



## **Differences between Stranger and Known Assailant Sexual Assaults**

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Using Medical Provider Data to Describe and Compare the Nature and Context of Sexual Crime Perpetrated by Strangers and Known Assailants

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## Highlights

Analyses were conducted on victims of stranger assailants and victims of known assailants in the Provider Sexual Crime Report (PSCR) dataset. This report presents a comparison of findings on the nature and context of sexual assaults committed by stranger assailants only versus sexual assaults committed by known assailants only. The following are highlights of these findings:

- There were 7,096 cases of sexual assault where a victim identified his/her assailant(s) as either a stranger or known assailant starting from the beginning of the PSCR inception (approximately January 2000) through the first 6 months of 2008.
- Of the total cases, 2,082 represent individual cases of sexual assault perpetrated by a stranger(s) and 5,014 represent individual cases of sexual assault perpetrated by a known assailant(s).
- In 50% of cases where the victim was assaulted by a known assailant, the assailant was an acquaintance.
- The average age of victims with known assailants was 3 years younger than the average age of victims of stranger assaults (23 years old versus 26 years old, respectively).
- While all victims were more likely to be victimized by someone known to them, stranger assaults became more common as victim age increased.
- The majority of both stranger and known assaults involved only one assailant per incident (76% of stranger assaults, 91% of known assaults). However, stranger assaults were more likely than known assaults to involve two or more assailants (24% versus 9%, respectively).
- Overall, force was used more frequently by strangers than by known assailants (89% versus 77%, respectively).
- Victims were more likely to receive injuries resulting in bleeding if their assailant was a stranger versus someone known to them (25% versus 20%, respectively).
- Nearly 75% of all victims reported their assault to the police; victims of stranger assaults reported the assault to the police in 80% of cases while victims with known assailants reported their assault to the police 72% of the time.
- Victims indicated their assailant(s) wore a condom in only 13% of cases of stranger assaults and only 12% of known assaults.

## Introduction

Sexual assault is a serious, pervasive social issue. The Federal Bureau of Investigation (FBI) produces an annual publication “Crime in the United States” that compiles volume and rates of crime offenses for the nation. According to “Crime in the United States, 2007”, 90,427 forcible rapes were reported to the police at a rate of 30 crimes per 100,000 residents.<sup>1</sup> It is important to note, however, these statistics only reflect crimes where the victim reported the assault to the police and therefore significantly underestimate sexual assault by excluding crimes that are not reported to the police.

Victimization surveys, such as the Bureau of Justice Statistics’ (BJS) National Crime Victimization Survey (NCVS) and the National Violence Against Women Study (NVAWS) track sexual victimization through random, representative, and confidential samples. Victimization surveys may offer more accurate representations of the prevalence of sexual assault as they often include whether the respondent had been raped or assaulted during the survey period or during their lifetime, regardless of whether or not the crime was reported to the police. Data from the Bureau of Justice Statistics’ (BJS) National Crime Victimization Survey (NCVS) found that in 2006 there were 272,350 victims of sexual assault, a rate of 1.1 per 1,000 age 12 or older or per 1,000 households.<sup>2</sup> A National Institute of Justice (NIJ) report summarizing results from the NVAWS survey estimated that more than 300,000 women and almost 93,000 men are raped in a single year.<sup>3</sup>

And yet, despite increased media coverage and considerable progress in relevant research on sexual assault, gaps still exist in the overall understanding of sexual crime. The image of the rapist as a masked stranger prevails. Unfortunately, the reality is far more concerning. Substantial research on sexual victimization overwhelmingly indicates that victims are most likely to be sexually assaulted by someone they know versus a stranger. Of those victims who responded to the NCVS and indicated that they had been sexually assaulted, both males and females were more likely to be victimized by an offender they previously knew (70% of females and 50% of males were victimized by a nonstranger). Statistics from the NVAWS further confirm this finding; only 17% of all female victims and 23% of all male victims who responded to the survey were raped by a stranger. Furthermore, a report studying the prevalence and characteristics of sexual violence victimization using a nationally representative survey found that in the first rape experience, male victims indicated they knew their perpetrator in nearly 84% of cases and female victims knew their perpetrator in approximately 74% of cases.<sup>4</sup>

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<sup>1</sup> Federal Bureau of Investigation. (2008). *Crime in the United States, 2007*. Washington, DC: US Department of Justice.

<sup>2</sup> Bureau of Justice Statistics. (2007). *Criminal Victimization, 2006*. Washington, DC: US Department of Justice.

<sup>3</sup> Tjaden, P. & Thoennes, N. (2006). *Extent, Nature, and Consequences of Rape Victimization: Findings From the National Violence Against Women Survey*. Washington, DC: US Department of Justice, National Institute of Justice.

<sup>4</sup> National Center for Injury Prevention and Control website. *Sexual Violence: Facts At A Glance*. <http://www.cdc.gov/ncipc/dvp/SV/SVDataSheet.pdf>. Accessed 09/10/08.

For the most part, researchers are limited to statistics that estimate the prevalence or incidence of sexual assaults. Aside from raw numbers reported to law enforcement or indicated through victimization surveys, few details are known about the specific nature and context of sexual assault. It is in this framework that the PSCR is both unique and significant because it allows for a more detailed analysis of both the nature and context of sexual assault in Massachusetts. PSCR data is also distinctive because of the environment in which the information is collected. Sexual assaults are disclosed to a medical professional, but victims are not required to report the crime to the police. Therefore, the PSCR captures cases that go unreported to police. The PSCR provides a rare opportunity to perform a detailed analysis of this complex data to provide a comprehensive understanding of sexual assaults in Massachusetts.

The results presented in this report should not be considered a representative sample of sexual assault in Massachusetts, but merely a reflection of the cases in which a victim sought medical attention and a medical professional forwarded the information to the Executive Office of Public Safety and Security (EOPSS). This report does not present information on the incidence or prevalence of sexual victimization, as the PSCR does not capture sexual assaults where the victims did not seek medical attention, regardless of whether they reported the crime to the police.

## Data Overview

This report analyzes data from the Provider Sexual Crime Report (PSCR) and compares PSCR sexual assaults perpetrated by a known assailant to those perpetrated by a stranger. Developed by a multidisciplinary committee in 2000, the PSCR data tracking form collects information from cases where an individual sought medical treatment for a sexual assault. Massachusetts law requires medical providers who treat sexual assault victims to report details about the crime to the Executive Office of Public Safety and Security (EOPSS) and to local law enforcement. This is done in order to alert law enforcement of possible unreported crimes in their jurisdiction.<sup>5, 6</sup> The data elements in this dataset are unique, as they include information reported by medical professionals which are not necessarily reported to the police. Data collected on the PSCR do not include victim name, address, or any other identifying information. For purposes of this report only, all sexual assaults collected through the PSCR form will be referred to as “PSCR sexual assaults”, assaults perpetrated by stranger assailants will be referred to as “stranger assaults” and assaults perpetrated by known assailants will be referred to as “known assaults”.

It is important to note that PSCR forms were developed specifically for adolescent and adult victims (age 12 years and over) and were only completed for victims under the age of 12 when a medical professional chose to use an adolescent/adult evidence collection kit on a young child. Therefore, youth victims under the age of 12 will be underrepresented in this report. In 2005, it was decided that PSCR data should be tracked for *all* sexual assaults committed on youth under the age of 12, and a separate form was specially designed for this population (called a Pediatric Provider Sexual Crime Report form). The Pediatric PSCR was specifically designed with more limited data fields for a variety of reasons regarding the nature of child sexual assault. The Pediatric PSCR collects data on all youth victims under the age of 12 who are examined by a medical professional. These cases will be excluded from this analysis because assailant characteristics data, including relationship type, are not collected on the Pediatric PSCR.

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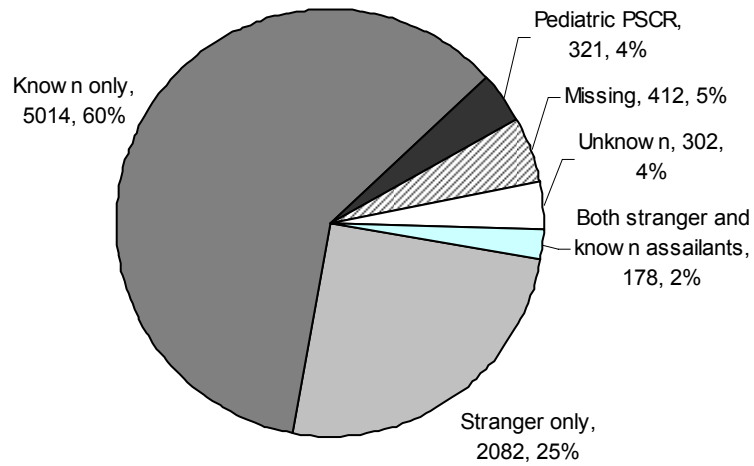
<sup>5</sup> MGLC 112§ 12 ½. Massachusetts General Court website. <http://www.mass.gov/legis/laws/mgl/112-12a.5.htm>. Accessed 6/10/06.

<sup>6</sup> The Massachusetts Executive Office of Public Safety mandated that all forms be centralized at the EOPSS offices instead of the Criminal History Systems Board, which is an EOPSS agency. Currently, the Research and Policy Analysis Division at EOPSS compiles all PSCR forms.

The total sample size for all cases with a valid assault date starting from the inception of the PSCR data collection form (approximately January 2000) through the first 6 months of 2008 is 8,309. Each case reflects one individual seeking medical treatment for a sexual assault. This total sample size includes cases with various victim-assailant relationship types (see Figure 1).

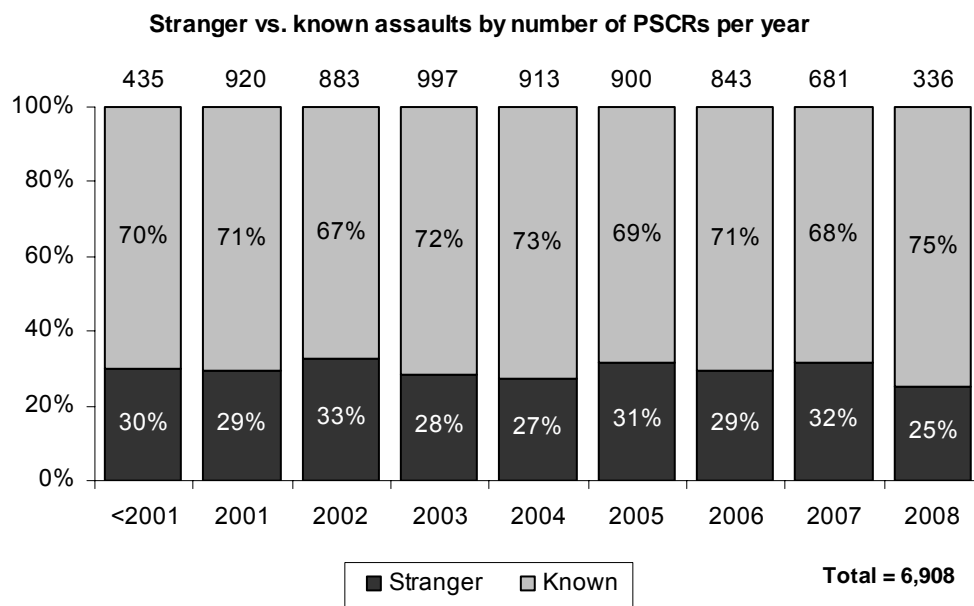
**Figure 1.**

**Total sample of PSCRs by victim-assailant relationship type**



In this report we are solely focusing on the differences between stranger assaults and known assaults. For this reason, only cases where the assault was perpetrated exclusively by strangers or exclusively known assailants were included. Cases involving more than one assailant where the victim-assailant relationship types include more than one category (i.e. one stranger assailant and a known assailant **or** one stranger assailant and an unknown assailant) will be excluded from analysis. As such, the analyses presented in this report reflect 7,096 individual cases of sexual assault where a victim identified his/her assailant(s) as either a stranger or known assailant starting from the inception of the PSCR data collection form (approximately January 2000) through the first 6 months of 2008 (see Figure 2).<sup>7</sup>

**Figure 2.**

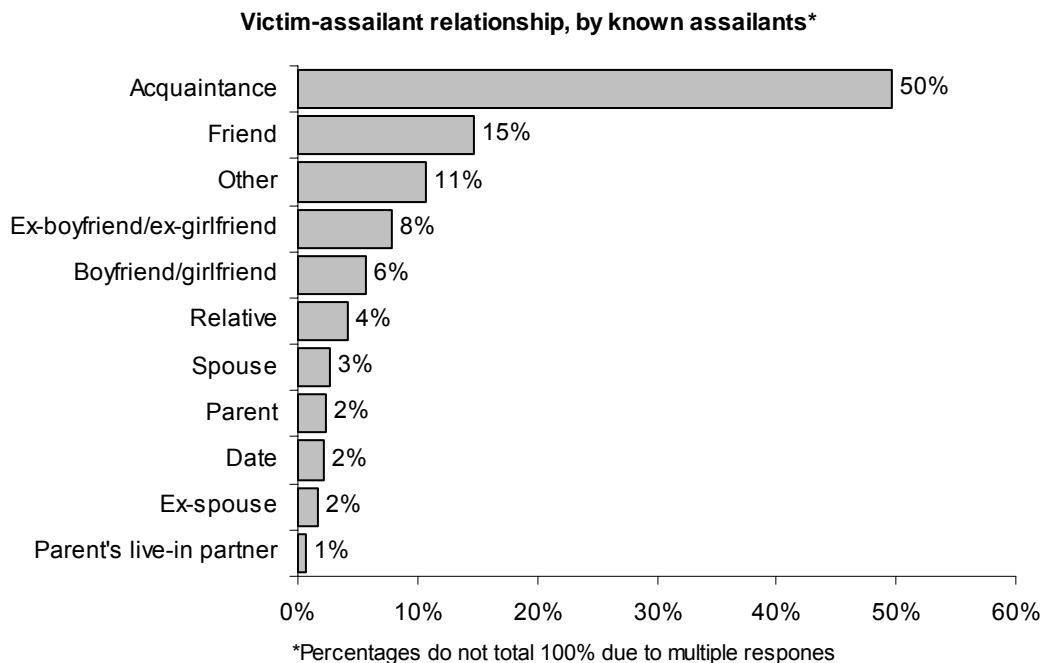


<sup>7</sup> Graph does not include 188 cases with a missing assault date.

Of the total cases in our selected sample, 2,082 (29%) represent individual cases of sexual assault perpetrated by a stranger(s) and 5,014 (71%) represent individual cases of sexual assault perpetrated by a known assailant(s). Known assailants include the following relationship types: parent, spouse, ex-spouse, relative, parent's live-in partner, boyfriend/girlfriend, ex-boyfriend/ex-girlfriend, acquaintance, friend, date, and other. These relationship categories are not mutually exclusive, as a number of cases involving multiple known assailants included more than one relationship type (i.e. two assailants: one "date", one "friend").

As shown in Figure 3, the most commonly indicated relationship type for known assailants is acquaintance (50%), followed by friend (15%), and other known assailant (11%).<sup>8</sup>

**Figure 3.**



## Gender

The majority of victims in both stranger and known assailant PSCR sexual assaults were female (96% vs. 95%, respectively).<sup>9</sup> Approximately 4% of victims of stranger and known assailant assaults were male, and less than 1% reported being transgender. Interestingly, both males and females were much more likely to be victimized by someone they knew (73% and 71%, respectively) versus a stranger (27% and 29%, respectively).

<sup>8</sup> The "other" category refers to assailants known to the victim, and captures relationship types not listed on the PSCR form. Examples of "other assailants" include: teacher, inmate, babysitter, neighbor, and co-worker.

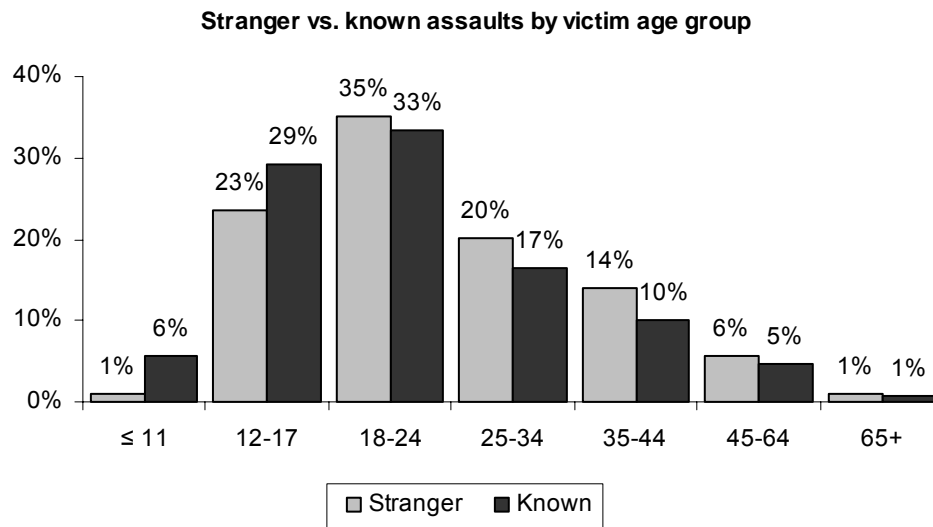
<sup>9</sup> Includes only those cases where gender is indicated.

## Age

Victim age ranged from less than one year to 96 years of age for victims of stranger assaults and from less than one year to 86 years of age for victims of known assaults.<sup>10</sup> Both the median and average ages of victims assaulted by a known assailant were younger than victims assaulted by strangers. The median age of victims with known assailants was 20 years (versus 22 years for victims of stranger assaults) and the average age was 23 years (versus 26 years for victims of stranger assaults). In both groups, the modal age (the most commonly reported age) was 18 years. It is important to note that prior to June 2006, data were not collected on all PSCR victims under the age of 12 and, as such, victims under the age of 12 may be unrepresented in this analysis.<sup>11</sup>

Figure 4 compares the distribution of victim age groups for stranger and known assailant PSCR sexual assaults. For both stranger and known assaults there are relatively few victims 11 years old and younger, followed by a substantial increase in victims from age 12 through 17, and a subsequent peak in victims age 18 to 24. After age 24 the number of victims begins to decline considerably over time.

**Figure 4.**



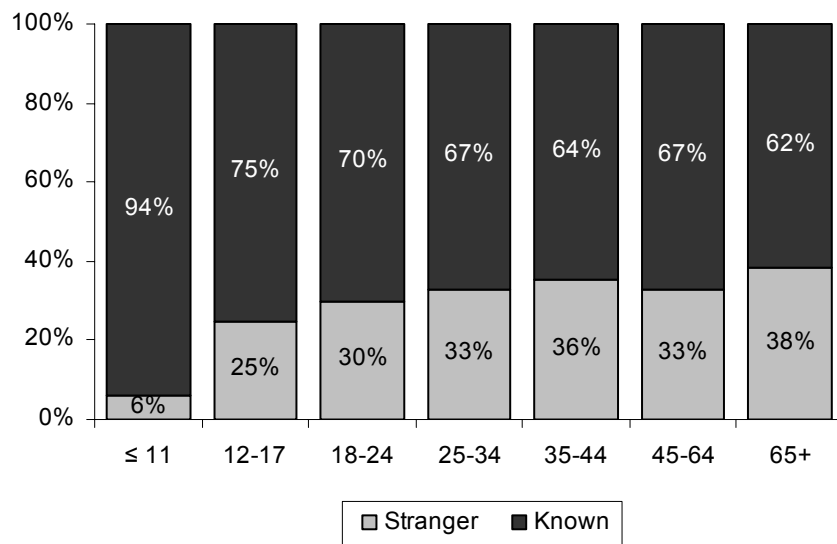
<sup>10</sup> Includes only those cases where the age of victim is indicated.

<sup>11</sup> See the data overview section for a more detailed explanation.

While Figure 4 compares the distribution of victim age groups for stranger and known assailant PSCR sexual assaults, Figure 5 compares the number of victims within each age group (i.e., the percentage of victims aged 12 through 17 who were assaulted by stranger versus those assaulted by a known assailant). As shown here, victims age 11 or younger are considerably more likely to be assaulted by someone known to them versus a stranger (94% vs. 6%, respectively). While all victims are more likely to be victimized by someone known to them, the probability becomes less dramatic as victim age increases.

**Figure 5.**

**Stranger vs known assaults by victim age group**



## Race

The self-reported racial background of victims is nearly identical for victims of stranger versus known assailant assaults.<sup>12</sup> The majority of victims in both samples (69%) self-reported as White (non-Hispanic). Black (non-Hispanic) victims made up 14% of stranger assaults and 13% of known assailant assaults. Self-reported Hispanic victims made up 13% of known assaults and 12% of stranger assaults. Victims self-reporting as Asian/Pacific Islander or Other each made up 3% or less for both stranger and known assaults.

## Number of Assailants

The PSCR collects information on the number of assailants for each assault. The number of assailants in stranger assaults ranged from one to 17 and from one to 35 in assaults perpetrated by known assailants.<sup>13</sup> While the majority of cases involved only one assailant per incident (76% of stranger assaults, 91% of known assaults), a considerable share of cases involved more than one assailant. Compared to known assaults, stranger assaults were more likely to involve two or more assailants. Approximately 14% of victims were assaulted by two strangers, versus 6% of victims assaulted by two known

<sup>12</sup> Includes only those cases where gender is indicated.

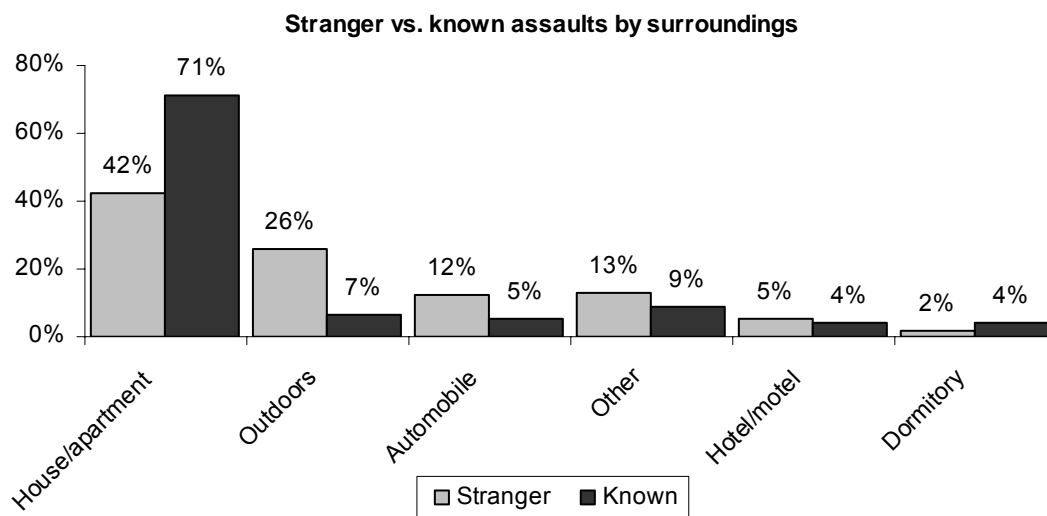
<sup>13</sup> Not included in this calculation are 380 cases where the victim did not identify the number of assailants.

assailants. When the number of assailants increases to 3 or more, strangers were identified approximately 3 times more often than known assailants (10% vs. 3%).

## Assault Surroundings

The PSCR data collection form asks victims about surroundings at the time of the assault. As shown in Figure 6, the majority of victims of both stranger and known assaults indicated that the assault took place in a house or apartment (42% vs. 71%, respectively).<sup>14</sup> Victims with known assailants, however, are considerably more likely than those assaulted by strangers to be assaulted in a house/apartment over any other location. In contrast, assaults perpetrated by strangers are more widely disbursed across surrounding types. For example, victims assaulted by strangers are almost 4 times more likely to be assaulted outdoors than victims assaulted by known assailants.

**Figure 6.**



## City/Town of Assault

One hundred and eighty-nine Massachusetts communities had PSCR sexual assaults where the victims identified their assailant(s) as a stranger. Of those assaults, approximately 70% occurred in communities with a population of 50,000 or greater. Two hundred and eight-two Massachusetts communities had PSCR sexual assaults where the victims identified their assailant(s) as someone known to them. Of those assaults, slightly more than half occurred in communities with a population of 50,000 or greater (55%). Stranger assaults are more concentrated in the larger Massachusetts cities while known assaults are more dispersed around the state.

<sup>14</sup> Includes only those cases where an assault surrounding is indicated.

Table 1 shows the ten communities with the highest number of stranger assaults versus those with the highest number of known assaults collected through the PSCR. As one would expect, the largest cities had the highest number of PSCR sexual assaults perpetrated by known and stranger assailants.

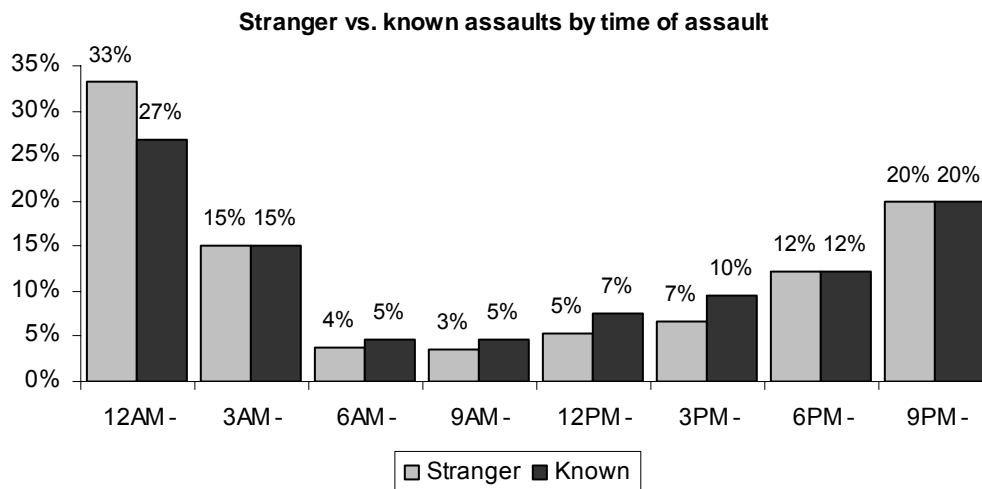
**Table 1.**  
**Stranger vs. known assaults, top ten communities by total count of PSCRs**

Stranger			Known		
City/Town	PSCR sexual assaults	Percentage of total cases	City/Town	PSCR sexual assaults	Percentage of total cases
Boston	570	28%	Boston	845	17%
Springfield	119	6%	Worcester	217	4%
Worcester	103	5%	Springfield	187	4%
Brockton	82	4%	Brockton	130	3%
Lawrence	56	3%	Fall River	121	2%
Cambridge	52	3%	Lawrence	119	2%
Lowell	46	2%	New Bedford	114	2%
Lynn	45	2%	Cambridge	107	2%
New Bedford	43	2%	Lowell	101	2%
Somerville	34	2%	Lynn	77	2%
<b>Total = 2,012<sup>15</sup></b>			<b>Total = 4,885<sup>16</sup></b>		

## Time of Assault

There was little difference between time of assault for stranger and known assaults. Victims of both stranger and known assaults were more likely to be assaulted during the late evening or early morning hours. As shown in Figure 7, both types of assaults peaked between 12AM and 2AM, decreased during the early morning and afternoon, and began to increase again during the late evening hours.<sup>17</sup>

**Figure 7.**



<sup>15</sup> Does not include 70 cases where the city/town of assault was unknown or missing.

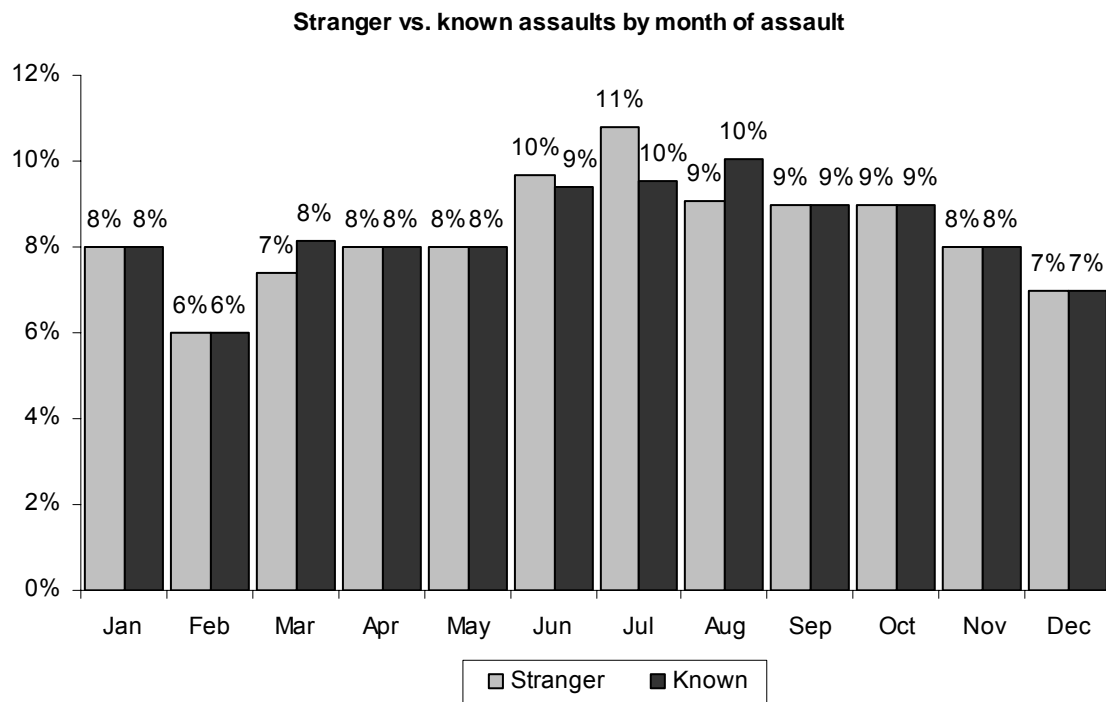
<sup>16</sup> Does not include 129 cases where the city/town of assault was unknown or missing.

<sup>17</sup> Includes only those cases with a valid time of assault.

## Month of Assault

Figure 8 suggests that there is a seasonal effect on PSCR sexual assaults perpetrated by stranger and known assailants.<sup>18</sup> While all assaults begin to increase in June, stranger assaults peak in July (11%) while known assaults peak in August (10%). Approximately 30% of all victims were assaulted in the summer (June, July, and August) compared to approximately 20% in the winter (December, January, and February).

**Figure 8.**



## Assault Surroundings by Month of Assault

By further examining the relationship between assault surroundings and month of assault it is possible to parse out the subtle differences seasonal changes may play on stranger versus known assailant assaults.

Generally, assaults committed by strangers are most likely to occur in a house year round. However, from June through October stranger assaults occurring outdoors increase considerably, and actually surpass assaults perpetrated in a home or apartment during the month of September. Assaults in automobiles, other locations, and hotel/motels remain fairly constant year round. Dormitory assaults perpetrated by strangers are uncommon throughout the year, increasing only slightly during the school year (September through April). Conversely, assaults by known assailants overwhelmingly occur in a house or apartment year round. Outdoor assaults by known assailants are relatively infrequent most of the year, increasing somewhat May through October. Dormitory assaults by

<sup>18</sup> Includes only those cases where an assault date is indicated.

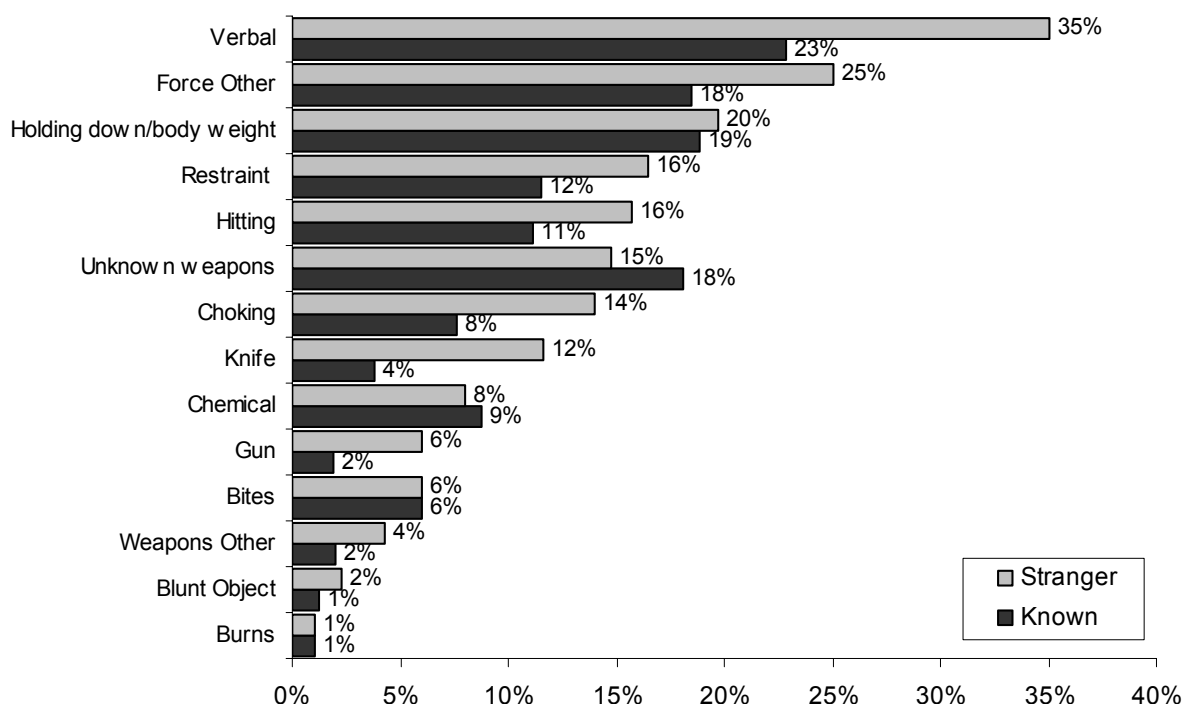
known assailants are slightly more common than stranger assaults and are considerably more likely during the school year, then drop off significantly throughout the summer.

## Types of Force Used

The PSCR forms provide detailed data on the type of force and/or weapon used by an assailant against a victim.<sup>19</sup> Overall, force was used more frequently by strangers than by known assailants (89% vs. 77%, respectively). For both stranger and known assaults, verbal threats were the most commonly reported type of force, reported in 35% of stranger assault cases and in 23% of known assault cases. In stranger assaults, other force (25%)<sup>20</sup> and holding down/body weight (20%) were the next most frequently reported types of force used. In known assailant assaults, holding down/body weight (19%), other force (18%), and unknown weapons (18%) were the next most commonly indicated types of force. While use of weapons such as knives, guns, other weapons, and blunt objects was rare relative to the above mentioned types of force, stranger assailants were considerably more likely to use such weapons than known assailants. However, victims of known assaults reported unknown weapons and chemical force, such as illicit substances, Rohypnol or other “date rape” drugs, more often than victims of stranger assaults.

**Figure 9.**

### Stranger vs. known assaults by types of force used



<sup>19</sup> It is important to note that the types of force are not mutually exclusive as a number of cases involved multiple types of force.

<sup>20</sup> Examples of “other force” include hair pulling, pushing, kicking, and dragging.

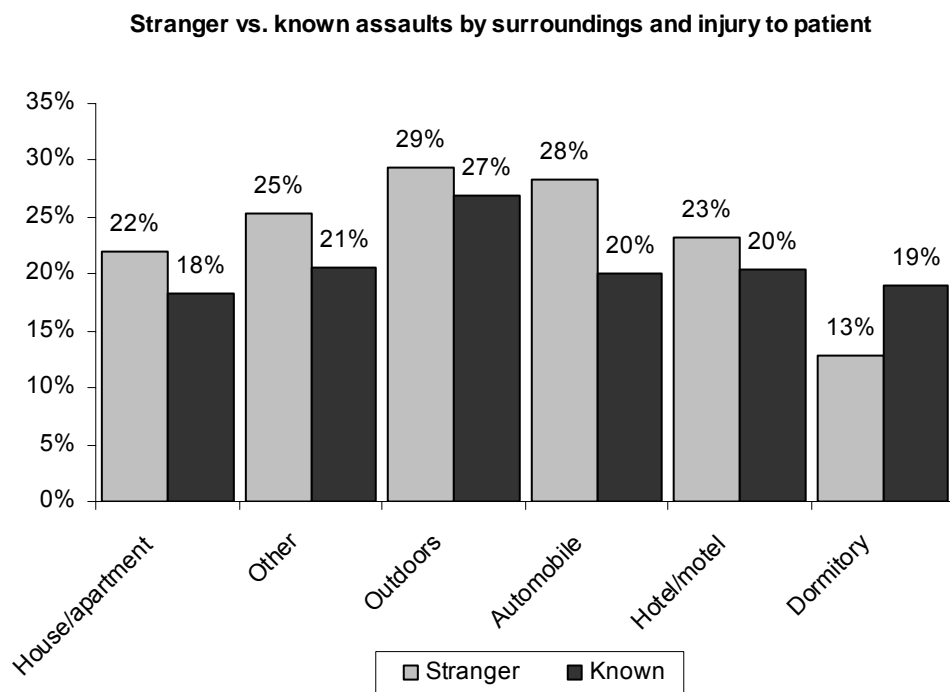
## Injuries Sustained

The PSCR form asks whether the assailant and/or victim sustained any injuries that resulted in bleeding. Victims were more likely to receive injuries resulting in bleeding if their assailant was a stranger (25%) versus someone known to them (20%).<sup>21</sup> Victims of stranger assaults and known assaults were equally as likely to report inflicting injury upon their assailant (3%). Stranger assault victims were more commonly unsure if they inflicted injury on their assailant (31%) compared to victims of known assailants (27%). In only 1% of both stranger and known assailant assaults did the victims indicate injuries that resulted in bleeding to both themselves and their assailant(s).

## Assault Surroundings by Injury to Patient

Figure 10 shows the percentage of victims that received injuries resulting in bleeding by surrounding at the time of the assault. Consistent with the above findings, victims of stranger assaults are injured more often in almost every assault surrounding, with the exception of assaults in dormitories (13% of stranger assaults vs. 19% of known assailant assaults). Interestingly, while data analysis has shown that most PSCR sexual assaults occur in a house or apartment, victims are actually most likely to sustain injuries in assaults occurring outdoors (29% of stranger assaults, 27% of known assailant assaults). Victims of stranger assaults were nearly as likely to sustain injury when the assault took place in an automobile (28%) as when the assault took place in a house or apartment (22%). Victims of known assaults were more likely to sustain injury when the assault took place in a house or apartment (18%) than in an automobile (20%).

**Figure 10.**



<sup>21</sup> Includes only those cases with a response to injury to patient.

## Reporting to Police

The PSCR form asks whether the victim reported the crime to the police. Not all PSCR victims choose to report the assault to the police. In the case of pediatric victims, the decision to report to the police is usually made by the parent or legal guardian. In cases where teen victims seek medical treatment without parental involvement, they decide whether or not to report the assault to the police. Nearly three-quarters of victims reported their assault to the police; victims of stranger assaults reported the assault to police slightly more frequently than victims with known assailants (80% versus 72%, respectively).<sup>22</sup>

## Assailant Condom Use

The PSCR form asks the victim whether their assailant(s) wore a condom during the assault. Victims indicated that stranger assailants were slightly more likely to wear a condom during the commission of the assault than known assailants (13% vs. 12% respectively).<sup>23</sup> Nearly half of victims of known assaults reported that their assailant did not wear a condom (48%) compared to 53% of victims of stranger assaults. Victims of known assaults were less sure whether a condom was worn by their assailant (35%) versus victims of stranger assaults (39%).

## Evidence Collection

When a victim seeks medical treatment the health care provider may gather evidence from the victim (with consent) that can be used for legal purposes. Two methods of evidence collection can be used, separately or in tandem: evidence collection kits and toxicology kits.

In 92% of cases where the victim was assaulted by a stranger, an evidence collection kit was used to gather evidence, compared to 91% of cases where the victim was assaulted by a known assailant. Toxicology kits were processed equally as often regardless if the victim was assaulted by a stranger or known assailant (23%).<sup>24</sup>

## Future Directions

This report contains basic descriptive statistics on PSCR sexual assaults perpetrated by known and stranger assailants and represents a first attempt at better understanding the difference between the two. The Research and Policy Analysis Division of the EOPSS hopes to conduct more sophisticated analysis techniques on this dataset in the future in order to answer more complex research questions regarding sexual assaults in Massachusetts.

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<sup>22</sup> Includes only those cases with a response to reporting to police.

<sup>23</sup> Includes only those cases with a response to assailant condom use.

<sup>24</sup> Includes only those cases with responses to evidence collection kit and/or toxicology kit use.