



Differences between Sexual Assaults Perpetrated in Small, Medium, and Large Massachusetts Cities

Using Medical Provider Data to Describe and Compare
the Nature and Context of Sexual Crime Perpetrated in
Small, Medium, and Large Cities

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Points of view in this document are those of the authors and do not necessarily represent the official position or policies of the Massachusetts Executive Office of Public Safety and Security.

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TABLE OF CONTENTS

HIGHLIGHTS	4
INTRODUCTION	5
DATA OVERVIEW	6
GENDER	8
AGE	8
RACE	9
NUMBER OF ASSAILANTS.....	9
GENDER OF ASSAILANTS.....	10
ASSAILANT-VICTIM RELATIONSHIP	10
ASSAULT SURROUNDINGS	12
TIME OF ASSAULT	12
MONTH OF ASSAULT	13
TYPES OF FORCE USED	14
INJURIES SUSTAINED	16
REPORTING TO POLICE	16
ASSAILANT CONDOM USE.....	17
EVIDENCE COLLECTION	17
FUTURE DIRECTIONS	17

Highlights

An analysis was conducted on sexual assaults committed in small, medium, and large cities in the Commonwealth of Massachusetts using Provider Sexual Crime Report (PSCR) data. For the purposes of this report, small cities are defined as those with a population under 20,000, medium cities with a population between 20,000 and 50,000, and large cities with a population over 50,000.¹ This report compares the findings on the nature and context of sexual assaults occurring in these three city types. The following are highlights of these findings:

- Although there are only 25 cities in Massachusetts that are categorized as large cities (according to the definition used for this report), these cities make up approximately 60% of the PSCR sexual assaults in the State.
- Victims in small cities were slightly younger than victims in both medium and large cities (modal age of 16 compared to 18 for medium and large cities).
- Victims in large cities were more racially diverse than those in both medium and small cities (see Figure 3).
- Assaults involving multiple assailants were the most common in large cities (17%) followed by medium (14%) and small cities (11%).
- Stranger assailant assaults occurred more frequently in large cities (37%) compared to medium (27%) and small cities (19%).
- House/apartment was the most common assault surrounding for all city types (63% for large, 60% for medium, and 65% for small cities).
- Force was more commonly used by assailants in large cities (65% of cases) followed by medium cities (57%) and then small cities (52%).
- Victims assaulted in large cities were slightly more likely to receive injuries resulting in bleeding (23%) compared to victims in medium (18%) and small cities (20%).
- The frequency of police reporting was the same in medium and small cities (77% reported the crime). However, victims assaulted in large cities were less likely to report the crime to the police (72% reported the crime).

¹ Census 2007 estimates were used to determine city population.

Introduction

Sexual assault is a serious social problem that affects the lives of women, men, and children everywhere. For the most part, researchers are limited to statistics that estimate the prevalence or incidence of sexual assault. 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 Provider Sexual Crime Report (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 distinct 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 look in depth, across several years, at a certain context of sexual assaults in Massachusetts.

PSCR data was analyzed in order to gain a better understanding of the differences between sexual assaults committed in larger versus smaller cities. For example, do victims in large cities differ from victims in smaller cities? Does city size affect the probability of being assaulted with a weapon? Are victims in smaller cities more likely to be assaulted by someone that is known to them? The unique nature of the PSCR allows comparisons to be made about the nature of sexual assault in varying city sizes.

The results presented in this report should not be considered a representative sample of sexual assaults 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 the characteristics of PSCR sexual assaults perpetrated in small, medium and large Massachusetts cities. 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.^{2, 3} 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.

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 to discourage medical professionals from obtaining detailed information about the abuse/assault from a child because this information is best obtained by a specially trained forensic interviewer. 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 analysis in certain sections of this report because not all data elements are collected on these forms (such as assailant characteristics and surrounding).

² MGLC 112§ 12 ½. Massachusetts General Court website. <http://www.mass.gov/legis/laws/mgl/112-12a.5.htm>. Accessed 10/22/08.

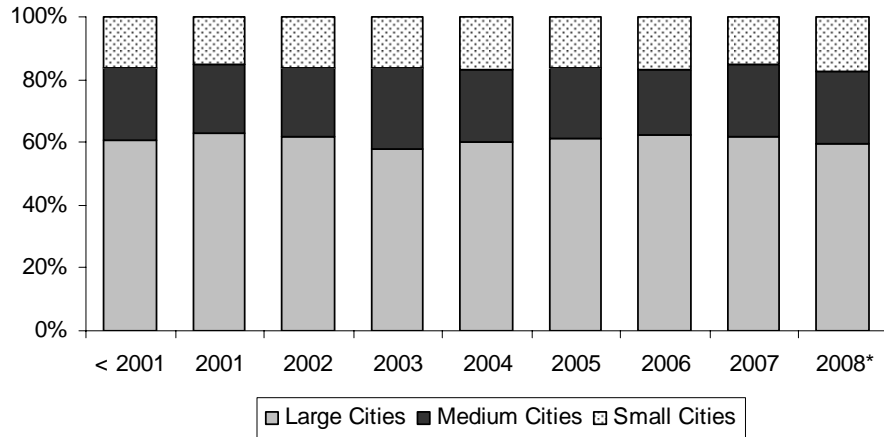
³ The Massachusetts Executive Office of Public Safety mandated that all forms be centralized at the EOPSS offices instead of the Criminal History Systems Board, which is an EOPSS agency. Currently, the Research and Policy Analysis Division at EOPSS compiles all PSCR forms.

For the purposes of this report, small cities are defined as those with a population under 20,000, medium cities with a population between 20,000 and 50,000, and large cities with a population over 50,000.⁴ According to Census 2007 estimates, of the 351 cities in Massachusetts, 25 cities are considered large cities (according to the definition used in this report), 70 cities fall into the medium category, and the remaining 256 cities fall into the small category. However, these 25 “large” cities account for a disproportionate share of the PSCR assaults in Massachusetts (see Figure 1).

The analyses presented in this report reflect a total of 7,840 PSCR assaults where the city of assault was identified, starting from the inception of the PSCR data collection form (approximately January 2000) through June 2008. A total of 4,761 PSCR assaults occurred in a large city (61%), 1,816 assaults in a medium city (23%), and 1,263 assaults in a small city (16%).

Figure 1.

PSCR Assaults by Year and City Type



* 2008 only includes cases through June

⁴ Census 2007 estimates were used to determine city population.

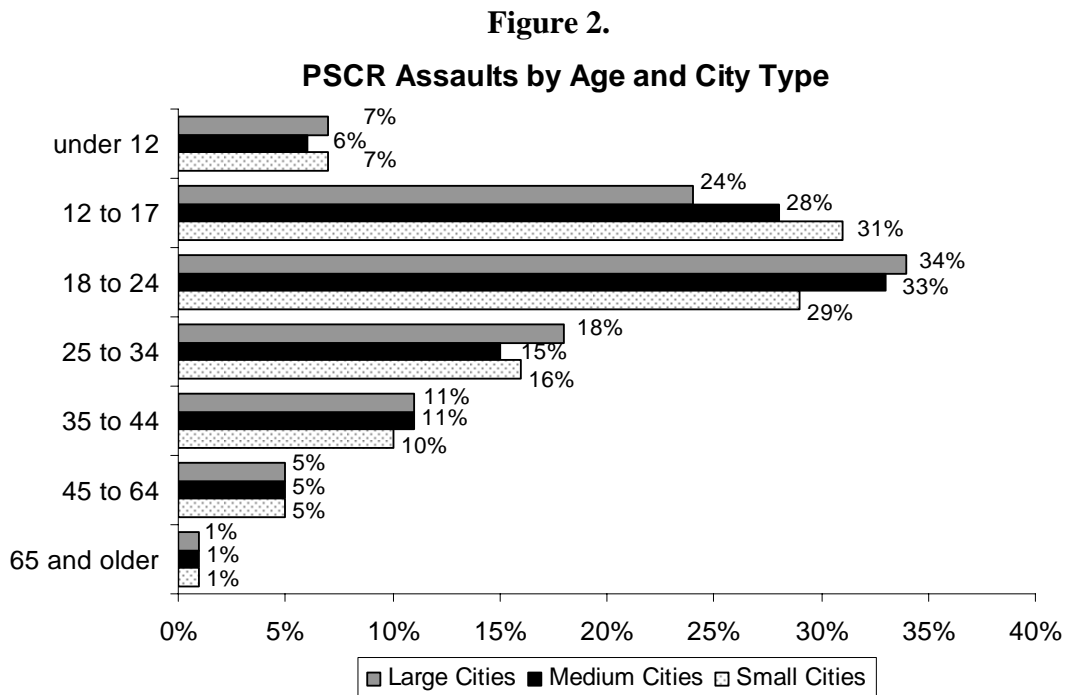
Gender

The majority of victims in all three city types were female.⁵ Approximately 94% of victims in small city assaults were female, 95% in medium city assaults, and 95% in large city assaults. Overall, there were very few differences in gender when city types were compared.

Age

Victim age ranged from less than 1 year of age to 101 years old.⁶ The median age for all victims was 20 years old while the modal age (or most common age) was 18 years old. When age is examined by city type, victims in the small city category were generally younger than those in the medium and large city categories. The modal age was 16 years for small cities compared to 18 years for both medium sized and large cities.

Figure 2 compares the distribution of victim age groups by city type. While the largest portion of PSCR victims fall into the 12 to 17 and 18 to 24 categories, there are slight differences in victim age when city types are compared. For small cities, the most common victim age was 12 to 17, while 18 to 24 was the most common victim age group for both medium and large cities.

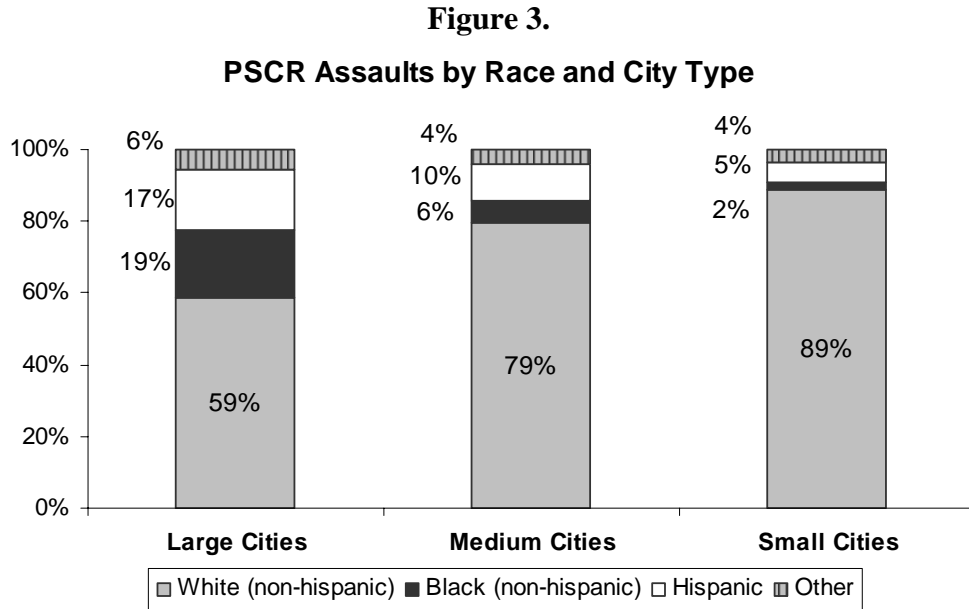


⁵ Includes only cases where victim gender and city was indicated.

⁶ Includes only cases where victim age was indicated. Prior to June 2006, data was not collected on all PSCR victims under the age of 12 and, as such, victims under the age of 12 may be underrepresented in this analysis.

Race

The majority of PSCR victims in all three city types were white (59% in large cities, 79% in medium cities, and 89% in small cities).⁷ However, as shown in Figure 3, victims in large cities were the most racially diverse, followed by medium cities, then small cities. For example, 19% of victims in large cities were black compared to only 6% in medium and 2% in small cities. This pattern also follows with Hispanic victims and victims of other races.



Number of Assailants

The PSCR collects information on the number of assailants for each assault.⁸ The number of assailants per assault ranged from one to 35.⁹ While the majority of cases involved only one assailant per incident (82% in large cities, 85% in medium cities, and 89% in small cities), there were differences in the number of assailants for each city type. Table 1 shows that assaults involving multiple assailants were much more common in large cities (17%) than small cities (11%), with medium cities falling in between (14%).

Table 1.¹⁰

Number of Assailants	Large Cities	Medium Cities	Small Cities
1	82%	85%	89%
2	10%	9%	8%
3 or more	7%	5%	3%
	100%	100%	100%

⁷ Includes only cases where victim race was indicated.

⁸ Not included in the analysis of assailants are 239 pediatric cases where this information was not collected.

⁹ Not included in this calculation are 338 cases where the victim did not identify the number of assailants.

¹⁰ Percentages do not total 100 due to rounding.

Gender of Assailants

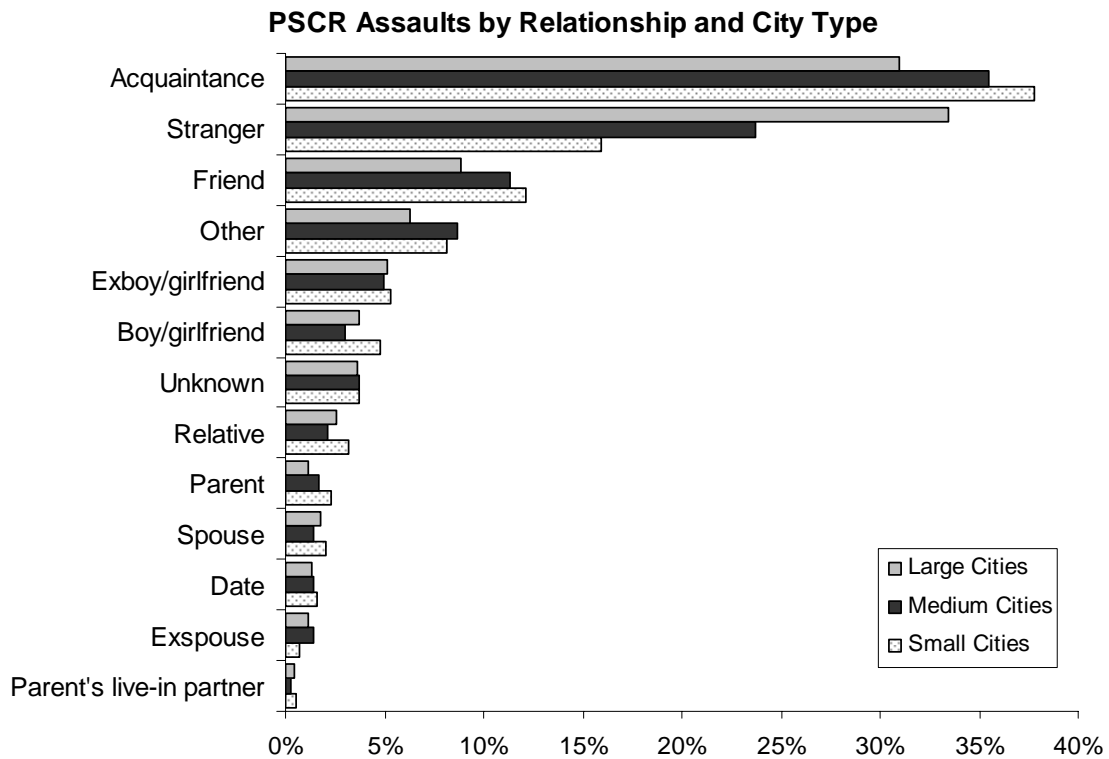
For each city type, nearly every assault involved at least one male assailant (98% of cases). Comparatively, only 2% of cases involved at least one female assailant.¹¹ There were no differences in the gender of assailants by city type.

Assailant-Victim Relationship

Victims are asked about their relationship to the assailant(s) during medical exams. Data were analyzed and compared for the 3 different city types.

Figure 4 shows the most common relationship types by city type.¹² For small cities, “acquaintance” was by far the most common victim-assailant relationship type (38% of cases). The next most common relationship type for small cities was “stranger” (16%). For medium sized cities, “acquaintance” was also the most common relationship type (36%). However, in medium cities a greater portion of victims were assaulted by a “stranger” than small cities (24% compared to 16%). For large cities, the most common relationship type was “stranger” (33%), followed closely by “acquaintance” (31%).

Figure 4.



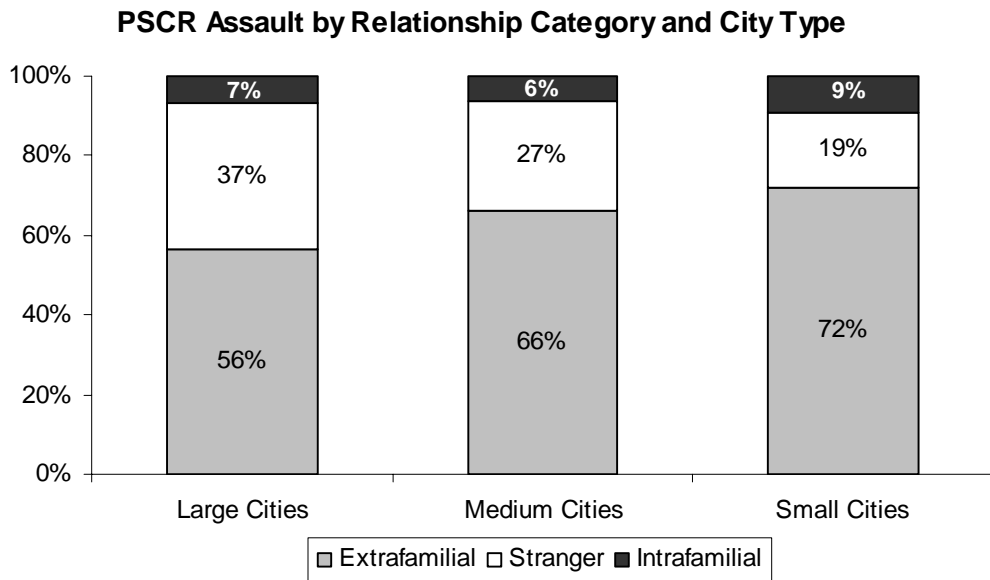
¹¹ Includes only cases where assailant gender was indicated.

¹² Includes only cases where victim/assailant relationship was indicated.

In order to understand the nature of victim-assailant relationships more generally, relationship types were collapsed into three general categories - “intrafamilial,” “extrafamilial,” and “stranger.” The intrafamilial category includes parents, relatives, spouses, and parent’s live-in partners. The extrafamilial category includes ex-spouses, boyfriends/girlfriends, ex-boyfriends/girlfriends, friends, acquaintances, and dates. The stranger category includes only strangers.^{13,14}

Figure 5 compares the relationship categories described above by city type. For all three city types the most common relationship category was “extrafamilial” (56% for large, 66% for medium, and 72% for small cities). “Stranger” assaults occurred more frequently in large cities (37%) compared to medium (27%) and small cities (19%). Assaults by “intrafamilial” relationship types were relatively uncommon for all 3 city types. However, “intrafamilial” assaults were more common in small cities (9%) compared to medium (6%) and large cities (7%).

Figure 5.

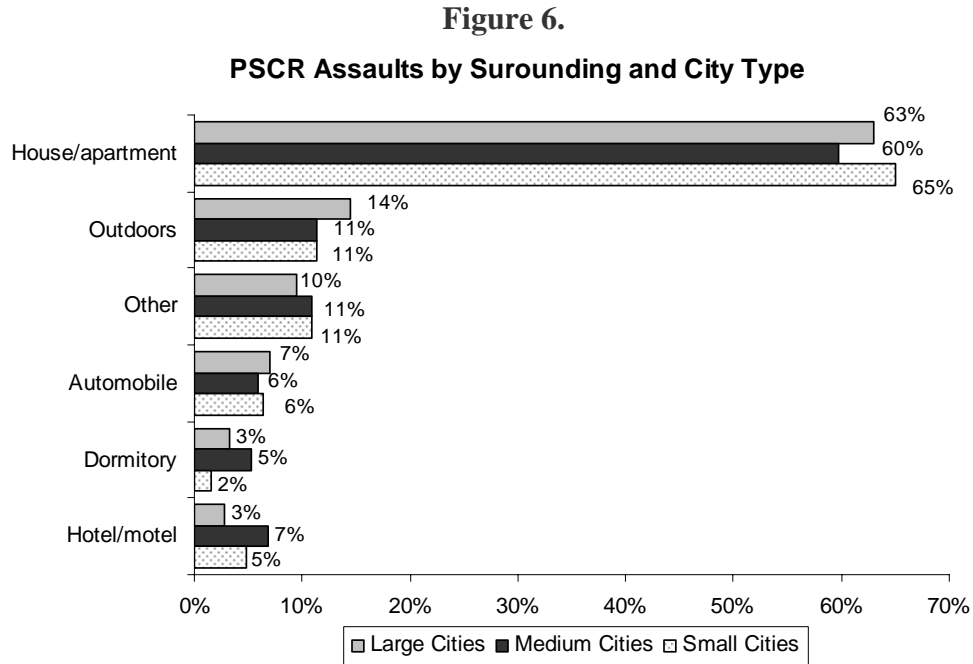


¹³ The three relationship categories do not include cases where the victim did not identify an assailant relationship type or those cases where the victim-assailant relationship type was unknown (“unknown”) or other (“other”).

¹⁴ The three relationship categories are not mutually exclusive as a number of cases involving multiple assailants included more than one relationship type.

Assault Surroundings

The PSCR data collection form asks victims about surroundings at the time of the assault. Figure 6 shows that house/apartment was the most common assault surrounding for all city types (63% for large, 60% for medium, and 65% for small cities).¹⁵ Assaults occurring outdoors were slightly more common in large cities (14%) compared to medium (11%) and small cities (11%).



Time of Assault

There was little difference between the time of assault for the three city types.¹⁶ The most common assault time for all three city types was 12AM - 3AM.

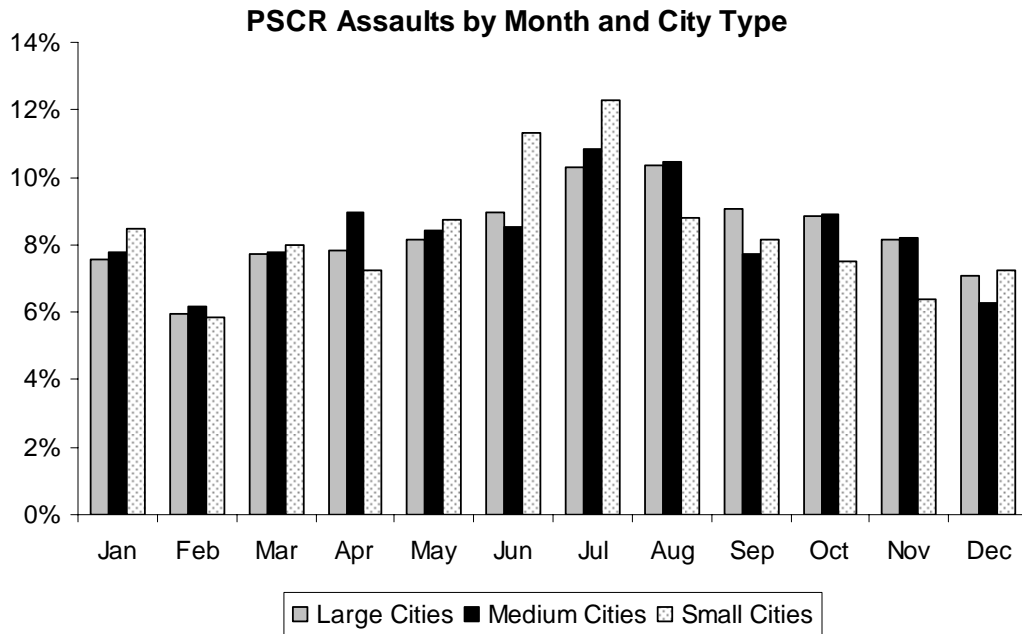
¹⁵ Includes only cases where an assault surrounding was indicated. Pediatric PSCR cases did not collect this information.

¹⁶ Includes only cases where an assault time was indicated.

Month of Assault

The month of assault was quite similar for all three city types.¹⁷ There is a slight seasonal effect for all city types. As shown in Figure 7, assaults begin to increase in June, and peak in July for all city types. However, this seasonal effect appears to be more pronounced for small cities, which experience a more dramatic increase in assaults during the summer months.

Figure 7.

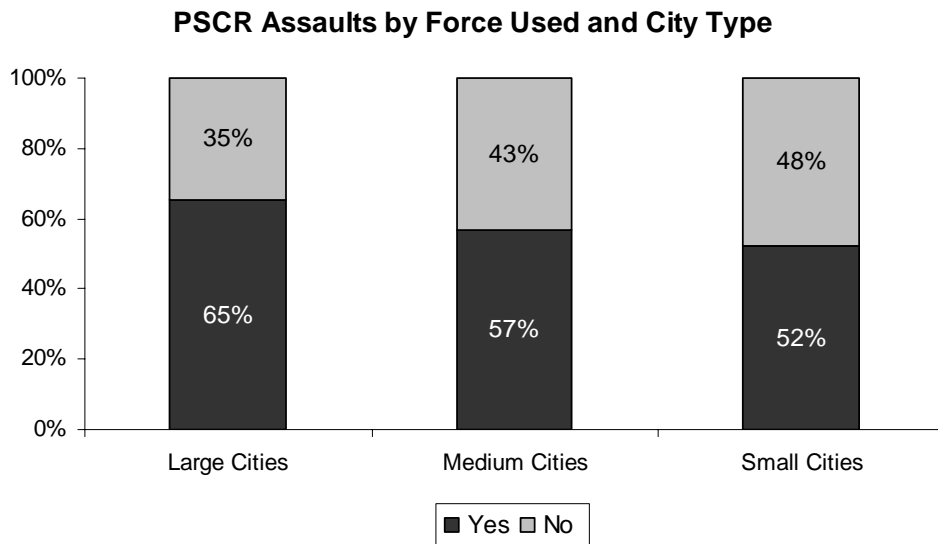


¹⁷ Includes only cases where an assault date was indicated.

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.¹⁸ Figure 8 compares how often force was used during an assault by the city types. Force was most commonly used on victims in large cities (65% of cases) followed by medium cities (57%) and then small cities (52%). Types of forces used will be discussed in more detail below.

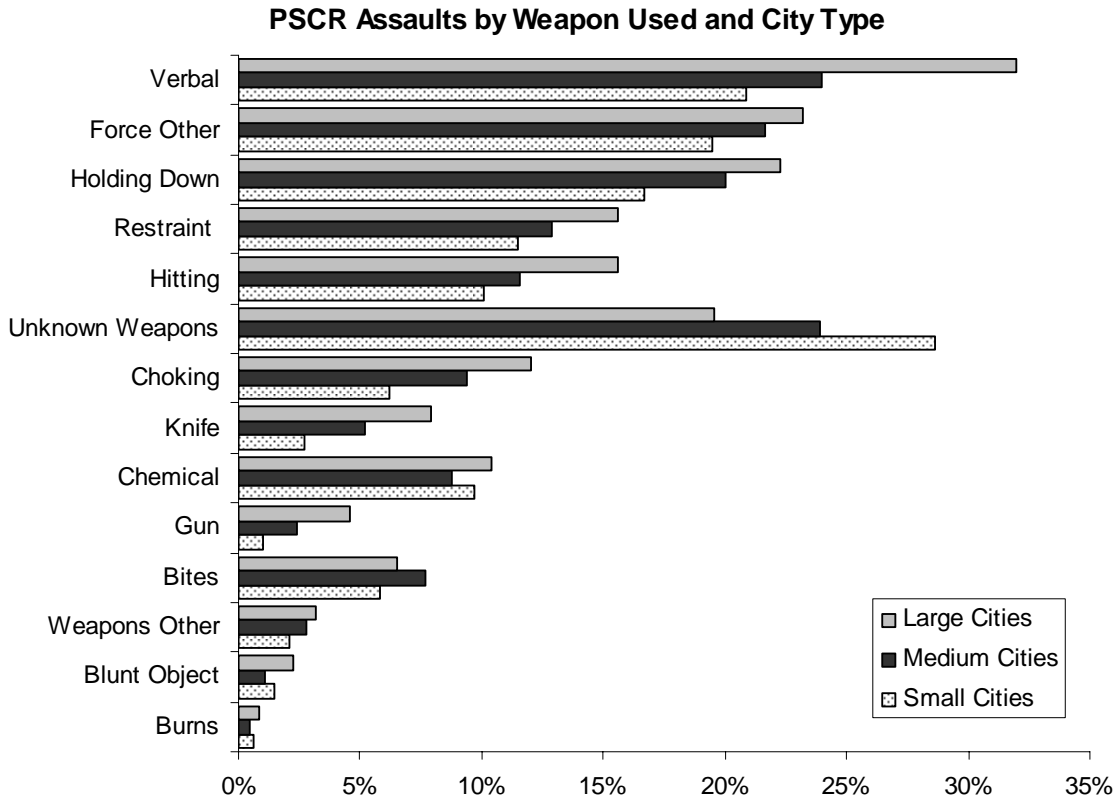
Figure 8.



¹⁸ It is important to note that the types of force are not mutually exclusive as a number of cases involved multiple types of force. Pediatric PSCR cases did not collect this information.

Figure 9 shows the different types of forces used by city type. In large cities, the most common type of forced used was verbal threats (32%) followed by other force (23%).¹⁹ In medium cities, verbal threats were also the most common type of force used (24%) followed closely by unknown weapons (24%). In small cities, the most common type of forces used was unknown weapons (29%), followed by verbal threats (21%).

Figure 9.

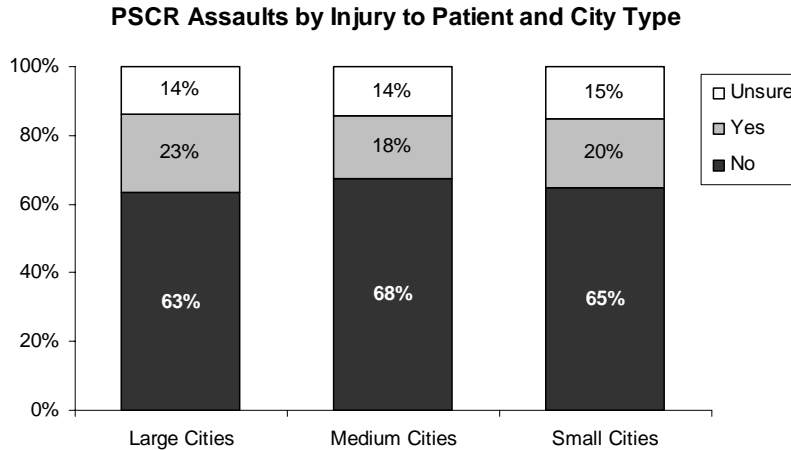


¹⁹ Examples of “other force” include hair pulling, pushing, kicking, and dragging.

Injuries Sustained

The PSCR form asks whether the assailant and/or victim sustained any injuries that resulted in bleeding.²⁰ Figure 10 shows that victims assaulted in large cities were slightly more likely to receive injuries resulting in bleeding (23%) compared to victims in medium (18%) and small cities (20%). Assailants in all three city types rarely received injuries that resulted in bleeding (3% in large, 2% in medium and 3% in small cities).

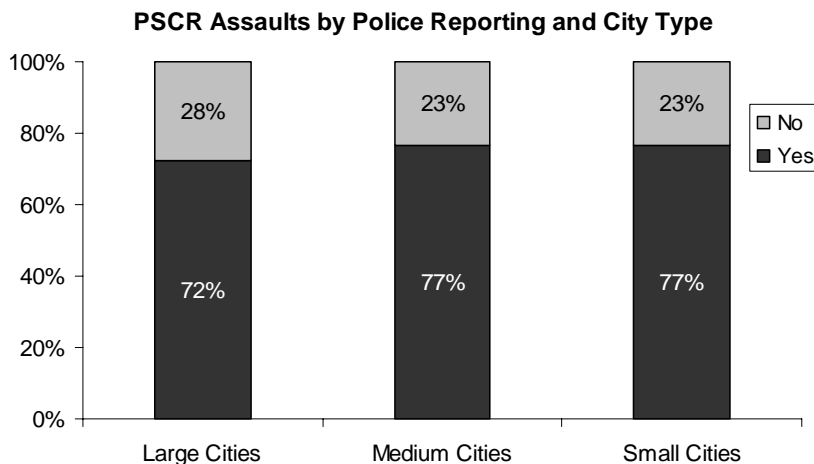
Figure 10.



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. Figure 11 shows the percentage of victims in each city type that reporting the crime to the police.²¹ While the frequency of reporting was the same in medium and small cities (77% reported the crime), victims assaulted in large cities were less likely to report the crime to the police (72%).

Figure 11.

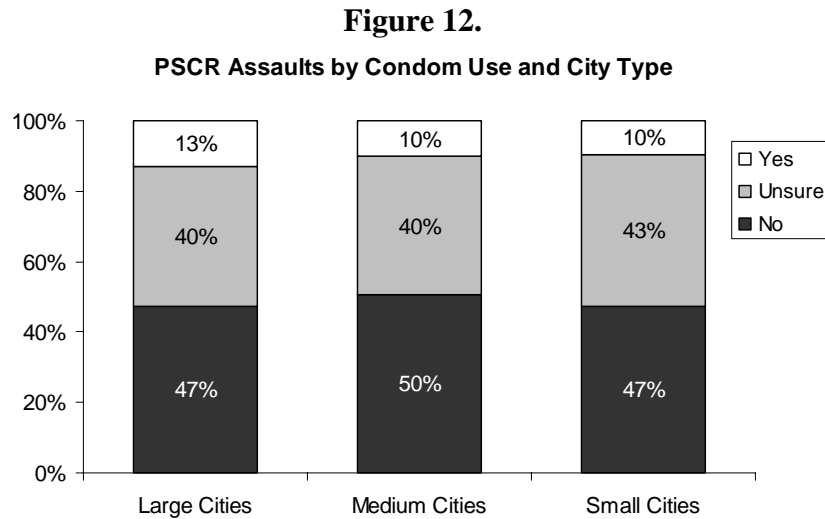


²⁰ Includes only cases with a response to injury to patient/assailant. Pediatric PSCR cases did not collect this information.

²¹ Includes only cases with a response to reporting to police.

Assailant Condom Use

The PSCR form asks the victim whether their assailant(s) wore a condom during the assault. Victims in all city groups reported that their assailants generally did not wear a condom or that they were unsure whether a condom was used. However, assailants in large cities were slightly more likely to use condoms during the assault (13%) than those in medium (10%) and small cities (10%).²²



Evidence Collection

When a victim seeks medical treatment the health care provider may gather evidence (with consent) from the victim 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.

Evidence collection kits were completed equally as often, regardless of city type (90% for large cities, 89% for medium cities, and 91% for small cities). Toxicology kits were used slightly more frequently in small city assaults (29%) compared to medium (26%) and large city assaults (23%).²³

Future Directions

This report contains basic descriptive statistics on PSCR sexual assaults perpetrated in small, medium, and large Massachusetts cities. This analysis represents a first attempt at using PSCR data to better understand how city size affects sexual assault victims and circumstances. The Research and Policy Analysis Division of 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.

²² Includes only cases with a response to condom use. Pediatric PSCR cases did not collect this information.

²³ Includes only cases with a response to evidence collection and toxicology kit used.