota hospitals and represent about 95percent of hospital discharges.

Victims of IPV were identified using the two ICD-9 codes[10] (E967.3 and N995.81) documented in the hospital discharge records. The data presented in an earlier IPV data brief were generated using one code, E967.3.

Summary
The data presented in this report are intended to provide more insight into the public health scope and burden of IPV. Counts of victims presented are mere estimates; not every case of IPV results in an injury, and not all injured victims seek hospital treatment. It is also likely that additional cases were missed because health care providers did not use the appropriate ICD codes, or victims did not truthfully indicate the cause of their injury.

Endnotes

1. Tjaden P, Thoennes N. Full Report of the Prevalence, Incidence, and Consequences of Intimate Partner Violence Against Women: Findings from the National Violence Against Women Survey. Report for grant 93-IJ-CX-0012, funded by the National Institute of Justice and the Centers for Disease Control and Prevention. Washington (DC): NIJ; 2000.

2. McCaw, B., Berman, W., Syme, L., Hunkeler, E. Beyon Screening for Domestic Violence, A Systems Model Approach for a Managed Care Setting. American Journal of Preventative Medicine 2001; 21(3):170-6.

3. Nelson, H., Nygren, P., McInerney, Y., Klein, J. Screening Women and Elderly Adults for Family and Intimate Partner Violence: A Review of the Evidence for U.S. Preventive Services Task Force. Annals of Internal Medicine 2004; 140(5):387-96.

4. Adeniyi A, Seifert S, Holmes R, Hagel D, Roesler J. Self-Reported Intimate Partner and Sexual Violence in Minnesota 1998-2001. Produced by the Minnesota Department of Health Injury and Violence Prevention Unit, St. Paul, Minnesota. (January 2004) Available at: http://www.health.state.mn.us/injury/pub/index.cfm

5. Seven county metro. area: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington counties.

6. These injuries were not mutually exclusive; so the percentage sum is greater than 100%.

7. This information was generated from abstracted medical records of victims during 2001, n=1491.

8. Mortality data were collected through death certificates, Supplemental Homicide Reports, newspaper stories, Medical Examiner reports, and the Femicide Report (an account of women murdered in Minnesota, created by the Minnesota Coalition for Battered Women).

9. Murder-suicide refers to a situation where an individual suicides within 24 hours after killing their partner.

10. ICD-9 codes: E967.3 (abuse of spouse or partner by an intimate partner) and/or N995.81 (adult physical abuse) for any ED-treated female.

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