

The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: **Rate of Force Used by the Police in Montgomery County, Maryland Summary**

Author(s): **Edward R. Hickey ; Joel H. Garner**

Document No.: **199877**

Date Received: **April 2003**

Award Number: **98-IJ-CX-0086**

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant final report available electronically in addition to traditional paper copies.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

PROPERTY OF
National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000

199877
C-1

The Rate of Force Used By the Police in Montgomery County, Maryland

Executive Summary

A Report to the
Montgomery County Department of the Police
and
the National Institute of Justice

Edward R. Hickey
Joel H. Garner

March 2002

This research was supported by award # 98-IJ-CX-0086 from the National Institute of Justice and by the active cooperation of the Montgomery County Department of the Police. Points of view are those of the authors and do not necessarily represent the official position of these organizations.

The Rate of Force Used By the Police in Montgomery County, Maryland

Abstract

This report describes the types and amount of force used by and against the police in Montgomery County Maryland for the seven years between January 1993 to December 1999. This study is based on official records of the use of force and of arrests maintained by the Montgomery Count Department of the Police. Although not without limitations, these data provide an especially valuable basis for understanding what constitutes a force incident and how the use of different types of force varies over time and circumstances.

This research uses research methods commonly used in health research but rarely used in the study of policing. These methods combine official records of the use of force with information about a base rate of police activity--in this case adult, custody arrests--to calculate a rate of force. The use of a rate of force, which we define as the number of force incidents per 100 adult custody arrest, provides a rigorous empirical basis for understanding recent police behavior, assessing departmental policies and practices and testing theories about police behavior.

This executive summary lists eleven findings about the nature of force in Montgomery County, five measures of the rate of force and 14 characteristics of officers, suspects and encounters that are associated with higher or lower rates of force.

Part 1: Describing the Use of Force

This report describes the types and amount of force used by and against the police in Montgomery County Maryland for the seven years between January 1993 to December 1999. This study is based on official records of the use of force and of arrests maintained by the Montgomery Count Department of the Police. Although not without limitations, these data provide an especially valuable basis for understanding what constitutes a force incident and how the use of different types of force varies over time and circumstances.

This research uses research methods commonly used in health research but rarely used in the study of policing. These methods combine official records of the use of force with information about a base rate of police activity--in this case adult, custody arrests--to calculate a rate of force. The use of a rate of force, which we define as the number of force incidents per 100 adult custody arrest, provides a rigorous empirical basis for understanding recent police behavior, assessing departmental policies and practices and testing theories about police behavior.

This executive summary lists eleven findings about the nature of force in Montgomery County, five measures of the rate of force and 14 characteristics of officers, suspects and encounters that are associated with higher or lower rates of force.

Finding 1.1: Amount of Force: The use of force by Montgomery County police officers is infrequent.

Finding 1.2: Change in Reporting Practices: Changes in reporting practices appear responsible for some of the increases in the total number of use of reports in 1999.

Finding 1.3: Use of Hands and Feet: In every year from 1993 to 1999, the most frequent type of force used by Montgomery County officers involved the use of hands and feet only.

Finding 1.4: Use of OC Spray: In every year from 1993 to 1999, the second most frequent type of force reported is the use of OC Spray.

Finding 1.5: Use of Canines: From 1993 to 1998, the use of canines was the third most frequent type of force used by the Montgomery County police department.

Finding 1.6: Type of Force Used by Suspects: Hands and feet are the most frequent types of force used by suspects. Firearms or knives were used by suspects in two percent of all use of force incidents.

Finding 1.7: Type of Injuries to Suspects: Suspects were injured in just over half of all use of force incidents. The most typical types of injuries involved exposure to OC spray, lacerations and dog bites.

Finding 1.8: Trends in Suspect Injuries: The number of suspects injured peaked in 1995 and by 1999 declined to a level similar to 1993. The percentage of suspects injured, including and excluding injuries from OC spray, declined from 1993 to 1999.

Finding 1.9: Suspect Injuries and Type of Force: Suspects are most frequently injured when officers use canines or OC spray. Suspects are least frequently injured when officers use vehicles (as weapons), hands and feet or firearms.

Finding 1.10: Officer Injuries: Officers are injured in just under 25% of their use of force reports. Officer injuries typically involve bruises or blunt trauma, lacerations, sprains and abrasions. MCPD officers received two gunshot wounds, both in 1994.

Finding 1.11: Trends in Officer Injuries: The number of officers injured has increased from 1993 to 1999. The percentage of officers injured peaked in 1997.

Part 2: Rates of Force

The approach used in this report relies on existing, automated official police records of uses of force and of arrests but generates multiple measures of different types of force based on indicators of the severity of the force used. Using the information in the use of force reports and MCPD arrest data, we construct five measures of force—Any Force, Weapon Use, Any Suspect Injury, Suspect Injury Excluding OC Spray, and Officer Injury.

Finding 2.1: Rates of Force: The rate of Any Force, over the 1993-1999 period is 6.4 incidents of force for every 100 arrests.

Finding 2.2: Weapon Use: The rate of Weapon Use is 2.9 incidents for every 100 adult custody arrests.

Finding 2.3: Suspect Injury: The rate of Any Suspect Injury is 3.6 incidents per 100 arrests; when injuries associated with OC spray are excluded, the rate of Suspect Injury Excluding OC Spray is 2.4 incidents per 100 arrests.

Finding 2.4: Officer Injury: The rate of Officer Injury is 1.9 officer reports per 100 arrests.

Part 3: Characteristics of Incidents, Suspects and Officers Associated with Higher Rates of Force

One of the primary purposes of this study is to assess the extent to which the five rates of force vary by the characteristics of use of force incidents, police officers or suspects. Our ability to make these assessments derives from the existence of common items in the automated information compiled by the Montgomery County Police Department about the use of force incidents and about adult custody arrests. Based on these two existing data files, we are able to compare the five rates of force using six characteristics of the incident--the year, month, day of week, time of day, police district and offense type--four characteristics of the officers--age, race, sex, length of service--and three characteristics of the suspects--age, race, sex.

Finding 2.5: Year of the Incident: The rate of Any Force is fairly steady from 1993 to 1998 but increases in 1999. The rate of Weapon Use decreases steadily since 1994. The rates of Suspect Injury with and without OC spray decline and then increase to a level still below the rates in 1993. The rate of Officer Injury declines but rises steadily following 1996 to an all time high in 1999.

Finding 2.6: Month of Year: The rates of Any Force, Weapon Use, Suspect Injury and Officer Injury are highest in July.

Finding 2.7: Day of the Week: The rates of Any Force, Weapon Use, Suspect Injury, and Officer Injury peak on Saturdays and Sundays.

Finding 2.8: Time of Day: The rate of Any Force, Weapon Use, Suspect Injury and Officer Injury is the highest during the time period midnight to 6 a.m. in the morning.

Finding 2.9: Offense Type: The rate of Any Force, Weapon Use and Suspect Injury is highest for incidents involving disorderly conduct and violent offenses compared to drug, property, and other types of offenses. The rate of Officer Injury is highest for violent offenses.

Finding 2.10: Police Districts: The Germantown police district has the lowest rate of Any Force, Weapon Use, and Suspect Injury (with and without OC spray) and Officer Injury. The Wheaton/Glenmont police district has the highest rate of Any Force , Weapon Use and Suspect Injury (with and without OC spray). The highest rate of Officer Injury occurs in the Rockville District.

Finding 2.11: Age of Suspect: The rate of Any Force, Weapon Use, Suspect Injury and Officer Injury is lowest among suspects 18 to 20 years of age. The rates of all measures of force tend to increase with suspect age; the major exception is Weapon Use, which peaks in the 26 to 40 age categories.

Finding 2.12: Suspect Race: The rates of Any Force, Weapon Use, Suspect Injury (with and without OC Spray) and Officer Injury are higher when the suspect's race is White than when the suspect's race is Nonwhite.

Finding 2.13: Suspect Sex: The rates of Any Force, Weapon Use, and Suspect Injury are higher for male suspects than female suspects. The rate of Officer Injury is the same for male and female suspects.

Finding 2.14: Officer Age: Officers in the 36 to 40 age category have higher rates of Any Force, Weapon Use, Suspect Injury (with and without OC spray) and Officer Injury. Officers in the 46 and older age category have the lowest rates of Any Force, Suspect Injury and Officer Injury. Officers in the 21 to 25 age category have the lowest rate of Weapon Use.

Finding 2.15: Officer Race: Nonwhite Officers have slightly lower rates of Any Force, Weapon Use, Suspect Injury and Officer Injury.

Finding 2.16: Officer Sex: Male and female officers use Any Force and Weapons at about the same rate. Male officers are more likely to injure suspects, with and without OC spray. Female officers are more likely to be injured than male officers.

Finding 2.17: Officer Years of Service: The rates of Any Force, Suspect Injury and Office injury tend to decline from the first through the fourth year of service. The rates of Any Force, Suspect Injury and Officer Injury are at or near the highest values for officers in their fifth year of service. The rate of weapon use increases after seven years of service.

Finding 2.18: Officer and Suspect Race: The rates of Any Force, Weapon Use, Suspect Injury and Officer Injury are highest when both officer and suspect are White. The rates of Any Force, Weapon Use, Suspect Injury and Officer Injury against Nonwhite suspects are very similar for White and Nonwhite Officers.

Finding 2.19: Officer Sex and Suspect Sex: The rates of Any Force and Officer Injury are highest when the officer and suspect are both female. The rates of Weapon Use and Suspect Injury are highest when the officer and suspect are both male.

Conclusions

The characteristics of incidents, suspects and officer available in both the MCPD use of force data and in the MCPD arrest data are associated with differences in our five measures of the rate of force. Like all measures, these data reflect a combination of reporting practices and real behavior but the generally consistent patterns over time and across measures suggest that our approach is capturing real differences in the rates of force by incident, suspect and police characteristics. We have documented empirical associations, some of which may and some of which may not reflect underlying causal processes. These empirical associations are perhaps best considered as clues to be examined further and definitely not proof of cause and effect.

We have documented the increase in the rate of Any Force and the extent to which this may be at least partially due to changes in use of force reporting practices. However, in combination with recent increases in the rate of suspect injury and officer injury, the trends in these four measures warrant heightened attention. Our fifth measure of the rate of force, Weapon Use, appears to be at or near historic lows. The nature of this counter trend and its relationship to the trend in officer and suspect injury should not be ignored.

The largest differences in the rates of force by incidents are associated with the police district and the type of offense involved. Higher rates of force in violent offenses and disorderly conduct suggests that violence by and against the police is associated with the nature and location of the incident to which the police were called. The available use of force and arrest data do not provide sufficient information to understand why rates of force are higher in the Wheaton/Glenmont area and lower in Germantown and Silver Spring but these areal difference warrant further investigation.

The finding that rates of force are highest during the midnight to 6 a.m. period also warrants closer scrutiny. Again, the available data do not record for arrests and use of force the extent to which suspects arrested during these hours tend to be more intoxicated or more likely to resist police authority, but our study has documented that something different is happening in the early morning hours.

Our findings about suspect characteristics tend to run counter to traditional expectations about policing. We found higher rates of force against middle aged or older suspects and lower rates against younger suspects. We found higher rates of force against White suspects and lower rates against Nonwhite suspects, and for two measures of the rate of force—Any Force and Officer Injury—we found similar rates for male and female suspects. Male suspects do have higher rates of Weapon Use.

Our methodology is designed to separate arrest decisions from decisions to use different types of force and our findings suggest that different suspect characteristics are associated with the use of force than are associated with arrests. If these findings can be substantiated in other studies, they might help re-focus use of force policies and managerial attention to the times, places and circumstances associated with higher rates of force.

Our research has also found that 1) middle aged officers consistently have substantially higher rates of force than younger or older officers, 2) that, on some measures, White officers have somewhat higher rates of force than Nonwhite officers, and 3) that males officers tend to use more force and to have higher rates of suspect injury. However, female officers are injured at a higher rate than male officers. While these findings about officer characteristics similarly do not readily conform to conventional wisdom or prior research about officer characteristics and

the use of force, they are generated by an appropriate analysis of systematic data obtained over a seven year study period and merit consideration.

The research approach used in this report describes the nature of the use of force by the Montgomery County Police Department, constructs alternative measures of the rates at which force is used, and it reports the extent to which 13 characteristics of incidents, suspects and officers are associated with increases or decreases in those rates. This approach systematically uses the information in official police records to improve upon our understanding of how much force is used, under what circumstances, against which suspects, by which officers and with what types of resulting injuries.

The available data do not include all the information that might be relevant to understanding police use of force. For instance, the available arrest data do not include information on whether the suspect is intoxicated, or armed or is fleeing or otherwise resisting legitimate police authority. We do not know the history and pattern of police assignments, arrests and uses of force by individual police officers. These and other limitations weaken the ability of this study to provide more definitive answers about the nature of the force being used by officers in the Montgomery County police department but the strengths of this study are many and should be sufficient to advance our understanding about when, where, how and against whom force is used in Montgomery County, Maryland.

The Rate of Force Used By the Police in Montgomery County, Maryland

A Report
to the Montgomery County Department of the Police
and
the National Institute of Justice

Edward R. Hickey
Joel H. Garner

Final Report March 2002

This research was supported by award 98-IJ-CX-0086 from the National Institute of Justice and the cooperation of the Montgomery County Department of the Police. Points of view are those of the authors and do not necessarily represent the official position of these organization.

The Rate of Force Used By the Police in Montgomery County, Maryland

Introduction

This report describes the types and amount of force used by and against the police in Montgomery County, Maryland for the seven years between January 1993 to December 1999.

This study is based on official records of the use of force and of arrests maintained by the Montgomery Count Police Department (MCPD). Although not without limitations, these data provide an especially valuable basis for understanding what constitutes a force incident and how the use of different types of force varies over time and circumstances.

This research uses research methods commonly used in health research but rarely used in the study of policing. These methods combine official records of the use of force with information about a base rate of police activity--in this case adult, custody arrests--to calculate a rate of force. The use of a rate of force, which we define as the number of force incidents per 100 adult custody arrest, provides a rigorous empirical basis for understanding recent police behavior, assessing departmental policies and practices and testing theories about police behavior.

When, how and how often the police do and should use force are long standing and contemporary controversies within our society, within the policing profession, and in Montgomery County. Typically, these controversies concern individual encounters between individual officers and individual citizens but these individual encounters can involve patterns of behavior related to larger social issues, such as the nature and effectiveness of police policies and practices and the potential for unequal treatment of racial and ethnic minorities. These are grave and sensitive issues which have not been well informed by systematic social inquiry.

This research effort has relatively modest objectives—to describe the types and amount of force used by and against the police and to compare rates of force for different characteristics of officers, suspects and arrest situations. Our empirical research is better suited for describing what the police actually do than for determining whether the force used, in individual instances or in the aggregate, meets contemporary standards for the legal or ethical use of force. Reliable and systematic information about the force the police do use is, in its own right, a valuable contribution to our knowledge and can provide a solid foundation for discussions about the larger issues concerning the appropriate types and amount of force in specific circumstances.

Describing the Use of Force

This research employs the information in official Montgomery County Police Department reports on use of force incidents to describe the type and amount of force used by the police and by suspects. The nature of these reports are described in the MCPD Use of Force policies and in separate directives on completing a Use of Force Report. Beginning with an April 1992 MCPD policy statement, MCPD officers were required to complete a Use of Force Report (MCP 37) any time a police officer uses force which

- 1) results in an injury to an individual,
- 2) where an individual claims he/she is injured as a result of the amount of force used,
- 3) where force is applied by use of a protective instrument, whenever a firearm is discharged (other than authorized target practice), or
- 4) whenever a departmental canine inflicts injury to any subject or defendant in conjunction with a search, arrest attempt, or apprehension.

In addition, a September 1992 MCPD policy memorandum on completion of Form MCP 37 expands the reporting requirement to any time

- 5) a police officer uses any form of force, and
- 6) whenever a police officer is the victim of any type of force or is assaulted.

The MCPD Official Use of Force Form and the departmental use of force policy has been revised several times during the 1993 to 1999 period¹ and the definition of what types of incidents should be reported in these two documents has not always been identical. For instance, until 1998 the Use of Force policy did not clearly indicate that a form should be completed whenever an officer uses force, regardless of whether or not a weapon is used or whether or not an officer or suspect is injured, even though the directions for completing form MCP 37 state that any form of force should be reported. In May of 1998, a revision of the Use of Force policy stated that the form should be completed any time force is used to counteract a physical struggle (emphasis in original) but this addition to the Use of Force policy statement was not fully implemented until late 1998.

Throughout the 1993 to 1999 period, the MCPD Use of Force Report Form (See Appendix 1) has consistently provided for the collection of information about the characteristics of the force used, weapon type, injuries and medical treatment, characteristics of the officer and citizen involved, and the time, date and place of the incident². The existence of use of force forms does not distinguish MCPD from many other large urban law enforcement departments in the 1990s

¹See Appendix 1, MCPD Use of Force Policies and Use of Force Forms, 1992 to 1998, for a more detailed chronology of the departmental policy on use of force reporting.

²Prior to 1998, these reports also included a narrative section describing the incident.

(Pate and Fridell, 1993). What is uncommon (and perhaps unique) is the way in which the forms are completed, reviewed, and used. It is departmental policy that the officer's immediate supervisor must review and sign the form before it is sent to the appropriate District Patrol Commander for review and approval (MCPD, 1995). All coded information (and prior to 1999, the narrative account) must be completed in the officer's handwriting. Another unusual feature of these reports is that they are used for both the use of force by officers and assaults on police by citizens. In both types of incidents, force by the police and force by citizens are recorded. In this research, we did not use reports about incidents where the suspect used force but the officer did not³.

Two other considerations make these Use of Force Reports especially valuable. First, most of the items on the Use of Force Report have been encoded into automated data files by MCPD management. Second, because officers are required by the MCPD to complete these forms, any information they provide cannot be used against them in civil, criminal or administrative proceedings (Article 27, *Annotated Code of Maryland*, Sections 727 to 734). Third, failure to complete the form is a violation of a departmental directive and can lead to serious disciplinary action. Thus, officers in Montgomery County have few, if any, disincentives for not completing the Use of Force Report. While we think these processes enhance the value of these self-reports, neither this research or any other research on police use of force, including observations studies or surveys of arrested person, has tested the reliability of their measures of force.

³This form is also used to record animal destructions. These incidents are also not included in this report.

These circumstances created an extensive amount of information on police use of force under conditions where these self-reports are less vulnerable to criticism as biased and incomplete. Although Montgomery County police mangers had occasionally used these data to generate some descriptive statistics on the total number of use of force incidents, prior to this report the available information in these forms has not been analyzed systematically to assess the nature of force used by and against Montgomery County police officers, to understand the changes over time in response to the availability of new equipment and new training, to calculate a rate of force, or to assess the characteristics of officers, citizens and incidents in which force is used.

We have identified one limitation to the current policies and practices in the Montgomery County Police Department about completing a use of force form. During the entire period of this study, canine officer rarely completed a use of force form except when a suspect was bitten by a police dog. As we discuss in the section on suspect injuries, this practice may exaggerate the amount of injury associated with the use of canines.

Use of Force Policies and Training

During the period of this study, the Montgomery County Police Department used a four level force continuum: 1) Communication/Voice Command, 2) Physical Force, 3) Protective Instruments, and 4) Deadly Force. The first category involves commands, verbal instructions, and physical gestures. The second category involves the use of any part of the human body (short of deadly force). The third category involves the use of various approved instruments, such as an asp, O.C. spray, flashlight, baton, or a taser. The highest category includes the use of firearms, other protective instruments, or other force options which are intended to or likely to cause death

or serious injury. Strikes to the head, groin, and kidney areas are considered deadly force.

The use of force policy and force continuum are implemented in entry level training with 14 hours of classroom instruction, 16 hours of asp training, six hours of O.C. spray training and 37.5 hours of firearm training. In addition, the entry level training includes 160 hours of practical applications through the use of scenarios. This form of training includes the use of marking cartridges that are similar to paint balls but fired through a standard handgun.

Officers in the Montgomery County Police Department attend in-service training every year during which the current use of force policy is taught. Each year each officer is re-certified in the proper use of the asp and O. C. spray. In addition, officers are tested annually on firearm policies and handgun and shotgun marksmanship. Failure to re-qualify results in officers being placed on limited duty until they successfully complete the firearm course.

Organization of this Report

This report is organized into an Executive Summary, two chapters, a series of tables and figures and several appendices. Chapter 1 is a description of number and type of all the use of force incidents between 1993 and 1999 and the number and type of injuries received by police officers and by suspects. Chapter 2 uses information on adult custody arrests by the Montgomery County Police Department to produce an analysis of the rate of force. The tables and figures display the information generated from the use of force reports and the MCPD arrest data. The appendices include more detailed data tables and a chronology of MCPD use of force reporting policies.

Chapter 1: Describing the Uses of Force in Montgomery County

This chapter uses the information in the automated use of force reports to describe the number and types of uses of force reported by Montgomery County police officers. It also describes the number and types of force used by suspects and the nature of the injuries received by officers and by suspects.

Finding 1.1: Amount of Force

The use of force by Montgomery County police officers is infrequent.

Between January 1, 1993 and December 31, 1999, Montgomery County Police officers made 2,660 reports about 2,206 incidents where force was used (See Table 1). This is an average of just over 315 use of force incidents a year, or less than one incident a day. As displayed in Table 1 and Figure 1, during the seven year period between January 1, 1993 and December 31, 1999, there were at total of 2,660 reports completed on 2,206 incidents where officers from the Montgomery County Police Department used force. According to MCPD policies, if more than one officer is involved in using force during a particular incident with a particular suspect, each officer is to complete a separate report. An incident will involve only one suspect but may involve multiple officers; a report will involve one officer and one suspect.

As displayed in Table 1 and Figure 1, the number of *reports* increased from just under 250 in 1993 to 407 for 1998 and more than 560 by the end of 1999. The number of *incidents* increased from 243 in 1993 to 331 in 1998 and 393 in 1999. The distinction between reports and incidents is an important one for this study because the number of reports per incident increased from 1.03 reports for each incident in 1993 to over 1.45 reports for each incident in 1999.

Finding 1.2: Change in Reporting Practices

Changes in reporting practices appear responsible for some of the increases in the total number of use of reports in 1999.

Table 1 shows a 19 percent increase in the number of incidents from 1998 (331) to 1999 (393) but there is a 40 percent increase in the number of reports. These increases reflect two changes in reporting practices as well as changes in police behavior. For instance, part of the increase in the number of reports in 1999 is due to the increased use of multiple reports from different officers about the same incident of the use of force. Thus, the increase in the number of reports in 1999 appears to be due, in part, to a change in reporting practices in 1999 and not entirely due to a change in police behavior.

The increase in the number of incidents in 1999 appears to be influenced by a different reporting artifact. The number of reports involving the use of weapons in 1999 is 154, virtually unchanged from the 152 use of weapon reports in 1998. The number of use of force reports where no weapon was involved, however, increases from 255 in 1998 to 414 in 1999. The seven year trend in the use of weapons and the use of hands and feet is displayed in Table 1a and Figure 1a. These differences suggest that at least part of the increase in 1999 is due to changes in reporting practices (and not necessarily changes in police behavior) and that the numbers and percentages reported for 1999 must be used with additional caution throughout this report.

Finding 1.3: Use of Hands and Feet

In every year from 1993 to 1999, the most frequent type of force used by Montgomery County officers involved the use of hands and feet only.

Table 2 and Figure 2 display the types of force used by the police as indicated by police

officers in the 2,660 reports in this study. The single most frequent type of force used by the police involved the hands and feet only (1,502 or 55.6%), followed by the use of Oleoresin capsicum (OC) spray (660 or 24.8%) and the use of canines (212 or 8.0%). The remaining reports (11.6%) included 113 reports of the use of flashlights, 60 reports of the use of a firearm, 43 reports of batons or asp use and 25 reports of using a motor vehicle as a weapon. These findings are consistent with findings from prior research showing that most police use of force incidents involve weaponless tactics and that the use of weapons with greater potential to result in death or serious injury are relatively infrequent (Garner and Maxwell, 1999; Alpert and Dunham, 1999).

Finding 1.4: Use of OC Spray

In every year from 1993 to 1999, the second most frequent type of force reported is the use of OC Spray.

Aerosol sprays with oleoresin capsicum have only recently become available for police use in the United States and there has been an ongoing scholarly and policy debate concerning the appropriate use, safety and effectiveness of this innovative technology. The Montgomery County Department of Police adopted the use of OC spray in mid 1992. Table 3 and Figure 3 summarize the increase and decline in the use OC spray over the 1993-1999 time period. However, the number of reports of OC spray used peaked at 113 in 1994; in that same year, OC spray represented 35.1% of all uses of force by Montgomery County police. By 1998, the number of reports involving OC spray had dropped to 21.9% (89) of all use of force reports. In 1999, the number of reports involving OC spray represented was virtually unchanged from 1998 at 86 but this number represented only 15.1 percent of all reported uses of force. The low percentage in 1999 is influenced by the substantial increase in the reported uses of weaponless tactics in 1999.

Finding 1.5: Use of Canines

From 1993 to 1998, the use of canines was the third most frequent type of force used by the Montgomery County police department.

The Montgomery County Police Department, like most major American law enforcement agencies, maintains a separate canine unit. In 1999, the Montgomery County unit had 13 officers and 13 canines. These officers typically do not perform routine patrol but are called out to assist other officers in locating or apprehending suspects. When a canine unit is called out and the dog is used to apprehend a suspect and the suspect is bitten, these officers report a use of force incident.

Except for the peak of 47 (13.4%) canine uses of force in 1995, the number of use of force incidents involving canines remained fairly steady at about 30 incidents a year and ranged from 12.8 percent of all uses of force in 1993 to 7.1 percent in 1998. This pattern changed in 1999. In 1999, the number of canine uses of force declined to 10 incidents⁴ and, in conjunction with the increased reporting of the use of weaponless tactics, canine uses in 1999 represent only 1.8 percent of all use of force reports.

Finding 1.6: Type of Force Used by Suspects

**Hands and feet are the most frequent types of force used by suspects.
Firearms or knives were used by suspects in two percent of all use of force incidents**

The Montgomery County Police Department's use of force reporting form indicates the type of force use by suspects. We have coded this information into seven types of force and the

⁴We contacted the head of the MCPD canine unit and confirmed that this was a real change in police behavior.

frequency of each type of force or resistance are presented in Table 4 and Figure 4. Similar to police behavior reported above (and to prior research in other jurisdictions), the predominant type of force by suspects is the use of hands or feet, with other forms of force or resistance comprising only a small proportion of all reports. In 337 (15.3%) of the use of force incidents, no use of force is reported for suspects. Suspects were reported to use firearms in 20 incidents and knives in another 22 incidents; these two potentially lethal uses of force by suspects occurred in less than two percent of all use of force incidents between 1993 and 1999.

Finding 1.7: Type of Injuries to Suspects

Suspects were injured in just over half of all use of force incidents.

The most typical types of injuries involved exposure to OC spray, lacerations and dog bites.

As displayed in Tables 5 and 5A and Figures 5 and 5A, the 1,215 (55.1%) of the 2,206 use of force incidents resulted in injured suspects. In 991 incidents (44.9%), no suspects were injured. The most common type of injury involved exposure to OC spray. This type of injury occurred in 376 incidents (17.0% of all incidents and 30.9 % of all suspect injuries) over the seven year study period and was the most common type of injury to suspects in each year of the study.

We count exposure to OC spray as an injury for several reasons. First, Montgomery Count Police Department records it as an injury and we are studying their use of force practices. Second, exposure to OC spray elicits a range of responses from individuals from mild irritant to a contributory factor in death. Third, other types of injury categories, such as abrasions or lacerations, can also vary greatly in the severity of the physical harm inflicted. We suspect that typical exposure to OC spray is less severe than many other injuries and we have constructed two

measures of suspect injury in order to capture the nature of injuries with and without counting exposure to OC spray.

Two hundred and sixty four (12.0% of all incidents and 21.7% of suspect injuries) suspects suffered lacerations and another 142 (6.4% of all incidents and 11.7% of all injuries) received abrasions during this period. In 174 incidents (7.9% of all incidents and 14.3% of all suspect injuries) suspects were bitten by police dogs. In the seven years of this study, 14 suspects suffered gunshot injuries in use of force incidents; gunshot injuries comprised 0.6% of all incidents and 1.2% of all injuries to suspects.

Finding 1.8: Trends in Suspect Injuries

The number of suspects injured peaked in 1995 and by 1999 declined to a level similar to 1993.

The percentage of suspects injured, including and excluding injuries from OC spray, declined from 1993 to 1999.

As displayed in Table 6 and Figure 6, the total number of injured suspects, including the effects of OC spray, varies between 150 and 200 between 1993 and 1999. The highest number of injured suspects (193) occurs in 1995 and the lowest number (158) occurs the following year. The number of injured suspects in 1998 and 1999 (171 and 181) are similar to the number of injured suspects in 1993. The number of injuries not involving OC spray, however, rose from 104 in 1993 to 128 in 1998 and 142 in 1999.

The trend in the number of suspect injuries is stable or rising, the percent of all use of force incidents involving suspect injuries declines from 70.4% in 1993 to 52.3% in 1998 and just 46.1% in 1999⁵. The percent of other, non-OC spray related, injuries declines from 42.8% of all

⁵The 1999 percentage is affected by the change in reporting practices during 1999.

incidents in 1993 to 36.1% in 1999. This decline in percentage of suspect injured occurs throughout the seven year study period but 1999 reductions stem in part from the change in reporting practices identified earlier.

These data are presented in a slightly different format in Figure 6A. Using the data presented in Table 6, the top part of the bar in Figure 6A shows the increased proportion of incidents with no injury to suspects; the middle part of the bar shows the decline in the proportion of incidents with injury due to OC spray. The bottom bar of Figure 6A shows the decline in the proportion of incidents associated with suspects injuries not associated with OC spray.

Finding 1.9: Suspect Injuries and Type of Force

Suspects are most frequently injured when officers use canines or OC spray.

Suspects are least frequently injured when officers use vehicles (as weapons), hands and feet or firearms.

Suspects are more likely to be injured when officers use canines or OC spray and less likely to be injured when officers use their vehicles (as a weapon), hands and feet, or firearms (See Table 7 and Figure 7). In 198 (96.1%) of the 206 use of force incidents involving canines, the suspect is injured. These findings stem in great part from the use of force reporting practices of canine unit of the Montgomery County Police Department⁶. In 403 (70.0%) of the 576 incidents involving the use of OC spray, the suspect is injured⁷. Similarly high percentages of

⁶Independent records of the canine unit indicate that between 1993 and 1998, canine officers were involved in 14,125 deployments. 1,179 of these deployments resulted in the apprehension of a suspect. Suspects were injured in 202 of those apprehension. These figures suggest that the rate of injury is 1.4 percent of all deployments and 17.1 percent of all apprehensions.

⁷Unfortunately, the available automated data about the use of force incidents and injuries does not describe the injuries in sufficient detail to distinguish the exact nature of the injury.

injury occur in incidents where officers use a flashlight (66.3% injured) or a baton or an asp (62.1% injured). In the 14 incidents where the officer used a vehicle, there were 3 (21.4%) injured suspects. In the 709 incidents where the officers used only their hands and feet, there were 494 (41.1%) injured suspects. In the seven year period of this study, 45 incidents involved police use of firearms but only 19 (42.2%) of these suspects were injured⁸.

Finding 1.10: Officer Injuries

Officers are injured in just under 25% of their use of force reports.

Officer injuries typically involve bruises or blunt trauma, lacerations, sprains and abrasions.

MCPD officers received two gunshot wounds, both in 1994.

In the 2,660 reports by officers over the entire 1993 to 1999 period, 628 (23.6%) involved an injury to the reporting officer (See Tables 8 and 8A and Figures 8 and 8A). While this percentage varies from a high of 28.3% in 1997 to a low of 19.2% in 1996, the number of officer injuries increased from 63 in 1993 to a peak of 118 in 1999. The increased number of injuries in 1999 is concentrated in two injury types; lacerations went from 18 in 1998 to 34 in 1999 and abrasions went from 9 in 1998 to 24 in 1999. Because of the increased reporting of incidents with no officer injury in 1999, the percent of officers injured in 1999 is 21.8, down from 25.8% in 1998. Table 8 and Figure 8 displays fifteen types of injuries to MCPD officers between 1993 and

However, suspects sprayed with OC are typically treated by washing the face and eyes with water. Canine injuries involve dog bites.

⁸Firearm use can involve a discharge where the suspect is not hit, or the threatened use of a firearm where no bullet is discharged.

1999⁹. Table 8A and Figure 8A displays the frequency and percentage of each injury type, excluding cases with no injuries.

During the entire seven year period, the typical injuries involved a bruise--147 bruises or 5.5% of all reports and 23.4% of all officer injuries--or a laceration--132 lacerations or 5.0% of all reports and 21.0% of all officer injuries. Officers reported that they suffered 99 sprains, which are 3.7% of all reports and 14.4% of all injuries. During the seven year study period, MCPD use of force reports included only two gunshot injuries to officers, both in 1994.

Finding 1.11: Trends in Officer Injuries

**The number of officers injured has increased from 1993 to 1999.
The percentage of officers injured peaked in 1997.**

The annual trends in the number and percent of reports with officer injury is similar to the annual trends suspect injury (See Table 9 and Figure 9). The number of injuries peaks at 118 in 1999; 1998 and 1997 are the second and third highest years for officer injuries. Over the seven year study period, the percent of reports with officer injuries various from 19.2% in 1996 to 28.3% in 1997. The percentage of use of force reports with officer injuries declines to 23.9% in 1999, partially due to the increased number of multiple officer reports about the same incident and the increased reporting of incidents involving hands and feet only.

Summary

⁹These data do not necessarily include all officer injuries, just those that occurred during use of force incidents and were reported on Form 37. The available use of force data do not specify how the officer was injured, whether the officer's injury was intentionally inflicted by the suspect, or the time sequencing of officer use of force or injury and suspect use of force or injury.

The existence of official self-reports of police use of force provides a unique opportunity to learn about the frequency and types of force used by Montgomery County police officers and the frequency and nature of the injuries received by both suspects and officers during use of force incidents. The available data provide useful details about the nature and trends in the use of force but, because of apparent changes in reporting practices during 1999, need to be used with caution. Many of our descriptive findings conform to prior empirical research on the use of force by and against the police: the use of force is infrequent and, when force is used, it most commonly involves the use of weaponless tactics. The most commonly used weapons are OC spray and canines. The use of life threatening weapons is rare.

Suspects involved in use of force incidents commonly use weaponless tactics or no force at all. Suspects also rarely use life threatening weapons, such as the use of knives or firearms. Suspects are injured in about half of the use of force incidents; about 25% of use of force reports include an injury to the officer. The injuries received by suspects and officers tend to be relatively minor. The number of injuries to officer and to suspects is increasing in recent years but the proportion of all use of force incidents involving injuries to suspects is declining.

Chapter 2: Incident, Suspect and Officer Characteristics

Associated with Increased Rates of Force

In the first chapter of this report, we described the characteristics of use of force incidents reported by the Montgomery County Police Department from January 1993 to December 1999. In this chapter, we describe and implement a methodology for assessing the characteristics of officers, suspects and incidents that are associated with the use of increased or decreased amounts of force.

The descriptive information provided in Chapter 1 does not provide a complete basis for understanding the use of force by the Montgomery County Police Department. Just as raw counts of the number of offense are typically used to compute crime rates using information on the types of crimes reported and the population of Montgomery County, this report uses the raw information on the number and types of force used and the characteristics of adult custody arrests made by the Montgomery County Police Department to compute rates of force. For the purposes of this research, we compute rates of force by dividing the total number of force incidents by the total number of arrests¹⁰ for the period 1993 through 1999. This report uses a common measure of police activity—arrests—as the basis for computing a rate of force. Other reports have used other measures to construct use of force rates. For instance, the IACP program on use of force employs calls for services to compute rates of force (Henriquez, 1999). Researchers using data from their observations of officers on patrol have counted “potential violent situations” to compute use of

¹⁰Because we only had detailed information on adult arrests, our calculations of the rate of force are based on uses of force against individuals 18 years of age or older. For this reason, our analyses of the rate of force excludes the 315 reports (11.8% of 2,660 reports) where the suspect was a juvenile. We also excluded arrests generated by warrants.

force rates (Baily and Garofalo, 1986; Worden, 1995). Langan et al., (2001) report rates of force based on the citizen reports of the number of actual contacts with police officers. Garner, et al, (1996) and Garner and Maxwell (1999) compute rates of force based on officer self-reports of use of force incidents and adult custody arrests. All of these approaches have strengths and weaknesses and contribute to our understanding of the use of force by and against the police. The approach used in this chapter relies on existing, automated official police records of uses of force and of arrests but generates multiple measures of different types of force based on indicators of the severity of the force used. Using the information in the use of force reports and MCPD arrest data, we construct five measures of force—Any Force, Weapon Use, Any Suspect Injury, Suspect Injury Excluding OC Spray, and Officer Injury.

Finding 2.1: Rates of Force

The rate of Any Force, over the 1993-1999 period is 6.4 incidents of force for every 100 arrests.

During the seven year period 1993 to 1999, Montgomery County Police Department records include 2,345 reports of uses of force against 1,938 adults and 30,209 adult custody arrests. Using this information, we compute a total rate of force during this period as 7.8 reports and 6.4 incidents of Any Force per 100 arrests (See Table and Figure 10)¹¹. These rates are about one half the rate reported in other recent studies that have computed a rate of force using police arrest statistics (Garner and Maxwell, 1999).

¹¹Table 10 and Figure 10 display all five of these measures of the rate of force and the calculations of the rates are based on either officer reports or incidents of force against a single suspect.

Finding 2.2: Weapon Use

The rate of Weapon Use is 2.9 incidents for every 100 adult custody arrests.

We compute a measure of the rate of Weapon Use that is defined as the number of force reports or incidents that involve the use of any type of weapon divided by the number of arrests. As displayed in Table 10, the rate of weapon use for the 1993 to 1999 period in Montgomery County is 3.4 reports and 2.9 incidents of Weapon Use per 100 arrests.

Finding 2.3: Suspect Injury

The rate of Any Suspect Injury is 3.6 incidents per 100 arrests; when injuries associated with OC spray are excluded, the rate of Suspect Injury Excluding OC Spray is 2.4 incidents per 100 arrests.

The rate of Any Suspect Injury is defined as the number of suspects injured divided by the number of arrests during the 1993-1999 period, the rate of suspect injuries was 3.6 injuries per 100 arrests (See Table 10a). We also generated a second rate of suspect injuries in which we excluded the generally less serious injuries associated with the use of OC spray. The rate of Suspect Injury Excluding OC spray is 2.4 incidents per 100 arrests.

Finding 2.4: Officer Injury

The rate of Officer Injury is 1.9 officer reports per 100 arrests.

During our seven year study period, the rate of Officer Injury is 1.9 reports of officer injury for every 100 arrests. The rate of Officer Injury is the lowest of our five use of force measures but captures an important concern among policy makers, police managers, researchers and officers.

The five measures we have generated in this report distinguish between any report of force, any force involving a weapon, and any report where either the suspect or the officer is injured. Among the important findings from prior research is that there is no standard definition of what constitutes the use of force or how rates of force should be computed. We have used the broadest definition possible in the official Montgomery County use of force records—any use of force—and then generated more restrictive definitions involving more severe types of force—weapon use and injuries to suspects and officers. In many of our analyses, all five of these measures generate the same association with officer, suspect and incident characteristics and these consistent findings strengthen our belief that these findings are real. When the association of the five measures of force is not consistent within a particular characteristics of an officer, suspect and incident, this multiple measurement approach provides a basis for understanding how the observed relationships are or are not dependent upon the particular measure of force used.

Characteristics of Incidents, Suspects and Officers

One of the primary purposes of this study is to assess the extent to which the five rates of force vary by the characteristics of use of force incidents, police officers or suspects. Our ability to make these assessments derives from the existence of common items in the automated information compiled by the Montgomery County Police Department about the use of force incidents and about adult custody arrests. Based on these two existing data files, we are able to compare the five rates of force using six characteristics of the incident--the year, month, day of week, time of day, police district and offense type—four characteristics of the officers¹²—age, race,

¹²The data files we obtained did not identify individual officers; Officer identification in both the use of force files and the arrest files were re-coded by the Montgomery County Police

sex, length of service—and three characteristics of the suspects—age, race, sex.

The remainder of this section examines these 13 characteristics and how they vary along our five measures of force. In these analyses, we remove all of the use of force incidents involving the use of canines. We do this because for most officers the use of canines is not an option. Only the handful of officers assigned to the canine unit can possibly use this type of force. While it is appropriate to include these uses of force in the rate of force for all of the department, it is not appropriate to include these incidents when we are comparing how the total rate of force varies by officer, suspect and incident characteristics. Table 10a displays the five measures of force when the 161 reports (156 incidents) involving canines are removed. When canine use is excluded, the rates of Any Force are 7.2 reports and 5.9 incidents per 100 arrests; the rates of Weapon Use are 2.9 reports and 2.4 incidents per 100 arrests. It is from this summary table with 2,184 reports and 1,782 incidents that all subsequent comparisons are made.

Finding 2.5: Year of the Incident:

The rate of Any Force is fairly steady from 1993 to 1998 but increased in 1999.

The rate of Weapon Use decreases steadily since 1994.

The rates of Suspect Injury with and without OC spray decline and then increase to a level still below the rates in 1993.

The rate of Officer Injury declines but rises steadily following 1996 to an all time high in 1999.

In tables 11a through 11d, we present detailed information about the rates of force for each year using the rates calculated based on officer reports and on incidents. As displayed in Table 11a, the rate of any force over the seven years included in this study increased from 5.9 reports in 1993 to 10.2 reports in 1999. There is also a less dramatic increase from 5.7 to 7.0 incidents per Department.

100 arrests. However, while the rate of any use of force increased over this period, the rate of weapon use declined from 3.0 reports per 100 arrests in 1993 to 2.7 reports per 100 arrests in 1999 (See Table 11b). The peak in weapon use occurred in 1994 and the subsequent reduction stems in great part from the drop in the use of OC spray from 107 incidents in 1994 to 80 incidents in 1999. These findings conform to the descriptive information provided in Part 1 of this report which identified what appears to be increased reporting of use of force incidents in 1999 that do not involve weapons and increased reporting when more than one officer is involved in a single incident¹³. From the available official records, we cannot easily determine the extent to which the increased rates of force are reporting artifacts or real changes of police behavior but the use of multiple measures helps to identify that the increases occurred in the use of generally less severe weaponless tactics and not in the more severe use of weapons.

The rate of Any Suspect Injury decreases from 3.8 incidents per 100 arrests in 1993 to 2.6 incidents in 1996. The rate increases to 2.8 incidents per 100 arrests in 1998 and to 3.2 incidents per 100 arrests in 1999. A similar pattern, with slight reductions and then increases in 1999, occurs in our measure of suspect injury that excludes OC spray. Until 1998, both measures of suspect injury were at or below the rates reported in 1993; in 1999, the rate of suspect injury excluding OC spray rises to 2.4 incidents per 100 arrests from a rate of 1.9 in 1998. The 1999 rise in suspect injuries is due almost entirely to a doubling of the number of reported lacerations (from 33 to 66) and a more than 40% increase in the number of reported abrasions (from 33 to 46) and is

¹³In our subsequent analyses, we continue to use the distinction between reports and incidents but typically only report one or the other. When we are analyzing incident characteristics or suspect characteristics, we use information about the 1,782 incidents of force; when we are analyzing officer characteristics, we use information about the 2,184 reports of force. In all the analyzes of rates of force, we use information about the same 30,209 adult custody arrests.

not an across the board increase in all types of injuries. This change could be a reporting artifact or a real change in officer behavior toward uses of force that result in more minor injuries. It is important to note, however, that the rates of suspect injury in 1999 remain below those reported in the 1993 to 1995 period.

The rate at which officers are reported injured is somewhat different than the pattern with suspect injury. Officer injury rates jump from 1.7 reports per 100 arrests in 1993 to 2.2 reports in 1994. This is followed by lower officer injury rates in 1995 and 1996 and then there is a steady increase after 1996 that peaks at 2.5 reports of officer injury per 100 arrests in 1999. The increase in officer injuries in 1999 is almost entirely due to an increase in reported abrasions (from 9 to 20) and in reported bruises or blunt trauma (from 17 to 29). The three year trend (1997-1999) in the number and rate of officer injuries (and the one year increase in the number and rate of suspect injuries) suggests that not all the increases in reported uses of force in 1998 and 1999 are due to increased reporting of the most minor incidents. Officers and suspects are being injured at an increasing rate and these findings suggest real but modest increases in the amount and severity of force being used during use of force incidents. While these increases warrant renew attention by the Montgomery County Department of Police, we do not see any clear relationship of changes in officer injury, suspect injuries, or other characteristics of police use of force in Montgomery County.

In the remainder of this report, we assess differences in the rates of force associated with 13 characteristics of officers, suspects and incidents in a consistent format of two tables and two figures for each characteristic. In the first page of this format, we present the rate of any use of force and rate of weapon use in both a table and a graph. In the second page, we present the rate

of suspect injury (with and without OC spray) and officer injury also in a separate table and graph¹⁴.

Finding 2.6: Month of Year

The rates of Any Force, Weapon Use, Suspect Injury and Officer Injury are highest in July.

More force of all types is used in the month of July than any other month (See Tables 12a and 12b). This difference is most pronounced in Weapon Use—3.5 incidents per 100 arrest versus 2.2 in May—and in Suspect Injury including OC spray—4.3 per 100 versus 2.7 per 100 in August. The rate of Officer Injury also peaks in July at 1.9 per 100 arrests but is closely followed by the rate of 1.8 per 100 in August. Officer injury rates are lowest in August (1.1 per 100).

The second highest rates of Any Force (6.7 per 100) and Weapon Use (2.6) is December but there is no clear of force rates among the other months. The rates for suspect injury are lowest in January regardless of whether injuries due to OC spray are included (2.5 per 100) or not (1.5 per 100).

Finding 2.7: Day of the Week

The rates of Any Force, Weapon Use, Suspect Injury, and Officer Injury peak on Saturdays and Sundays.

Rates of force vary by the day of the week. Although more arrests occur during the workweek, there are more use of force incidents on Saturday and Sunday and the rates of Any

¹⁴ A complete tabular listing of the frequency of force and the rate of force by each of the 13 characteristics is presented in Tables A5, A6 and A7 in the appendices.

Force for Saturday (8.1 per 100) and Sunday (8.6 per 100) are more than 80 percent higher than the rate for Wednesday (4.5 per 100). This pattern of weekend rates are about 80 percent higher than the lowest weekday for Weapon Use, Suspect Injury and Officer Injury (See Tables 13a and 13b).

Finding 2.8: Time of Day

The rate of Any Force, Weapon Use, Suspect Injury and Officer Injury is the highest during the time period midnight to 6 a.m. in the morning.

Most arrests and most use of force incidents occur between 6 p.m. and midnight but the rate of force is highest (10.1 per 100 arrests) during the six hour period after midnight (See Tables 14a and 14b). This rate is nearly twice the rate of Any Force during the 6 p.m. to midnight period and three times the rate (3.4 per 100) of the noon to 6 p.m. period. This pattern is consistent across all five measures of force—the rate of Weapon Use, Suspect Injury and Officer Injury are consistently higher during the midnight to 6 a.m. period and lowest between noon and 6 p.m.

Finding 2.9: Offense Type

The rate of Any Force, Weapon Use and Suspect Injury is highest for incidents involving disorderly conduct and violent offenses compared to drug, property, and other types of offenses.

The rate of Officer Injury is highest for violent offenses.

Using the use of force forms and the arrest record, we have coded the nature of the offense in arrests and use of force incidents. These separate record systems record the nature of the offense in different formats and categories but we have re-coded them into five generic types—violence, property, drugs, disorderly conduct and other—in order to construct rates of force

by type of offense¹⁵. As displayed in Tables 15a and 15b, the number of use of force incidents involving drugs or property offenses relative to the number of arrests for drugs and property offenses (1.2 incident per 100 arrests for drugs and 1.4 for property offenses) is much lower than the rate of force for violent offenses (16.1 per 100) or disorderly conduct (26.1 per 100). The high rate of force for disorderly conduct may be an artifact of officers listing the nature of suspect resistance as the primary offense. It is also important to note that while the rate of force is high only a small number of arrests (456 out of 30,209) and use of force incidents 119 out of 1,782) are coded as disorderly conduct offenses.

The rate of Weapon Use is also highest for disorderly conduct (18.2 per 100 arrests) and lowest for drug and property offenses (0.6 and 0.7 per 100, respectively). At 5.8 per 100 arrests, the rate of Weapon Use in violent offenses is similar to the rate for Other offenses (5.2 per 100). The rate of Suspect Injury with and without OC spray follows this same pattern with regard to offense type. Disorderly conduct has the highest rate at 17.8 injuries per 100 arrests. Violent offenses and Other offense types are again similar at 7.2 per 100 and 6.6 per 100. When injuries involving OC spray are excluded, the rate of Suspect Injury for disorderly conduct is still the highest offense type but much lower at 6.8 per 100 and similar to the rate for violent offenses at 5.1. The rate of Officer Injury at 4.4 per 100 arrests is highest for violent offenses, followed by disorderly conduct and other offenses.

¹⁵Both use of force forms and arrest reports are completed after an event is over and the nature of the offense coded may reflect the nature of suspect behavior after the officer arrives on the scene as much as the suspect behavior when the officer arrives.

Finding 2.10: Police Districts¹⁶

The Germantown police district has the lowest rate of Any Force, Weapon Use, and Suspect Injury (with and without OC spray) and Officer Injury.

The Wheaton/Glenmont police district has the highest rate of Any Force , Weapon Use and Suspect Injury (with and without OC spray).

The highest rate of Officer Injury occurs in the Rockville District.

There are substantial and fairly consistent differences between the officers in the five police districts in how much force they report. Germantown district has the lowest rates of force, followed by Silver Spring, Bethesda, Rockville and Wheaton/Glenmont (See Tables 16a and 16b).

The Germantown police district has the lowest rate of Any Force (2.7 per 100), Weapon Use (.8 per 100), and Suspect Injury (1.7 with OC spray and 1.1 without OC spray) and Officer Injury (.7 per 100). The Wheaton/Glenmont police district has the highest rate of Any Force (10.0 per 100), Weapon Use (3.7 per 100) and Suspect Injury (5.8 with OC spray and 3.7 without OC spray). The one minor variation in this pattern is that the highest rate of Officer Injury occurs in the Rockville District—2.7 injuries per 100 arrests with the Wheaton/Glenmont district a close second at 2.4 per 100.

The differences by police district are the largest among the 13 officer, suspect and incident characteristics used in this study. The Wheaton/Glenmont rate of 10.0 for Any Force is more than three times higher than the Germantown rate of Any force at 2.7; the Wheaton/Glenmont rate of weapon use (4.9) is more than five times greater than the same rate for Germantown (.8). Because we have controlled for the total number of arrests, the amount of crime in these district cannot explain these differences.

¹⁶For a substantial proportion of arrests, information about police district was missing, especially in 1998 and 1999. These rates were computed from the distribution of use of force and arrests where the district was known.

Finding 2.11: Age of Suspect

The rate of Any Force, Weapon Use, Suspect Injury and Officer Injury is lowest among suspects 18 to 20 years of age.

The rates of all measures of force tend to increase with suspect age; the major exception is Weapon Use, which peaks in the 26 to 40 age categories.

Criminal behavior that comes to the attention of the police tends to be concentrated among juveniles and young adults. This appears to be reflected in number of persons arrested by the Montgomery County Police Department. The rates at which force is used, however, tend to increase with the age of the suspect. Among the youngest suspect age category in this study, 18 to 20 years of age, the rate of Any Force is 3.6 incidents per 100 arrests (See Table 17a and 17b). The rate of Any Force increases to 5.5 among 21 to 25 year old suspects and then varies only slightly between 6.7 to 6.9 for suspects in the three age categories covering suspects aged 26 to 45. Among the oldest suspect age category, the rate of Any Force is 7.4, more than twice the rate for suspects aged 18 to 21.

The rate of Weapon Use also increases from a low of 1.4 for the youngest suspect age category to 3.0 for suspects aged 26 to 30. The rate of Weapon Use, however, declines among suspects aged 41 or older to a rate 2.0 that is below the rate of 21 to 25 year old suspects. The rate of Any Suspect Injury also begins at its lowest level among the youngest suspects (1.7 incidents per 100 arrests) and then peaks 4.0 per 100 in the 36 to 40 age group. The rate in Any Suspect Injury among suspects older than 46 is 3.3; it then declines to 3.0, close to levels experienced by suspects aged 21 to 25. The rate of Suspect Injury with OC spray excluded exhibits a steady increase from 1.1 incidents per 100 arrests at ages 18 to 21 and peaks at the rate of 2.7 per 100 in the oldest age group, 46 and older. The rate of Officer Injury is lowest among the 18 to 21 age group (.9) but these rates fluctuate between 1.4 and 1.8 per 100 for age groups over 21.

Finding 2.12: Suspect Race

The rates of Any Force, Weapon Use, Suspect Injury (with and without OC Spray) and Officer Injury are higher when the suspect's race is White than when the suspect's race is Nonwhite.

Much of the public policy discussion concerning police use of force focuses on the extent to which there is more force used against racial minorities than White suspects. The rates of force used in this study show a consistent pattern; there are substantially higher rates of force used against White suspects than Nonwhite suspects. The rate of Any Force for White suspects is 7.6. The comparable rate for Nonwhite suspects is 4.7. Similarly, the rate of Weapon Use is 2.9 for White suspects and 2.1 for Nonwhite suspects. The rate of Suspect Injury including OC spray displays the same pattern—White suspects are nearly twice as likely (4.1 versus 2.3 per 100 arrests) to be injured than Nonwhite suspects. A similar but not quite as large difference (2.7 versus 1.4 per 100 arrests) exists when OC spray is excluded from the measure of Suspect Injury and when we examine Officer Injury (1.7 for White suspects versus 1.2 for Nonwhite suspects).

These findings do not conform to any of the prior research on police use of force. Most research studies have found that the race of the suspect is not associated with increased use of force or increased use of excessive force. Worden's (1995) study of 42 use of force incidents out of 1,528 police citizen encounters in 24 jurisdictions during 1977 is the only published criminological study to find that more force is used against racial minorities. Our findings are that the rate of force is higher for White, not minority, suspects¹⁷. This finding contradicts the

¹⁷The Use of Force data and for some years the arrest data permit the use of a larger number categorization of suspect race—White, Black, Asian, Hispanic and Other. The numbers of Asian and Other are too small to analyze separately and are included under the Minority category. We computed our five measures of force using a three way grouping—White, Hispanic and Minority separately for each year (See Table A9 in the Appendices). The results consistently

generally null findings of prior research and perceptions of much of the public and especially racial minorities that racial minorities are subjected to disproportionate amounts of force by the police.

Given the anomalous nature of our findings, we checked and rechecked our calculations and reviewed our entire methodological approach prior to reporting these findings. We are confident that our approach and application of that approach is a sound method for studying the use of force. Our approach separates the arrest decision from the decision to use force and our findings are that force, given that an arrest has been made, is not disproportionately used against Nonwhite suspects in Montgomery County during the period 1993 to 1999.

Finding 2.13: Suspect Sex

The rates of Any Force, Weapon Use, and Suspect Injury are higher for male suspects than female suspects.

The rate of Officer Injury is the same for male and female suspects.

Most arrests (25,056 out of 30,209) and most use of force incidents (1,507 out of 1,782) involve male suspects but there are consistent differences in the rate at which force is used against male and female suspects (see Tables 19a and 19b). The rate of Any Force is slightly higher for male suspects (6.0 incidents per 100 arrests) than for female suspects (5.3 per 100); the differences in the rates of Weapon Use are in the same direction—more force against male suspects—but the size of the difference is much larger. The rate of Weapon Use against male suspects is 2.7 per 100, more than twice the rate for female suspects (1.2). This sex difference is

show a higher rate of force against White suspects.

also found when using rates of Suspect Injury; male suspects are more likely to be injured than female suspects. Interestingly, the rate of Officer Injury is the same (1.4 incidents per 100 arrests) for male and female suspects.

Finding 2.14: Officer Age

Officers in the 36 to 40 age category have higher rates of Any Force, Weapon Use, Suspect Injury (with and without OC spray) and Officer Injury.
Officers in the 46 and older age category have the lowest rates of Any Force, Suspect Injury and Officer Injury.
Officers in the 21 to 25 age category have the lowest rate of Weapon Use.

Rates of force and of weapon use vary by officer age (See Table 20a). While officers aged 26 to 30 make the most number of arrests (12,587 out of 30,209) and are involved in a large number of uses of force (925) and weapon use (334), their rate of force is 7.3 reports of force per 100 arrests and their rate of weapon use is 2.7 reports per 100 arrests. These rates are just about average for officers in Montgomery County. However, officers aged 36 to 40, as a group, have substantially higher rates of force—8.9 per 100 arrests—and rates of weapon use—4.3 per 100 arrests. The oldest group of officers (46 and older) and the youngest groups of officers (aged 21 to 25) have the lowest rates of force and weapon use. Similar patterns exist with suspect and officer injuries (See Table 20b). Officers aged 36 to 40 are more likely to injury suspects and more likely to be injured by suspects than any other officer age group.

Finding 2.15: Officer Race

Nonwhite Officers have slightly lower rates of Any Force, Weapon Use, Suspect Injury and Officer Injury. These differences are most evident in the differences of Weapon Use rates: 3.0 Weapon Uses per 100 arrests for White officers compared to 2.3 for Nonwhite Officers.

During the period of this study, White officers in the Montgomery County Police Department tend to use more force, use more weapons, injury more suspects and are injured more than nonwhite officers (See Table 21a). The differences are not as dramatic as those with officer age but the pattern is consistent across all five measures of force. These officer race differences are most pronounced in our measure of the rate of weapon use with White officer using weapons at a rate of 3.0 reports of weapon use per 100 arrests compared to 2.3 report per 100 arrests for Nonwhite officers. The rates of Any Suspect Injury are higher for White officers—4.0 injuries per 100 arrests versus 3.4 injuries per 100 arrests for nonwhite officers but the rates of injuries other than OC spray are virtually equivalent—2.5 reports per 100 arrests versus 2.6 reports per 100 arrests (See Table 21b). White officers are only slightly more likely to be injured—1.9 reports per 100 arrests—than nonwhite officers—1.8 per 100 arrests.

Finding 2.16: Officer Sex

**Male and female officers use Any Force and Weapons at about the same rate.
Male officers are more likely to injure suspects, with and without OC spray.
Female officers are more likely to be injured than male officers.**

Most arrests and most uses of force are made by male officers but the rate of using Any Force is nearly identical for male and female officers—7.1 reports per 100 arrests versus 7.3 per 100 (See Table 22a). Male officers use weapons at a slightly higher rate (2.9) than female officers (2.6). There are more dramatic differences in the rates by which male and female officers

injure suspects. The rate of any injury is 3.2 for female officers and 4.0 for male officers; when OC spray is excluded the rates are 2.0 and 2.6 respectively (See Table 22b). On the other hand, our measure of officer injury reveals that female officers are more likely to be injured (2.3) in use of force situations than male officers (1.8).

Finding 2.17: Officer Years of Service

The rates of Any Force, Suspect Injury and Office injury tend to decline from the first through the fourth year of service.

The rates of Any Force, Suspect Injury and Officer Injury are at or near the highest values for officers in their fifth year of service.

The rate of weapon use increases after seven years of service.

There is less of a clear pattern of the use of force associated with years of service than officer age, race and sex. As displayed in tables 23a and 23b, except for Weapon Use, there tends to be a peak during the first year of service, followed by three years of lower rates of force. For instance, rates of Any Force declines from 8.9 reports of Any Force in the first year of service to 6.1, 6.9 and 6.5 in the second, third and fourth years, respectively. In the fifth year of service, the rate of Any Force reaches its highest level at 9.0 reports per 100 arrests. The rate of Weapon Use does not fit this pattern neatly; rates of Weapon Use decline from 2.7 per 100 arrests in the first year to 1.9 in the second year but then remain stable in the 2.7 range until after the seventh year of service when the rate increases to 3.4 and higher in later years.

After a decline after the first year, the rates of Suspect Injury peak at 4.8 per 100 arrests (with OC Spray) and 3.5 (without OC spray) at five years of service. These rates then fluctuate without much pattern after six years of service. The rate of Officer Injury appears to increase slightly with age, with peak periods of 2.5 per 100 at five years of service and 2.6 per 100 at eleven to fifteen years of service.

Finding 2.18: Officer and Suspect Race

The rates of Any Force, Weapon Use, Suspect Injury and Officer Injury are highest when both officer and suspect are White.

The rates of Any Force, Weapon Use, Suspect Injury and Officer Injury against Nonwhite suspects are very similar for White and Nonwhite Officers.

The concern about the possible disproportionate use of force against minority suspects is occasionally identified as an interaction between the race of the officer and the race of the suspect. We examined that issue by constructing a variable with four categories for the possible racial combinations of officers and suspects. This analysis shows (See Table 24a and 24b) that the highest rates of force for all five measures occur when the officer and the suspect are White. The pattern of high rates of force against White suspects holds regardless of the race of the officer. The rate of Any Force against White suspects is 7.7 when officer is White; when the officer is Not White, the rate of Any Force against White suspects is 6.8. The rate of Any Force against Nonwhite suspect is 4.7 regardless of the race of the Officer.

The rate of Weapon Use is 3.1 per 100 arrests for White officers and White suspects; the rate for all other race categories ranges from 1.9 to 2.1 per 100 arrests. White suspects have the highest rate of Any Suspect Injury and this relationship holds when the officer is White (4.2 versus 3.7 per 100 arrests) and when the officer is Nonwhite (2.4 versus 2.1). When OC spray is excluded from the measure of Suspect Injury, the rate for White Suspects is higher than the rate for Nonwhite suspects regardless of officer race. The rate of Suspect Injury excluding OC spray is slightly higher for Nonwhite officers/White suspects (2.8) than for White officers/White Suspects (2.7). Although the differences in Officer Injury are not as large as Any Suspect Injury, the highest rate is still in the White Officer/White Suspect category (1.8 incidents per 100 arrests)

Finding 2.19: Officer Sex and Suspect Sex

The rates of Any Force and Officer Injury are highest when the officer and suspect are both female.

The rates of Weapon Use and Suspect Injury are highest when the officer and suspect are both male.

Most arrests (21,763 out of 30,209) and use of force incidents (1,335 out of 1,782) involve male officers and male suspects but the rates of Any Force (7.7) and Officer Injury (3.1) are higher when both the officer and the suspect are female (See Tables 25a and 25b). When both the officer and the suspect are male the rate of Any Force is 6.1 per 100 and the rate of Officer Injury is 1.4 per 100. Different patterns emerge when considering rates of Weapon Use and Suspect Injury. The rate of Weapon Use is highest when both the officer and suspect are male (2.8 per 100) and lowest when the officer is male and the suspect is female (0.9 per 100). The rates of Suspect Injury show a similar pattern—they are highest (3.4 and 2.1) when both the officer and suspect are male and lowest (1.7 and 1.3) when the officer is male and the suspect is female.

In general, when the officer and suspect are of different sexes, all rates of force are lower than when the officer and suspect are of the same sex. This is a difference interaction pattern than the one we observed with regard to officer race and suggest that the effect of officer and suspect race are independent of each other but that the effect of officer and suspect sex are not independent.

Summary

The characteristics of incidents, suspects and officer available in both the MCPD use of force data and in the MCPD arrest data are associated with differences in our five measures of the rate of force. Like all measures, these data reflect a combination of reporting practices and real

behavior but the generally consistent patterns over time and across measures suggest that our approach is capturing real differences in the rates of force by incident, suspect and police characteristics. We have documented empirical associations, some of which may and some of which may not reflect underlying causal processes. These empirical associations are perhaps best considered as clues to be examined further and definitely not proof of cause and effect.

We have documented the increase in the rate of Any Force and the extent to which this may be at least partially due to changes in use of force reporting practices. However, in combination with recent increases in the rate of suspect injury and officer injury, the trends in these four measures warrant heightened attention. Our fifth measure of the rate of force, Weapon Use, appears to be at or near historic lows. The nature of this counter trend and its relationship to the trend in officer and suspect injury should not be ignored.

The largest differences in the rates of force by incidents are associated with the police district and the type of offense involved. Higher rates of force in violent offenses and disorderly conduct suggests that violence by and against the police is associated with the nature and location of the incident to which the police were called. The available use of force and arrest data do not provide information to understand why rates of force are higher in the Wheaton/Glenmont area and lower in Germantown and Silver Spring but these areal differences warrant further investigation.

The finding that rates of force are highest during the midnight to 6 a.m. period also warrants closer scrutiny. Again, the available data do not record for arrests and use of force the extent to which suspects arrested during these hours tend to be more intoxicated or more likely to resist police authority, but our study has documented that something different is happening in the

early morning hours.

Our findings about suspect characteristics tend to run counter to traditional expectations about policing. We found higher rates of force against middle aged or older suspects and lower rates against younger suspects. We found higher rates of force against White suspects and lower rates against Nonwhite suspects, and for two measures of the rate of force—Any Force and Officer Injury—we found similar rates for male and female suspects. Male suspects do have higher rates of Weapon Use.

Our methodology is designed to separate arrest decisions from decisions to use different types of force and our findings suggest that different suspect characteristics are associated with the use of force than are associated with arrests. If these findings can be substantiated in other studies, they might help re-focus use of force policies and managerial attention to the times, places and circumstances associated with higher rates of force.

Our research has also found that 1) middle aged officers consistently have substantially higher rates of force than younger or older officers, 2) that, on some measures, White officers have somewhat higher rates of force than Nonwhite officers, and 3) that males officers tend to use more force and to have higher rates of suspect injury. However, female officers are injured at a higher rate than male officers. While these findings about officer characteristics similarly do not readily conform to conventional wisdom or prior research about officer characteristics and the use of force, they are generated by an appropriate analysis of systematic data obtained over a seven year study period and merit consideration.

The research approach used in this report describes the nature of the use of force by the Montgomery County Police Department, constructs alternative measures of the rates at which

force is used, and it reports the extent to which 13 characteristics of incidents, suspects and officers are associated with increases or decreases in those rates. This approach systematically uses the information in official police records to improve upon our understanding of how much force is used, under what circumstances, against which suspects, by which officers and with what types of resulting injuries.

The available data do not include all the information that might be relevant to understanding police use of force. For instance, the available arrest data do not include information on whether the suspect is intoxicated, or armed or is fleeing or otherwise resisting legitimate police authority. We do not know the history and pattern of police assignments, arrests and uses of force by individual police officers. These and other limitations weaken the ability of this study to provide more definitive answers about the nature of the force being used by officers in the Montgomery County police department but the strengths of this study are many and should be sufficient to advance our understanding about when, where, how and against whom force is used in Montgomery County, Maryland.

Bibliography: Hickey and Garner

- Bayley, D., & Garofalo, J. (1989). "The management of violence by police patrol officers". *Criminology*, 27(1), 1 - 23.
- Langan, P. A. L. A. Greenfeld, S. K. Smith, M. R. Durose and D. J. Levin. (2001), *Contacts between Police and the Public: Findings from the 1999 National Survey*, Washington, D.C.: Bureau of Justice Statistics.
- Garner, J. H., Buchanan, J., Schade, T., Hepburn, J., Fagan, J., & Mulcahy, A. (1995). *Understanding the Use of Force by and Against the Police* (Final Report to National Institute of Justice, 92-IN-CX-K028). Newark, NJ: Rutgers University.
- Garner, J. H. and Buchanan, J. (1996). "Understanding the Use of Force By and Against the Police" *Research in Brief*, National Institute of Justice, Washington, D.C.
- Garner, J. and Maxwell, C. (1999), "Measuring the Amount of Force Use by and Against the Police in Six Jurisdictions," in *Use of Force by Police: Overview of National and Local Data*, National Institute of Justice.
- Henriquez, M. A., (1999). "IACP National Database Project on Police Use of Force". Pp. 19-24 in National Institute of Justice, *Use of Force by Police: Overview of National and Local Data*, Washington, D.C.
- Montgomery County Police Department (1995), *Use of Force*.
- Pate, A. M., Fridell, L. A., & Hamilton, E. E. (1993). *Police use of force: Official reports, citizen complaints, and legal consequences, volumes I and II*. Washington, D.C.: The Police Foundation.
- Worden, R. E. (1995). The causes of police brutality. In W. A. Geller & H. Toch (Eds.), *And Justice for all: Understanding and Controlling Police Abuse of Force* (pp. 31-60). Washington, D.C.: Police Executive Research Forum.

List of Tables

- Table 1: Force Incidents and Force Reports, 1993 to 1999
Table 1A: Increase in Reported Use of Hands and Feet
Table 2: Type of Force Used by Officers
Table 3: Use of OC Spray
Table 4: Type of Force Used by Suspects
Table 5: Injuries to Suspects
Table 5A: Type of Injuries to Suspects
Table 6: Suspect Injuries, Including and Excluding OC Spray
Table 7: Suspect Injuries by Type of Force by Officers
Table 8: Injuries to Officers
Table 8A: Type of Injuries to Officers
Table 9: Officer Injuries, 1993 to 1999
Table 10: Five Measures of the Rate of Force
Table 10A: Five Measures of the Rate of Force (Excludes Canines)
Table 11A: Rate of Force by Year
Table 11B: Rate of Weapon Use by Year
Table 11C: Rate of Defendant Injury by Year
Table 11D: Rate of Officer Injury by Year
Table 12A: Rate of Force by Month of Year
Table 12B: Injury Rate by Month of Year
Table 13A: Rate of Force by Day of Week
Table 13B: Injury Rate by Day of Week
Table 14A: Rate of Force by Time of Day
Table 14B: Injury Rate by Time of Day
Table 15A: Rate of Force by Type of Offense
Table 15B: Injury Rate by Type of Offense
Table 16A: Rate of Force by Police District
Table 16B: Injury Rate by Police District
Table 17A: Rate of Force by Age of Suspect
Table 17B: Injury Rate by Age of Suspect
Table 18A: Rate of Force by Race of Suspect
Table 18B: Injury Rate by Race of Suspect
Table 19A: Rate of Force by Sex of Suspect
Table 19B: Injury Rate by Sex of Suspect
Table 20A: Rate of Force by Officer Age
Table 20B: Injury Rate by Officer Age
Table 21A: Rate of Force by Race
Table 21B: Injury Rate by Officer Race
Table 22A: Rate of Force by Officer Sex
Table 22B: Injury Rate by Officer Sex
Table 23A: Rate of Force by Officer Years of Service
Table 23B: Injury Rate by Officer Years of Service
Table 24A: Rate of Force by Officer and Suspect Race
Table 24B: Injury Rate by Officer and Suspect Race

List of Tables (Page 2)

Table 25A: Rate of Force by Officer and Suspect Sex
Table 25B: Injury Rate by Officer and Suspect Sex

Table A1: Characteristics of Officers in Use of Force Incidents
Table A2: Characteristics of Suspects in Use of Force Incidents
Table A3: Use of Force Incident Characteristics
Table A4: Officer, Suspect and Incident Characteristics in Use of Canine Incidents
Table A5: Officer Characteristics and Rates of Force
Table A6: Suspect Characteristics and Rates of Force
Table A7: Incident Characteristics and Rates of Force

Table 1: Force Incidents and Force Reports, 1993 to 1999

	Year of Incident							
	1993	1994	1995	1996	1997	1998	1999	All Years
Total Incidents	243	258	325	342	314	331	393	2,206
Total Reports	250	322	351	395	367	407	568	2,660
Reports Per Incident	1.03	1.25	1.08	1.15	1.17	1.23	1.45	1.21

Figure 1: Force Incidents and Force Reports

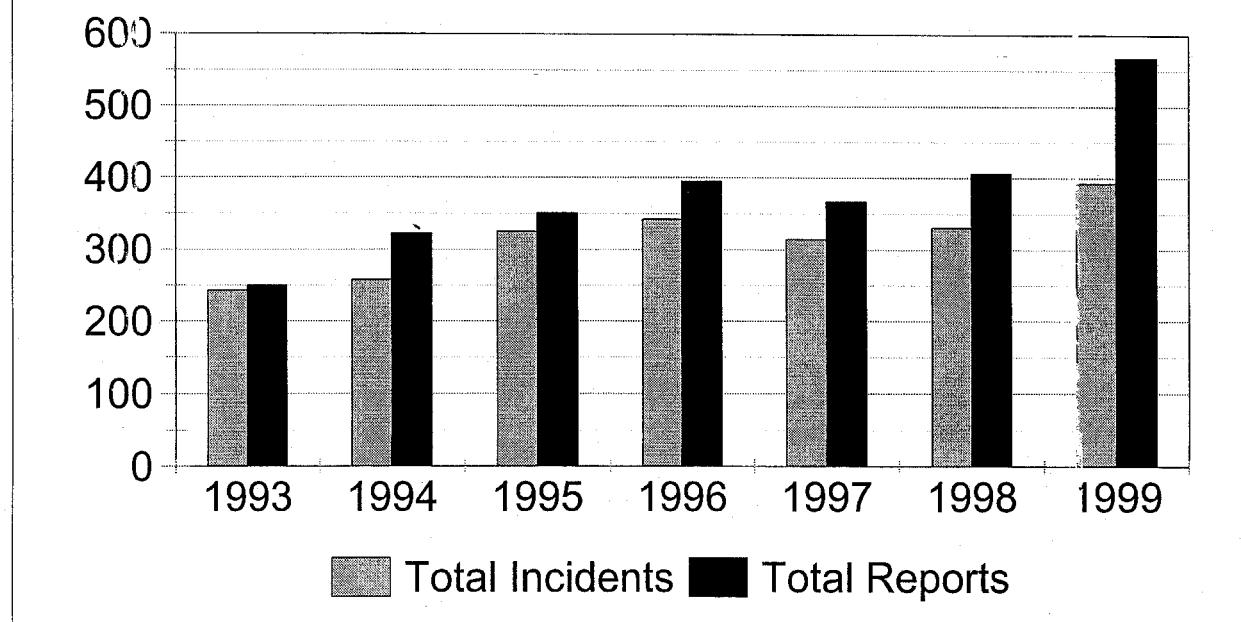


Table 1A: Increase in Reported Use of Hands and Feet
January 1993 to December 1999

Type of Force	1993		1994		1995		1996		1997		1998		1999		All Years	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Hands/Feet	108	43.2	143	44.4	165	47.0	235	59.5	182	49.6	255	62.7	414	72.9	1,502	56.5
All Other Types	142	57	179	55.6	186	53.0	160	40.5	185	50.4	152	37.3	154	27.1	1,158	43.5
All Types	250	100	322	100.0	351	100.0	395	100.0	367	100.0	407	100.0	568	100.0	2,660	100.0

Figure 1A: Number of Reports Listing Hands and Feet

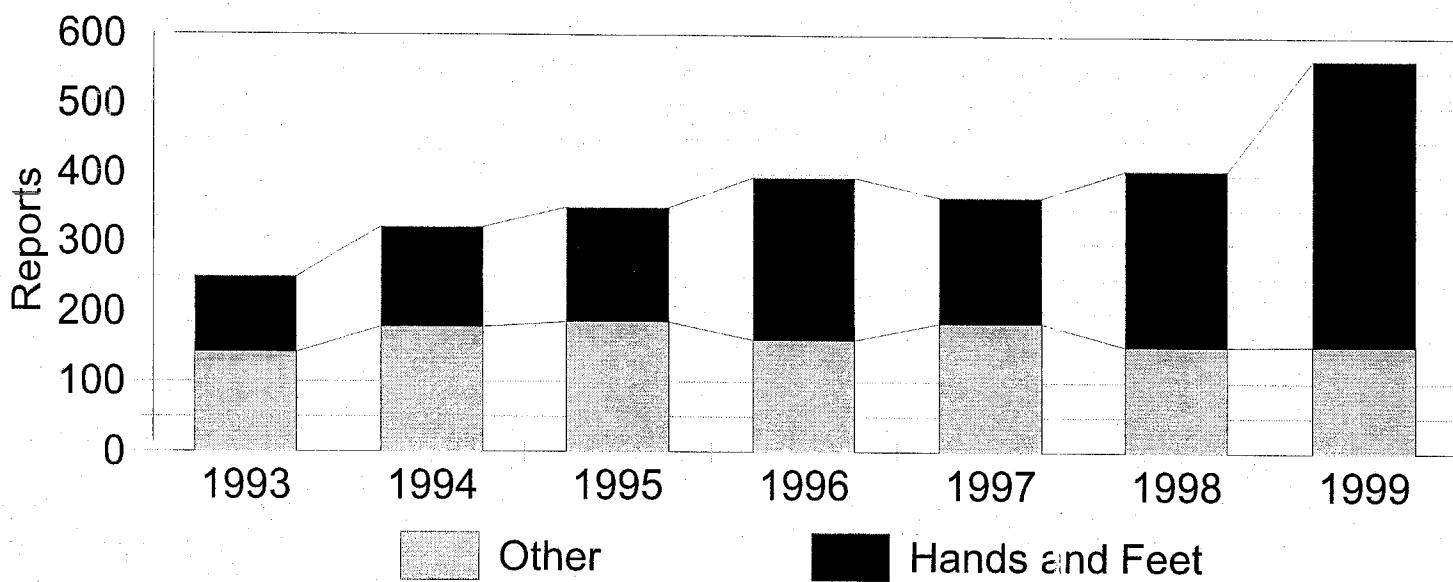


Table 2: Type of Force Used by Officers
January 1993 to December 1999

Type of Force	1993	1994	1995	1996	1997	1998	1999	All Years	
	N	%	N	%	N	%	N	N	%
Hands/Feet	108	43.2	143	44.4	165	47.0	235	59.5	182
OC Spray	86	34.4	113	35.1	90	25.6	93	23.5	104
Canine	32	12.8	31	9.6	47	13.4	29	7.3	34
Flashlight	11	4.4	14	4.3	22	6.3	22	5.6	16
Firearms	5	2.0	15	4.7	9	2.6	2	0.5	13
Other	4	1.6	2	0.6	2	0.6	2	0.5	5
ASP/Baton	1	0.4	2	0.6	10	2.8	8	2.0	8
Vehicle	3	1.2	2	0.6	6	1.7	4	1.0	5
All Types	250	100	322	100	351	100	395	100	367
									100
									2,660
									100

**Figure 2: Type of Force
Used By Police**

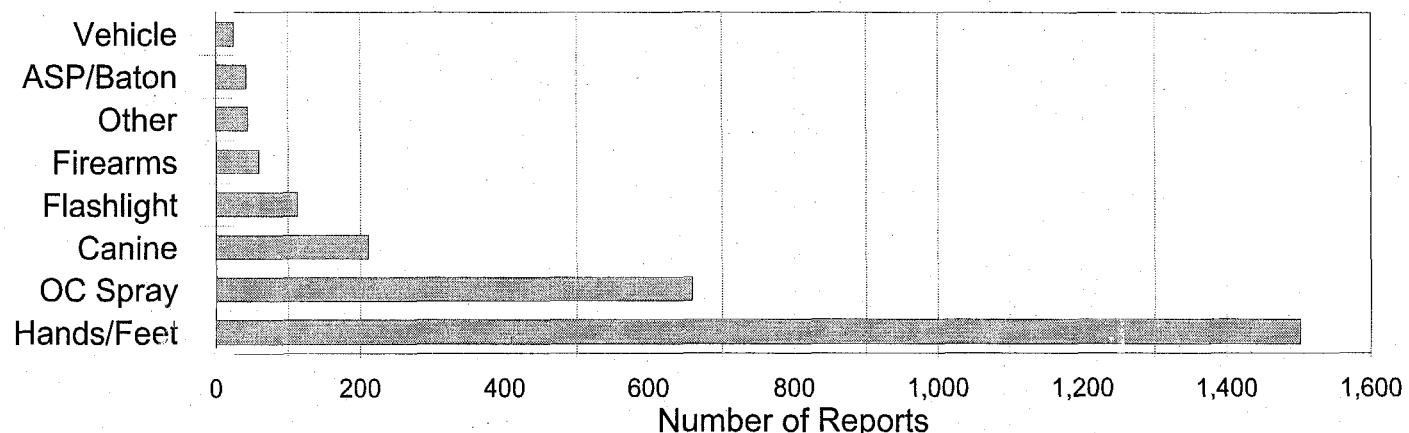


Table 3 : Use of OC Spray

	Number of Reports								
	1993	1994	1995	1996	1997	1998	1999	All Years	
OC Spray	86	113	90	93	104	89	86	664	
All Reports	250	322	351	395	367	407	568	2,660	
Oc Spray as Percent	34.4%	35.1%	25.6%	23.5%	28.3%	21.9%	15.1%	25.0%	

Figure 3a: Number of Reports Where Police Used OC Spray

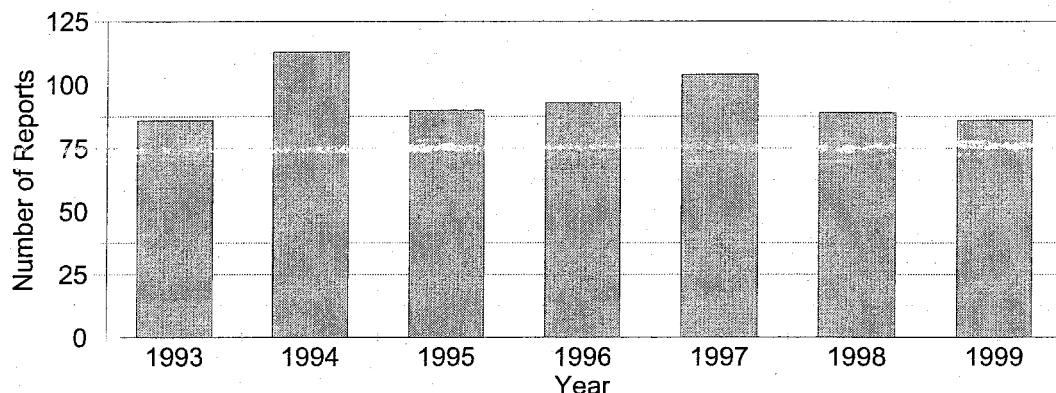


Figure 3b: OC Spray as Percent of Use of Force Reports

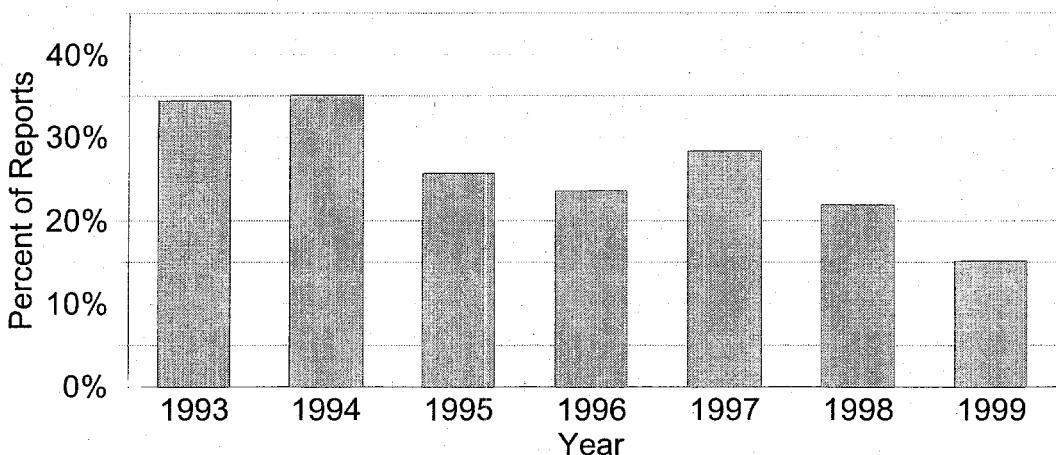


Table 4: Type of Force Used by Suspect
January 1993 to December 1999

Type of Force	Year															
	1993		1994		1995		1996		1997		1998		1999		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Hands/Feet	156	64.2	173	67.1	207	63.7	248	72.5	221	70.4	272	82.2	301	76.6	1,578	71.5
None Reported	58	23.9	56	21.7	80	24.6	50	14.6	51	16.2	37	11.2	5	1.3	337	15.3
Other	19	7.8	6	2.3	11	3.4	20	5.8	16	5.1	7	2.1	77	19.6	156	7.1
Hard Object		0.0	11	4.3	10	3.1	13	3.8	5	1.6	7	2.1	2	0.5	48	2.2
Vehicle	6	2.5	6	2.3	7	2.2	6	1.8	9	2.9	4	1.2	7	1.8	45	2.0
Knife		0.0	3	1.2	6	1.8	4	1.2	8	2.5	1	0.3	0	0.0	22	1.0
Firearms	4	1.6	3	1.2	4	1.2	1	0.3	4	1.3	3	0.9	1	0.3	20	0.9
All Incidents	243	100.0	258	100.0	325	100.0	342	100.0	314	100.0	331	100.0	393	100.0	2,206	100.0

**Figure 4: Type of Force
Used by Suspect**

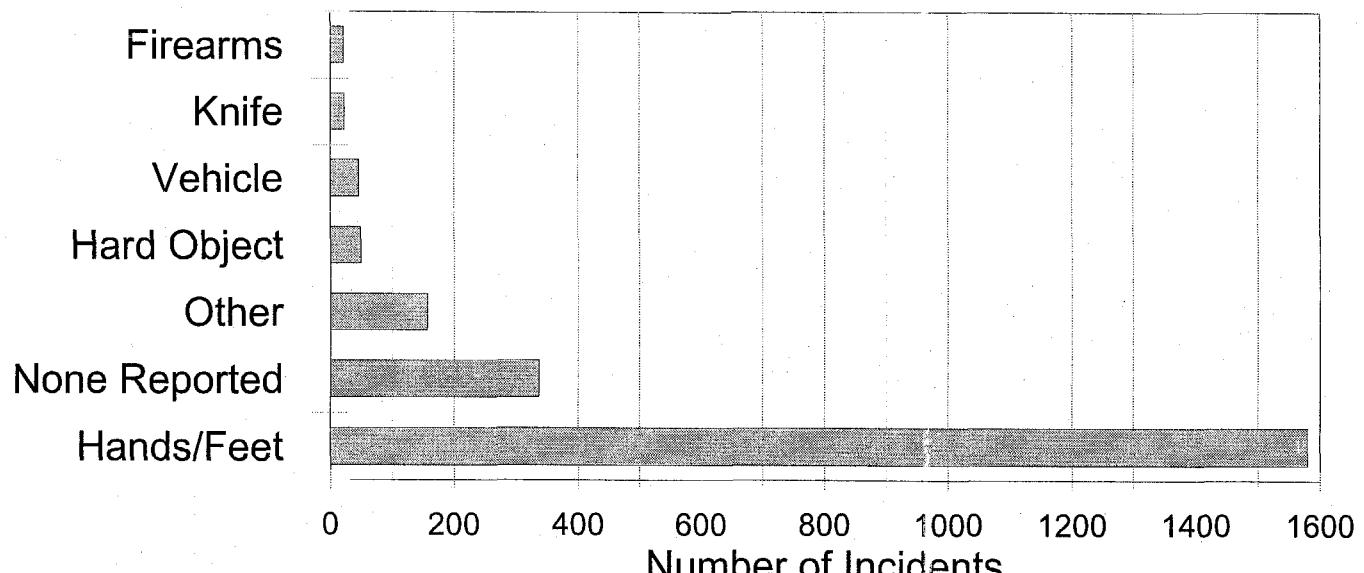


Table 5: Injuries to Suspects

Suspect Injury	1993		1994		1995		1996		1997		1998		1999		Total		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Bruise/Blunt Trauma	No Injury	72	29.6	90	34.9	132	40.6	184	53.8	143	45.5	158	47.7	212	53.9	991	44.9
	O.C. Spray	67	27.6	74	28.7	61	18.8	38	11.1	52	16.6	45	13.6	39	9.9	376	17.0
	Lacerations	37	15.2	31	12.0	37	11.4	34	9.9	40	12.7	36	10.9	49	12.5	264	12.0
	Dog Bite	30	12.3	29	11.2	37	11.4	15	4.4	28	8.9	25	7.6	10	2.5	174	7.9
	Abrasion	15	6.2	8	3.1	15	4.6	24	7.0	19	6.1	29	8.8	32	8.1	142	6.4
	Bruise/Blunt Trauma	11	4.5	11	4.3	18	5.5	23	6.7	18	5.7	25	7.6	23	5.9	129	5.8
	Scratch	2	0.8	6	2.3	11	3.4	9	2.6	7	2.2	4	1.2	14	3.6	53	2.4
	Other Injury	4	1.6	3	1.2	7	2.2	2	0.6	1	0.3	5	1.5	9	2.3	31	1.4
	Broken bone	1	0.4	3	1.2	2	0.6	7	2.0	2	0.6	1	0.3	1	0.3	17	0.8
	Sprain	1	0.4	1	0.4	3	0.9	5	1.5	1	0.3	2	0.6	1	0.3	14	0.6
	Gunshot	2	0.8	2	0.8	2	0.6	1	0.3	3	1.0	1	0.3	3	0.8	14	0.6
	Human Bite	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
All Incidents	243	100.0	258	100.0	325	100.0	342	100.0	314	100.0	331	100.0	393	100.0	2,206	100.0	

Figure 5: Injuries to Suspects

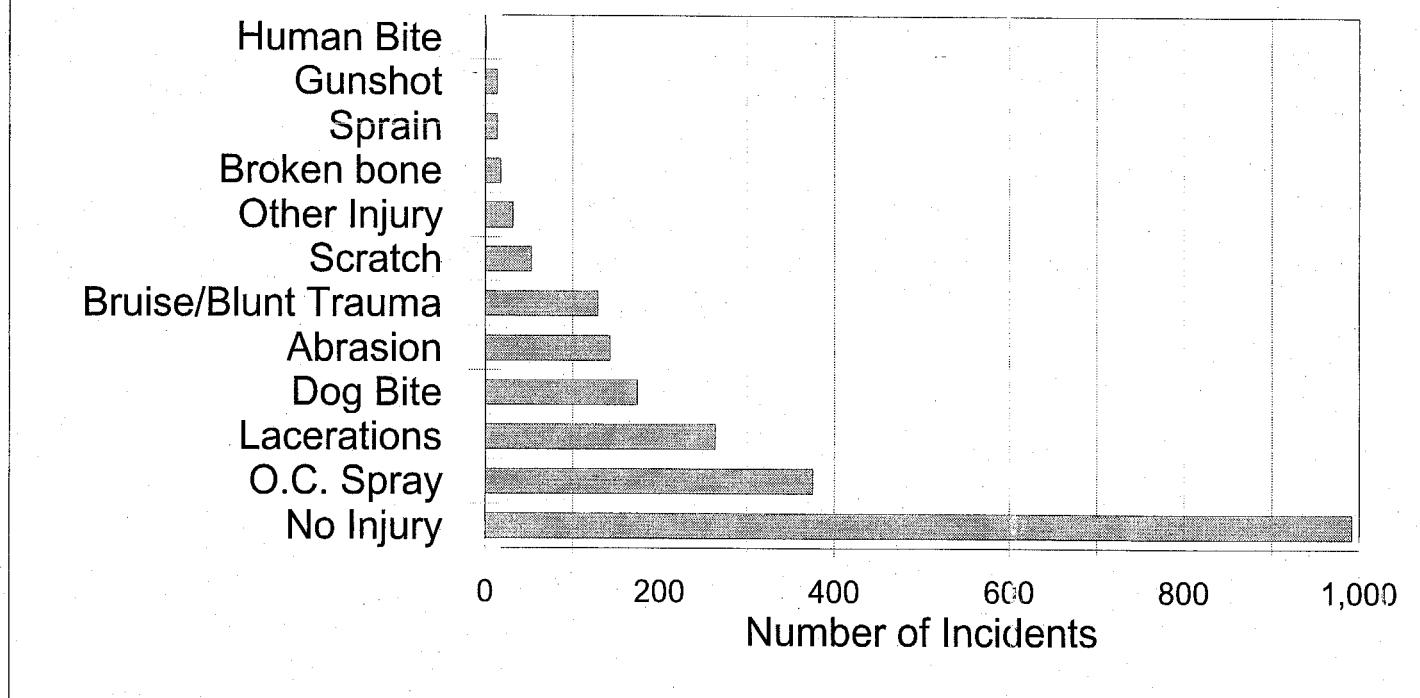


Table 5A: Type of Injury to Suspects

Suspect Injury	1993		1994		1995		1996		1997		1998		1999		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
O.C. Spray	67	39.2	74	44.0	61	31.6	38	24.1	52	30.4	45	26.0	39	21.5	376	30.9
Lacerations	37	21.6	31	18.5	37	19.2	34	21.5	40	23.4	36	20.8	49	27.1	264	21.7
Dog Bite	30	17.5	29	17.3	37	19.2	15	9.5	28	16.4	25	14.5	10	5.5	174	14.3
Abrasions	15	8.8	8	4.8	15	7.8	24	15.2	19	11.1	29	16.8	32	17.7	142	11.7
Bruise/Blunt Trauma	11	6.4	11	6.5	18	9.3	23	14.6	18	10.5	25	14.5	23	12.7	129	10.6
Scratch	2	1.2	6	3.6	11	5.7	9	5.7	7	4.1	4	2.3	14	7.7	53	4.4
Other Injury	4	2.3	3	1.8	7	3.6	2	1.3	1	0.6	5	2.9	9	5.0	31	2.6
Broken bone	1	0.6	3	1.8	2	1.0	7	4.4	2	1.2	1	0.6	1	0.6	17	1.4
Sprain	1	0.6	1	0.6	3	1.6	5	3.2	1	0.6	2	1.2	1	0.6	14	1.2
Gunshot	2	1.2	2	1.2	2	1.0	1	0.6	3	1.8	1	0.6	3	1.7	14	1.2
Human Bite	1	0.6	0	0.0	0	0.0		0.0		0.0		0.0		0.0	1	0.1
All Injuries	171	100.0	168	100.0	193	100.0	158	100.0	171	100.0	173	100.0	181	100.0	1,215	100.0

Figure 5A: Type of Injury to Suspects

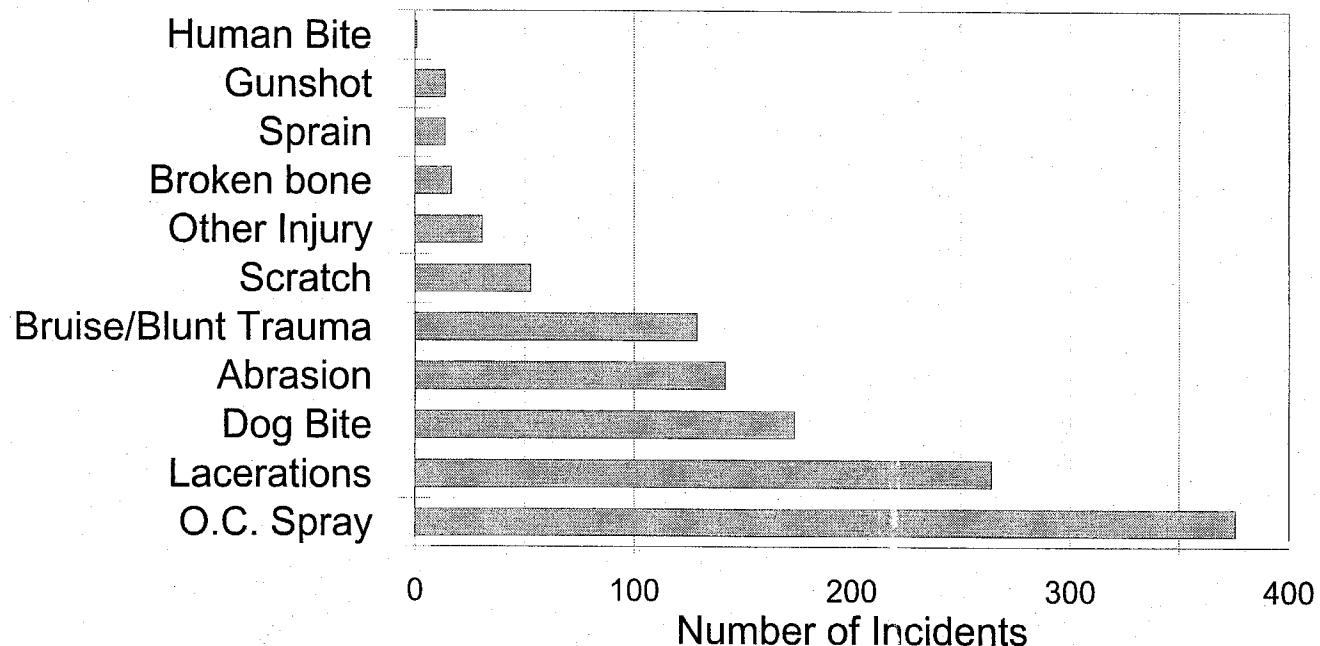
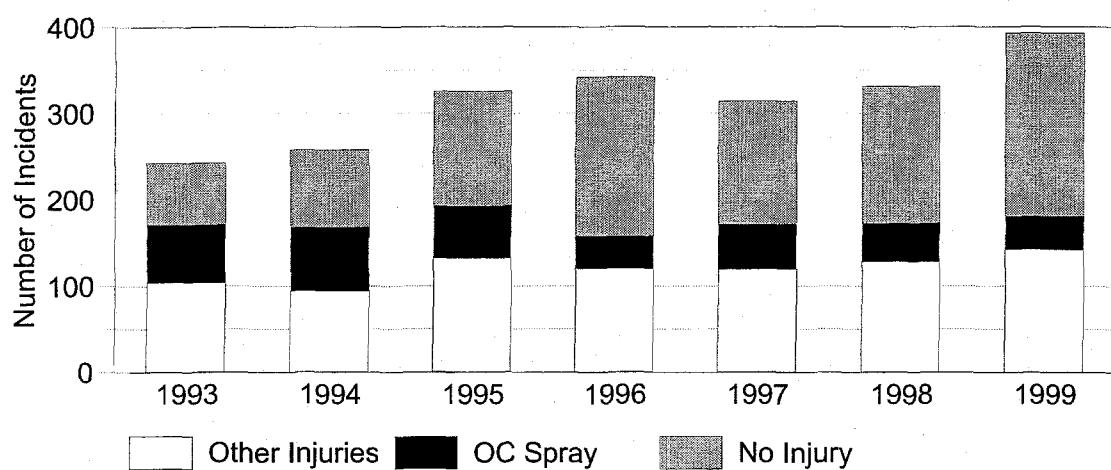


Table 6: Suspect Injuries, Including and Excluding OC Spray

Suspect Injury	Number of Incidents							
	1993	1994	1995	1996	1997	1998	1999	All Years
No Injury	72	90	132	184	143	158	212	991
O.C. Spray	67	74	61	38	52	45	39	376
All Injuries, Excluding OC Spray	104	94	132	120	119	128	142	839
All Injuries, Including OC Spray	171	168	193	158	171	173	181	1,215
All Incidents	243	258	325	342	314	331	393	2,206

Suspect Injury	Percent of Incidents							
	1993	1994	1995	1996	1997	1998	1999	All Years
No Injury	29.6%	34.9%	40.6%	53.8%	45.5%	47.7%	53.9%	44.9%
O.C. Spray	27.6%	28.7%	18.8%	11.1%	16.6%	13.6%	9.9%	17.0%
All Injuries, Excluding OC Spray	42.8%	36.4%	40.6%	35.1%	37.9%	38.7%	36.1%	38.0%
All Injuries, Including OC Spray	70.4%	65.1%	59.4%	46.2%	54.5%	52.3%	46.1%	55.1%
All Incidents	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Figure 6: Number of Suspects Injured
1993 to 1999**



**Figure 6A: Suspect Injuries
as a Percent of All Incidents**

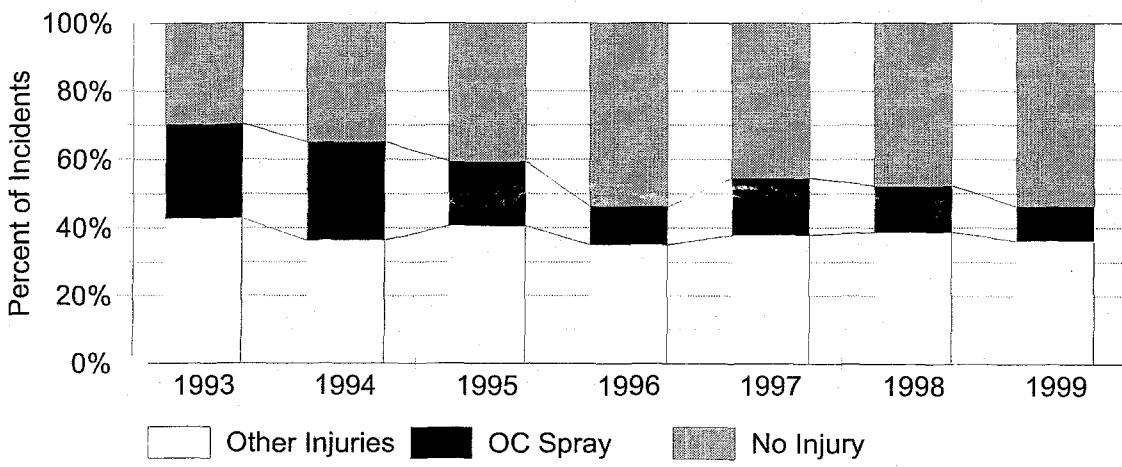


Table 8A: Type of Injury to Officers
1993 to 1999

Injury to Officers	1993		1994		1995		1996		1997		1998		1999		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Bruise/Blunt Trauma	15	2.2	15	1.7	27	3.0	19	2.3	19	1.7	18	1.6	34	2.6	147	2.0
Lacerations	14	2.0	22	2.5	9	1.0	19	2.3	21	1.8	26	2.3	21	1.6	132	1.8
Sprain	7	1.0	11	1.2	16	1.8	12	1.4	17	1.5	19	1.6	17	1.3	99	1.3
Abrasions	6	0.9	5	0.6	3	0.3	5	0.6	16	1.4	9	0.8	24	1.8	68	0.9
Scratches	4	0.6	8	0.9	4	0.4	6	0.7	16	1.4	20	1.7	4	0.3	62	0.8
O.C. Spray	10	1.4	9	1.0	8	0.9	7	0.8	6	0.5	4	0.3	4	0.3	48	0.6
Exposure to Blood	4	0.6	5	0.6	7	0.8	0	0.0	1	0.1	1	0.1	0	0.0	18	0.2
Human Bite	1	0.1	4	0.4	2	0.2	3	0.4	0	0.0	1	0.1	5	0.4	16	0.2
Broken bone	0	0.0	0	0.0	2	0.2	3	0.4	3	0.3	4	0.3	2	0.2	14	0.2
Spit	1	0.1	0	0.0	0	0.0	2	0.2	1	0.1	0	0.0	4	0.3	8	0.1
Groin Injury	1	0.1	0	0.0	2	0.2	0	0.0	2	0.2	2	0.2	0	0.0	7	0.1
Other Injury	0	0.0	0	0.0	1	0.1	0	0.0	2	0.2	0	0.0	3	0.2	6	0.1
Gunshot	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Dog Bite	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	0.0
All Injuries	693	100.0	891	100.0	891	100.0	836	100.0	1144	100.0	*****	100.0	1298	100.0	7,536	100.0

Figure 8A: Type of Injury to Officers

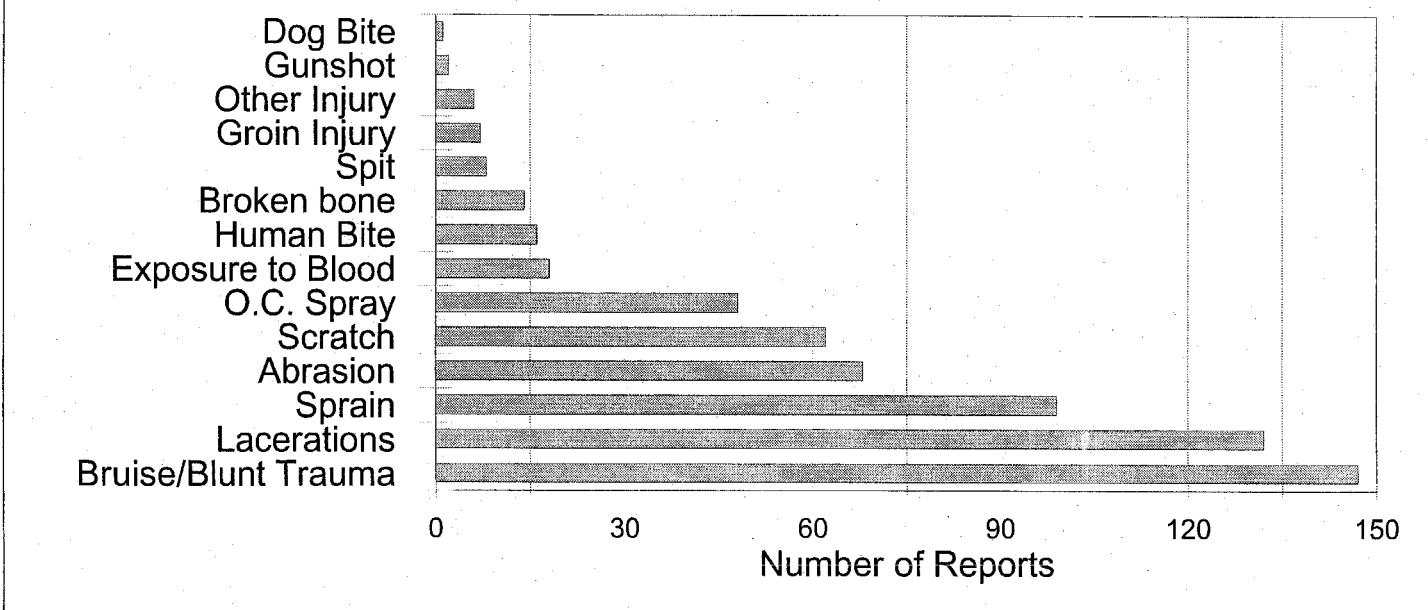


Table 9: Officer Injuries, 1993 to 1999

		Number of Injuries						
Injury to Officers		1993	1994	1995	1996	1997	1998	1999 All Years
No Injury		187	241	270	319	263	302	432 2,014
Officer Injury		63	81	81	76	104	105	136 646
All Reports		250	322	351	395	367	407	568 2,660

Percent of Reports								
Injury to Officers		1993	1994	1995	1996	1997	1998	1999 All Years
No Injury		74.8%	74.8%	76.9%	80.8%	71.7%	74.2%	76.1% 75.7%
Officer Injury		25.2%	25.2%	23.1%	19.2%	28.3%	25.8%	23.9% 24.3%
All Reports		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0% 100.0%

Figure 9: Number of Reports With Injured Officers, 1993 to 1999

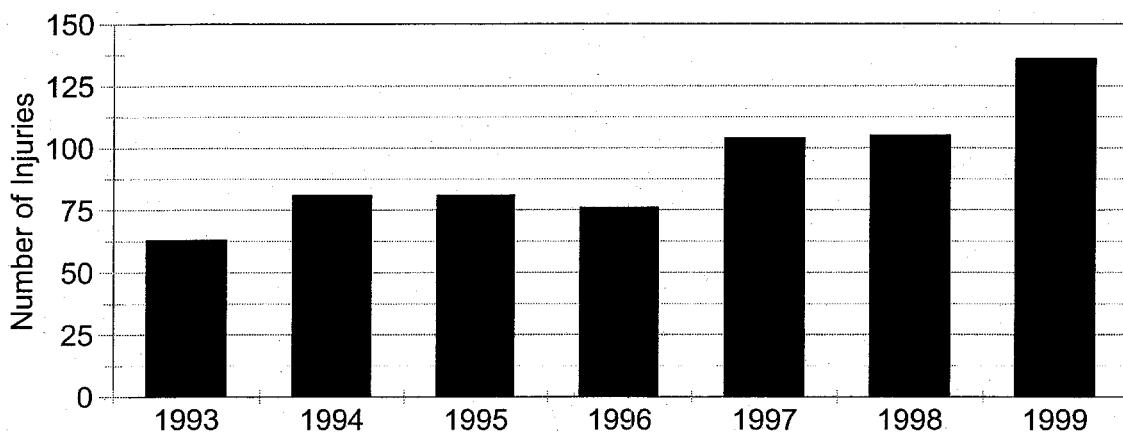


Figure 9A: Percent of Reports With Injured Officers, 1993 to 1999

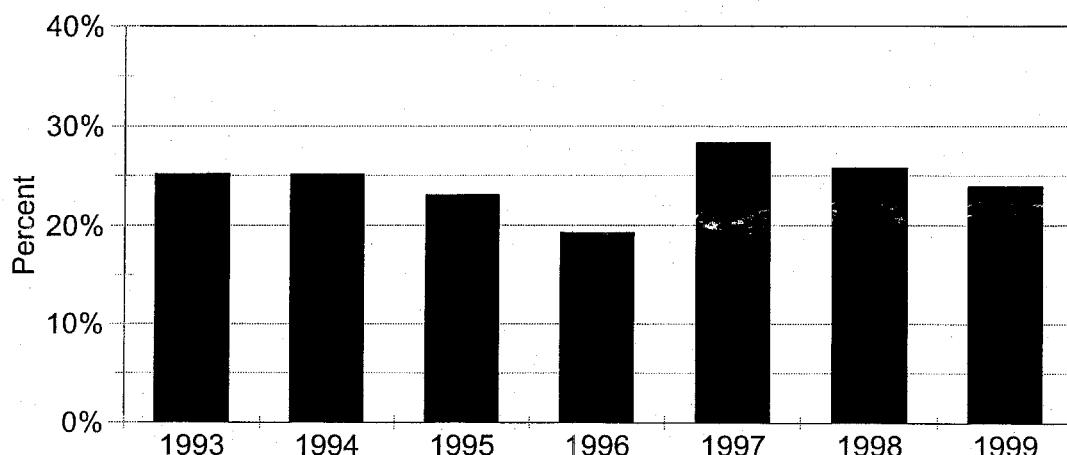
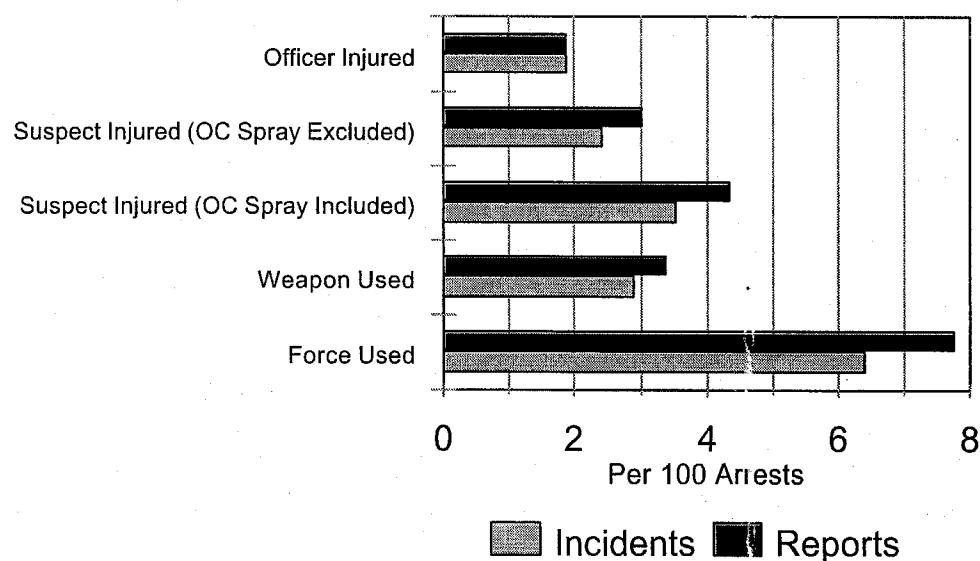


Table 10: Five Measures of the Rate of Force

Number of Adult, Custody Arrests, 1993 - 1999 30,209

Measures of Force	Number of Reports*	Reports* Per 100 Arrests	Number of Incidents*	Incidents* Per 100 Arrests
Force Used	2,345	7.8	1,938	6.4
Weapon Used	1,030	3.4	887	2.9
Suspect Injured (OC Spray Included)	1,317	4.4	1,074	3.6
Suspect Injured (OC Spray Excluded)	918	3.0	733	2.4
Officer Injured	577	1.9	577	1.9

**Figure 10: Five Measures
of the Rate of Force**



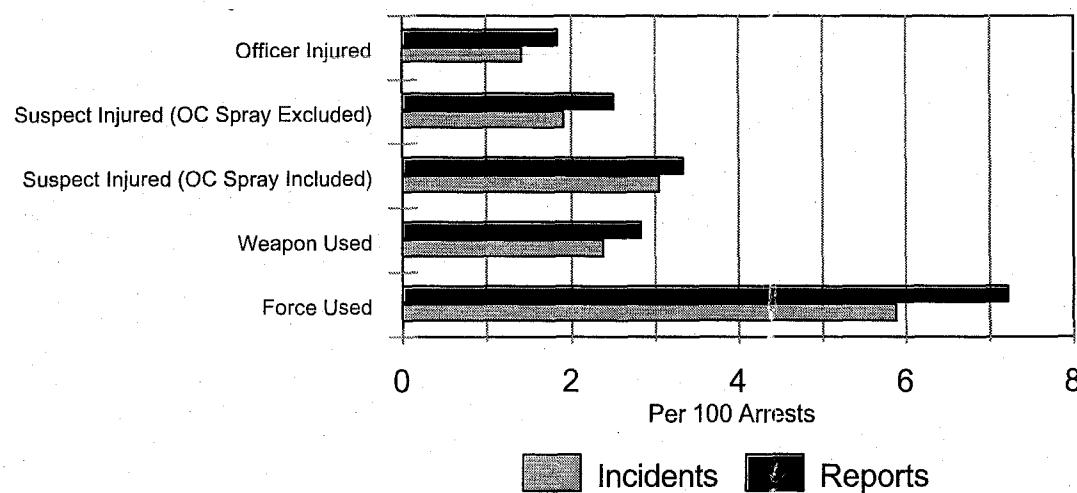
* Excludes suspects under the age of 18

Table 10a: Five Measures of the Rate of Force (Excludes Canines)

Number of Adult, Custody Arrests, 1993 - 1999 **30,209**

Measures of Force	Number of Reports*	Reports Per 100 Arrests	Number of Incidents*	Incidents Per 100 Arrests
Force Used	2,184	7.2	1,782	5.9
Weapon Used	869	2.9	731	2.4
Suspect Injured (OC Spray Included)	1,017	3.4	929	3.1
Suspect Injured (OC Spray Excluded)	766	2.5	585	1.9
Officer Injured	569	1.9	434	1.4

Figure 10a: Five Measures of the Rate of Force



* Excludes suspects under the age of 18 and incidents involving the use of canines

Table 11A: Rate of Force by Year

	All	1993	1994	1995	1996	1997	1998	1999
All Reports	2,184	199	264	276	343	287	328	487
All Incidents	1,782	192	204	252	292	239	266	337
Arrests	30,209	3,398	3,431	4,474	4,734	4,708	4,671	4,793
Report Rate	7.2	5.9	7.7	6.2	7.2	6.1	7.0	10.2
Incident Rate	5.9	5.7	5.9	5.6	6.2	5.1	5.7	7.0

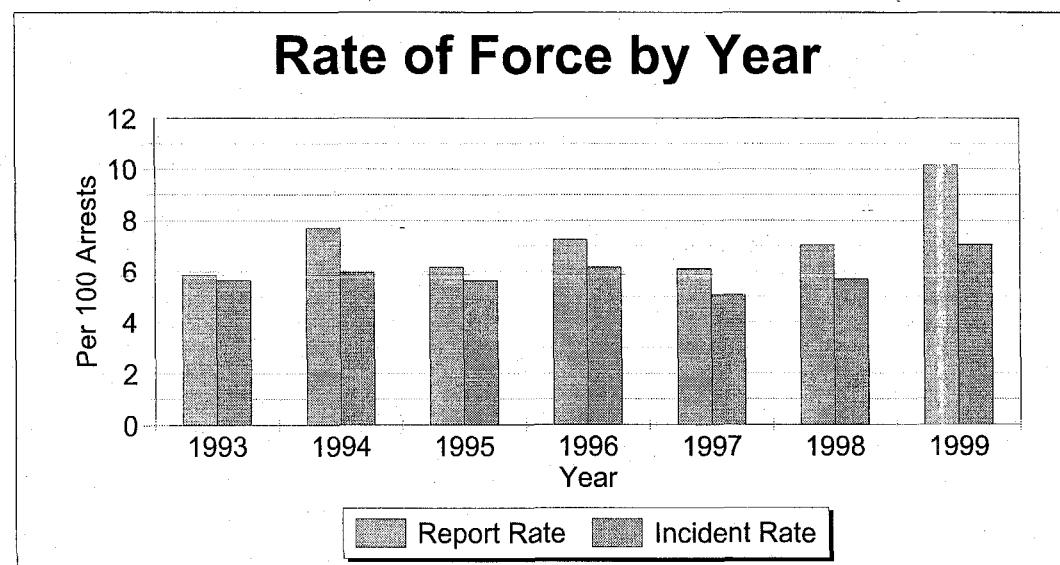


Table 11B: Rate of Weapon Use by Year

	All	1993	1994	1995	1996	1997	1998	1999
Weapon Use by Officer (Reports)	869	103	138	133	121	137	108	129
Weapon Use by Officer (Incidents)	731	100	110	116	101	115	92	97
Arrests	30,209	3,398	3,431	4,474	4,734	4,708	4,671	4,793
Report Rate	2.9	3.0	4.0	3.0	2.6	2.9	2.3	2.7
Incident Rate	2.4	2.9	3.2	2.6	2.1	2.4	2.0	2.0

**Rate of Weapon Use
by Year**

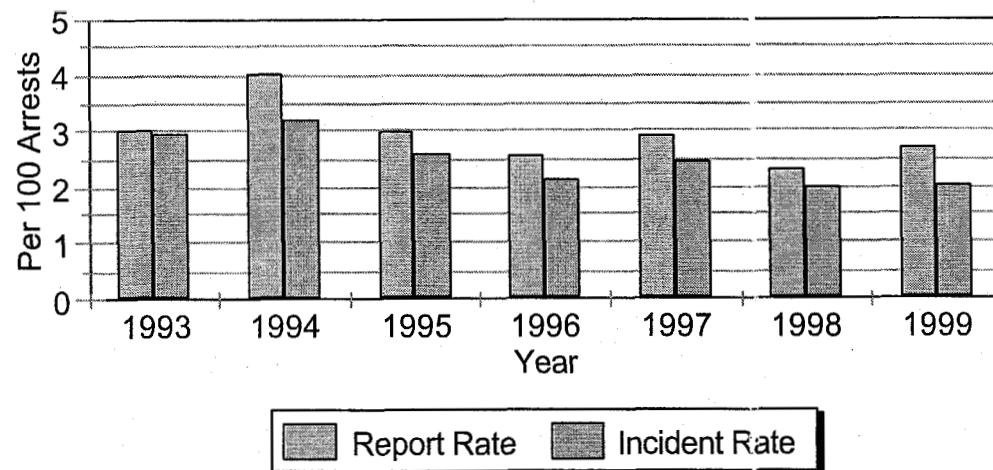
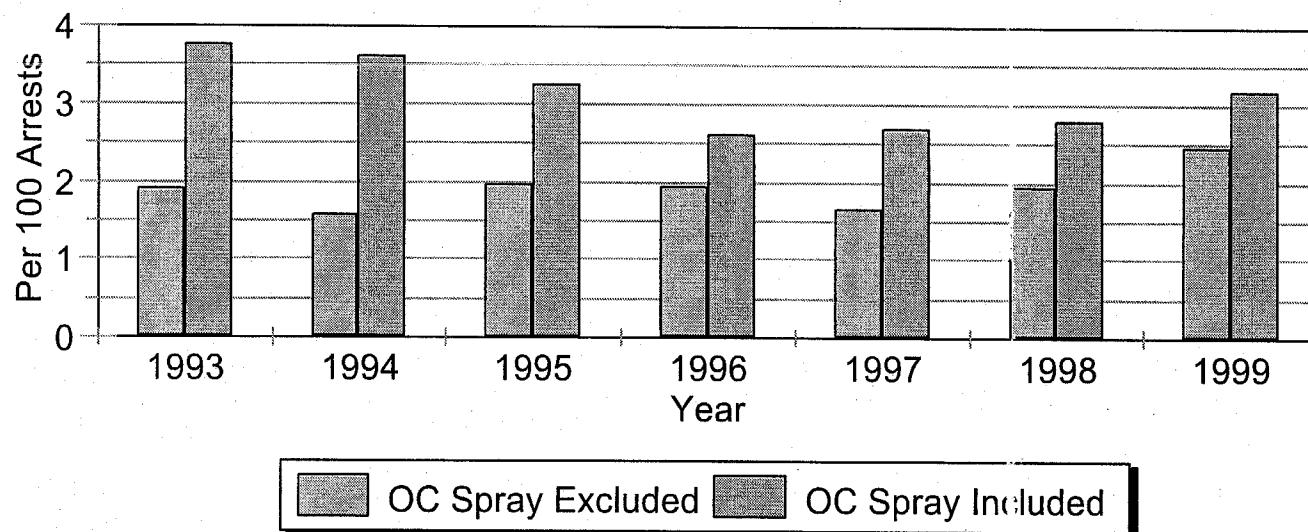


Table 11C: Rate of Suspect Injury by Year

	All	1993	1994	1995	1996	1997	1998	1999
Suspects Injured (OC Spray Excluded)	585	65	54	38	92	78	91	117
Suspects Injured (OC Spray Included)	929	128	124	146	123	126	130	152
Arrests	30,209	3,398	3,431	4,474	4,734	4,708	4,671	4,793
Rate (OC Spray Excluded)	1.9	1.9	1.6	2.0	1.9	1.7	1.9	2.4
Rate (OC Spray Included)	3.1	3.8	3.6	3.3	2.6	2.7	2.8	3.2

**Rate of Suspect Injury *
by Year**

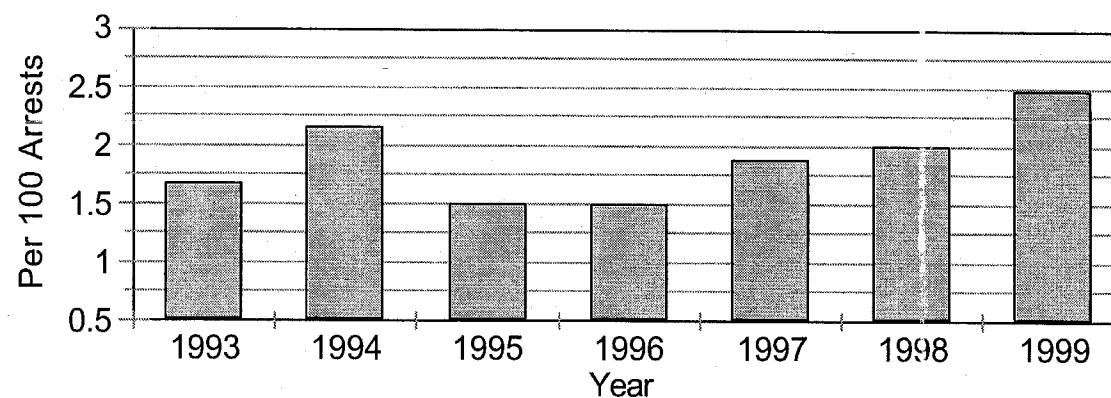


* Based on Incidents

Table 11D: Rate of Officer Injury by Year

	All	1993	1994	1995	1996	1997	1998	1999
Injury to Officer	569	57	74	67	71	88	93	119
Arrests	30,209	3,398	3,431	4,474	4,734	4,708	4,671	4,793
Rate of Officer Injury	1.9	1.7	2.2	1.5	1.5	1.9	2.0	2.5

**Rate of Officer Injury *
by Year**



* Based on Reports

Table 12a: Rate of Force by Month of Year

	Number of Arrests	Force Used		Weapon Used	
		Number	Rate	Number	Rate
All Arrests	30,209	1,782	5.9	731	2.4
Month of Arrest					
January	2,513	135	5.4	61	2.4
February	2,363	132	5.6	54	2.3
March	2,586	145	5.6	56	2.2
April	2,445	127	5.2	57	2.3
May	2,596	150	5.8	58	2.2
June	2,452	146	6.0	59	2.4
July	2,457	169	6.9	85	3.5
August	2,464	137	5.6	57	2.3
September	2,492	148	5.9	56	2.2
October	2,636	165	6.3	63	2.4
November	2,476	146	5.9	54	2.2
December	2,729	182	6.7	71	2.6

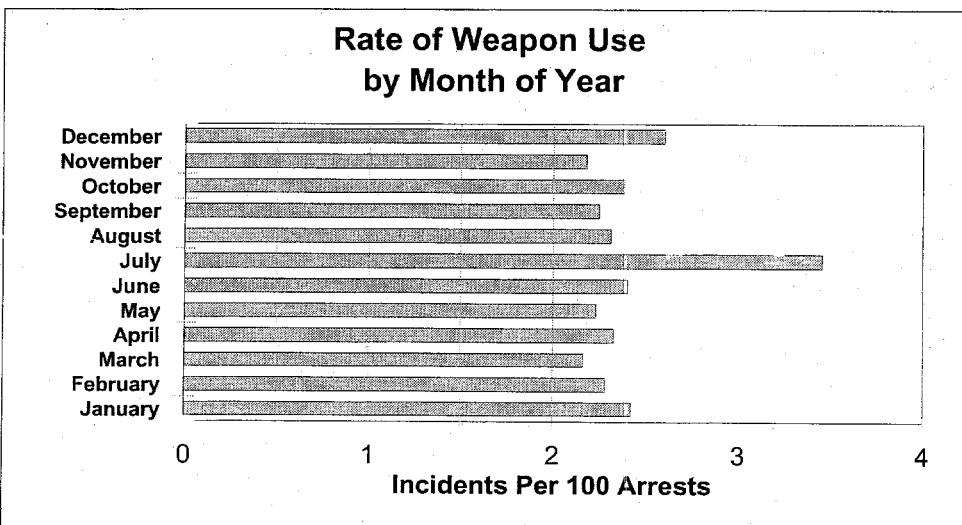
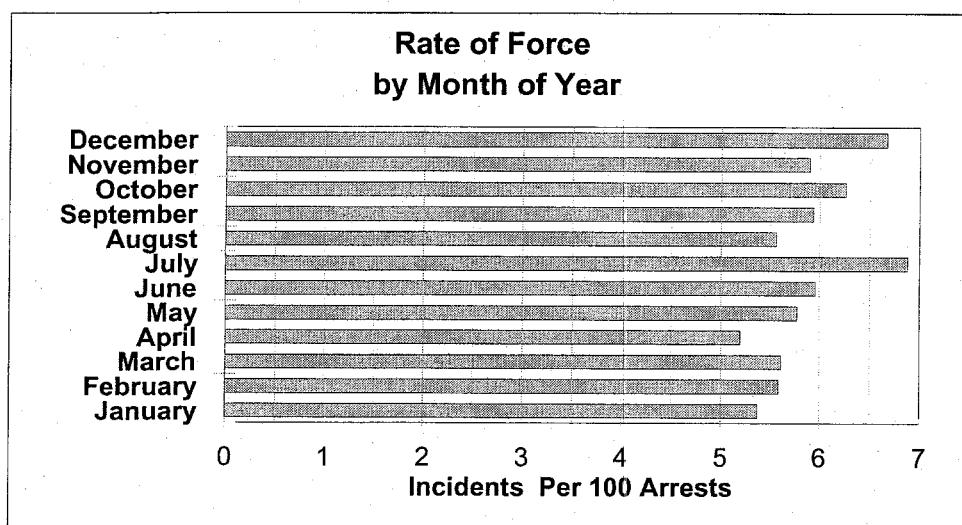


Table 12b: Injury Rate by Month of Year

	Number of Arrests	Officer Injury		(OC Spray Included)		Suspect Injury	
		Number	Rate	Number	Rate	Number	Rate
All Arrests	30,209	434	1.4	929	3.1	585	1.9
Month of Arrest							
January	2,513	37	1.5	63	2.5	37	1.5
February	2,363	29	1.2	70	3.0	51	2.2
March	2,586	30	1.2	77	3.0	49	1.9
April	2,445	39	1.6	74	3.0	46	1.9
May	2,596	41	1.6	84	3.2	54	2.1
June	2,452	35	1.4	83	3.4	59	2.4
July	2,457	46	1.9	105	4.3	61	2.5
August	2,464	27	1.1	66	2.7	36	1.5
September	2,492	46	1.8	77	3.1	49	2.0
October	2,636	35	1.3	80	3.0	40	1.5
November	2,476	31	1.3	69	2.8	48	1.9
December	2,729	38	1.4	81	3.0	55	2.0

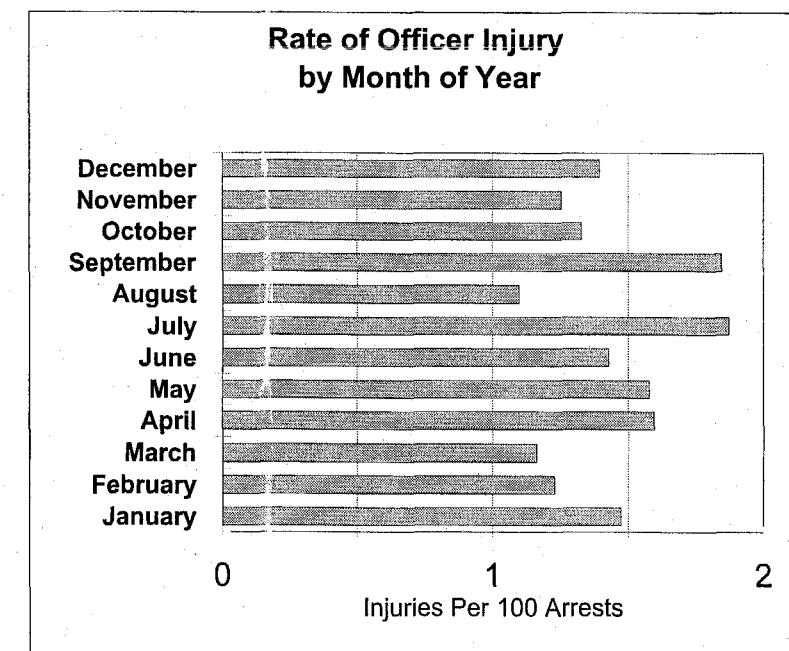
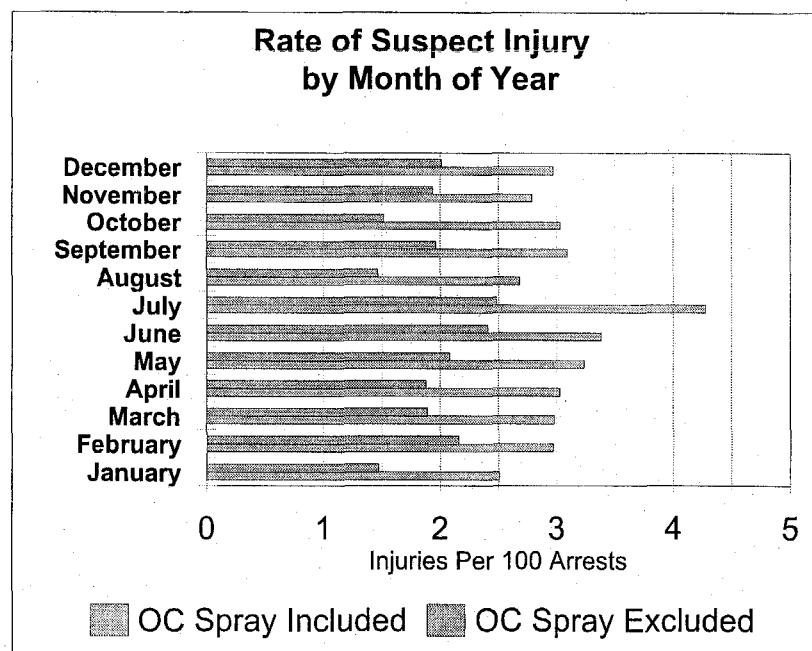


Table 13a: Rate of Force by Day of Week

	Number of Arrests	Force Used		Weapon Used	
		Number	Rate	Number	Rate
All Arrests	30,209	1,782	5.9	731	2.4
Day of Week					
Monday	3,815	212	5.6	76	2.0
Tuesday	4,594	235	5.1	96	2.1
Wednesday	4,568	206	4.5	86	1.9
Thursday	4,900	282	5.8	118	2.4
Friday	5,189	252	4.9	103	2.0
Saturday	3,939	319	8.1	125	3.2
Sunday	3,204	276	8.6	127	4.0

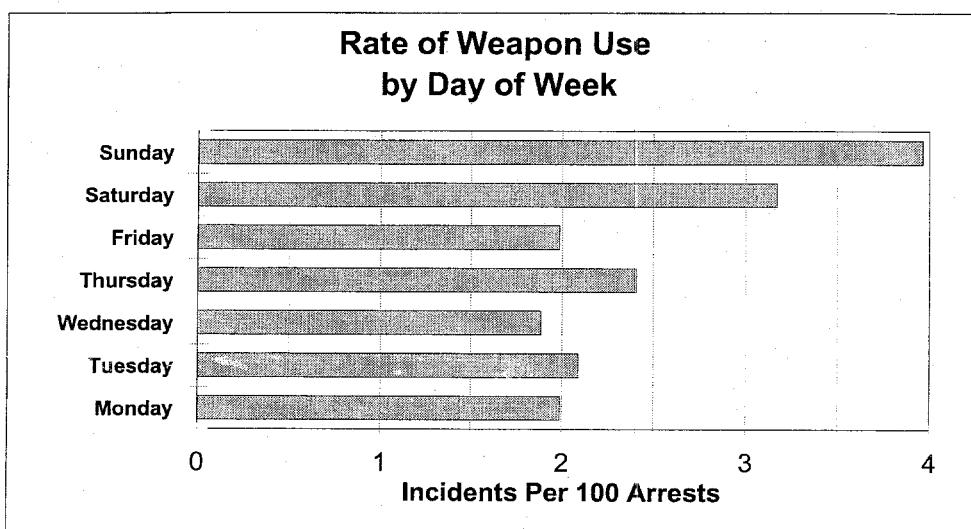
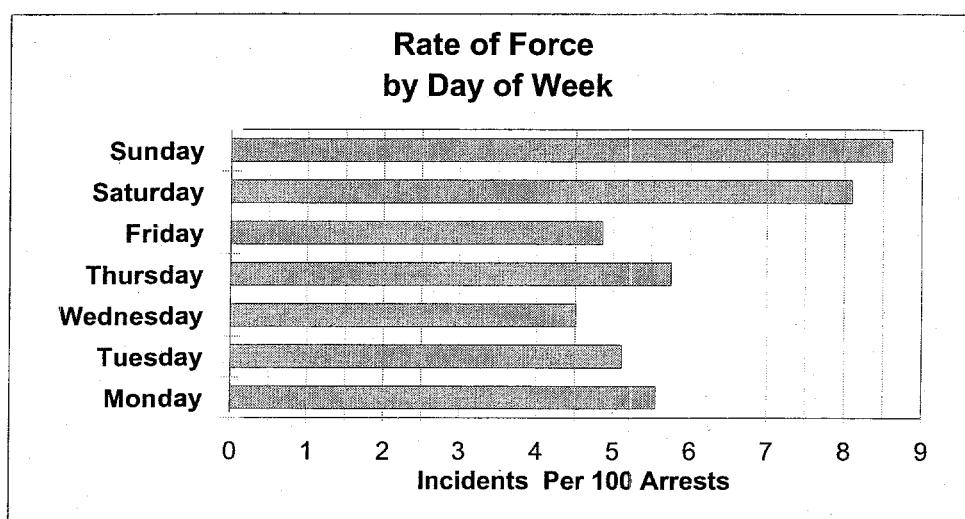
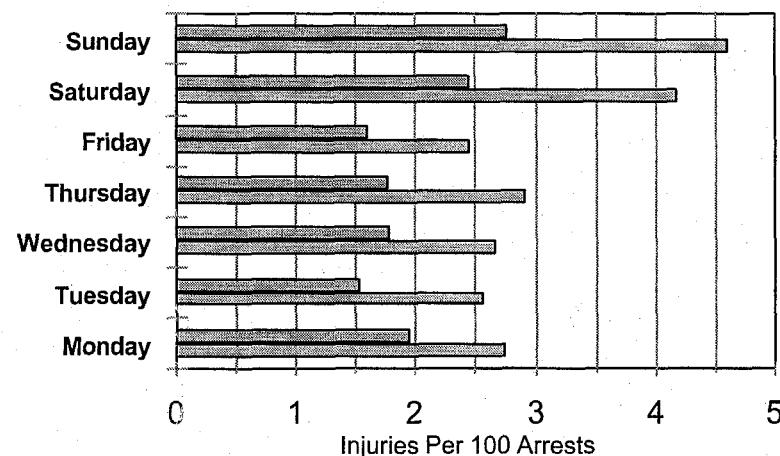


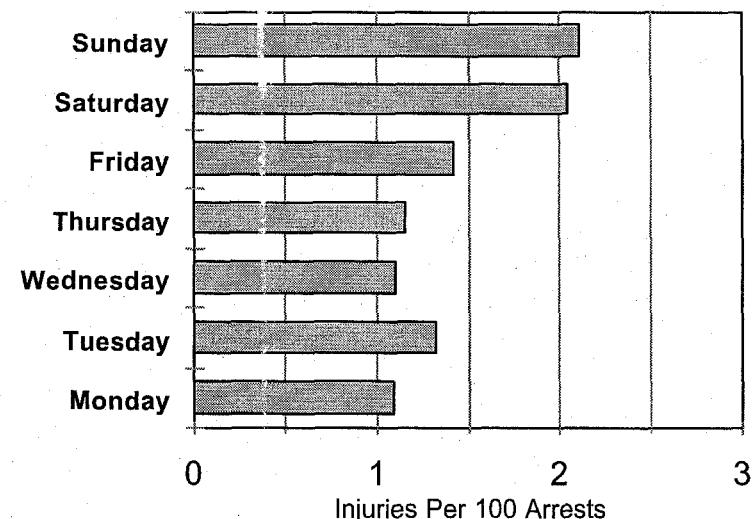
Table 13b: Injury Rate by Day of Week

	Number of Arrests	Officer Injury		(OC Spray Included)		Suspect Injury	
		Number	Rate	Number	Rate	Number	Rate
All Arrests	30,209	434	1.4	929	3.1	585	1.9
Day of Week							
Monday	3,815	42	1.1	105	2.8	75	2.0
Tuesday	4,594	61	1.3	118	2.6	71	1.5
Wednesday	4,568	51	1.1	122	2.7	82	1.8
Thursday	4,900	57	1.2	143	2.9	87	1.8
Friday	5,189	74	1.4	128	2.5	84	1.6
Saturday	3,939	81	2.1	165	4.2	97	2.5
Sunday	3,204	68	2.1	148	4.6	89	2.8

**Rate of Suspect Injury
by Day of Week**



**Rate of Officer Injury
by Day of Week**



■ Injuries Per 100 Arrests ■ OC Spray Included

Table 14a: Rate of Force by Time of Day

	Number of Arrests	Force Used		Weapon Used	
		Number	Rate	Number	Rate
All Arrests	30,209	1,782	5.9	731	2.4
Time of Incident					
0001 to 0600	6,656	671	10.1	270	4.1
0601 to 1200	2,614	161	6.2	61	2.3
1201 to 1800	7,962	267	3.4	114	1.4
1801 to 2400	12,977	683	5.3	286	2.2

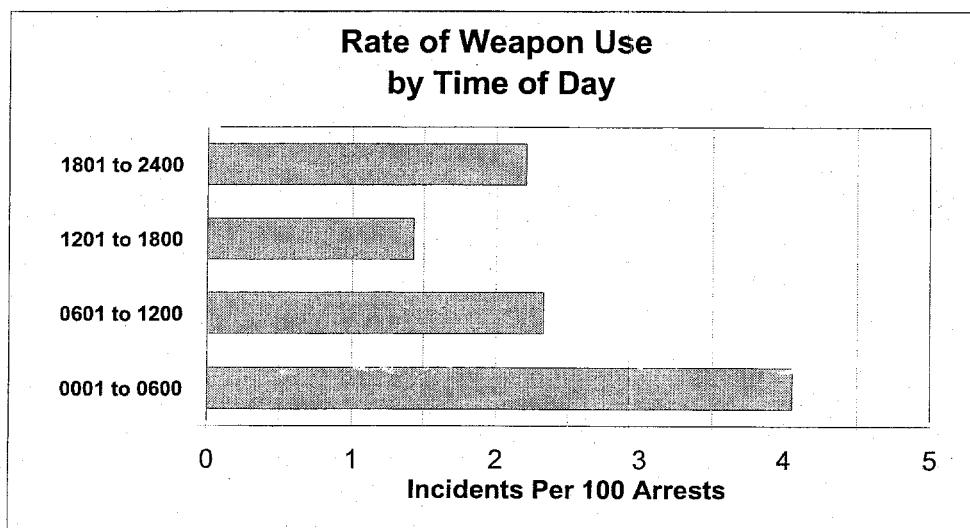
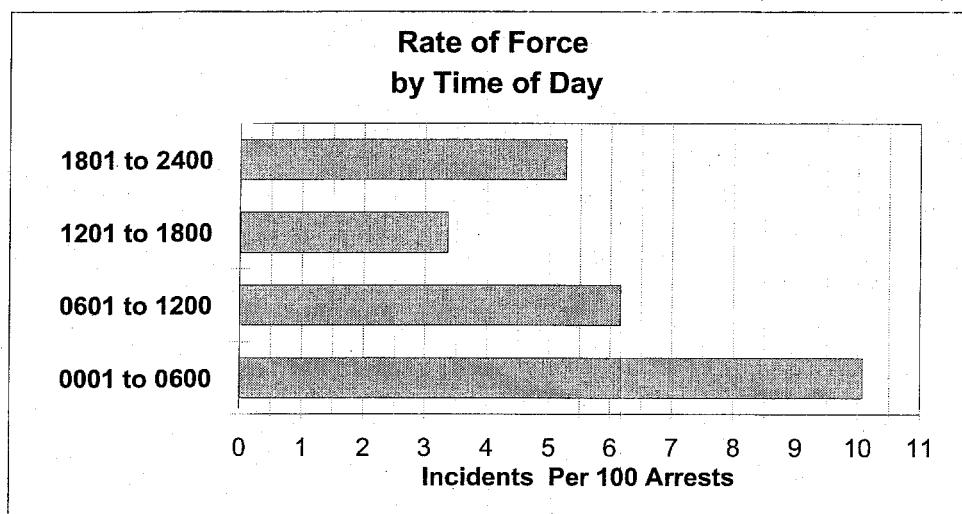


Table 14b: Injury Rate by Time of Day

	Number of Arrests	Officer Injury			Suspect Injury		(OC Spray Included)		(OC Spray Excluded)	
		Number	Rate	(OC Spray Included)	Number	Rate	Number	Rate	Number	Rate
All Arrests	30,209	434	1.4		929	3.1	585	1.9		
Time of Incident										
0001 to 0600	6,656	157	2.4		364	5.5	238	3.6		
0601 to 1200	2,614	39	1.5		87	3.3	56	2.1		
1201 to 1800	7,962	74	0.9		140	1.8	86	1.1		
1801 to 2400	12,977	164	1.3		338	2.6	205	1.6		

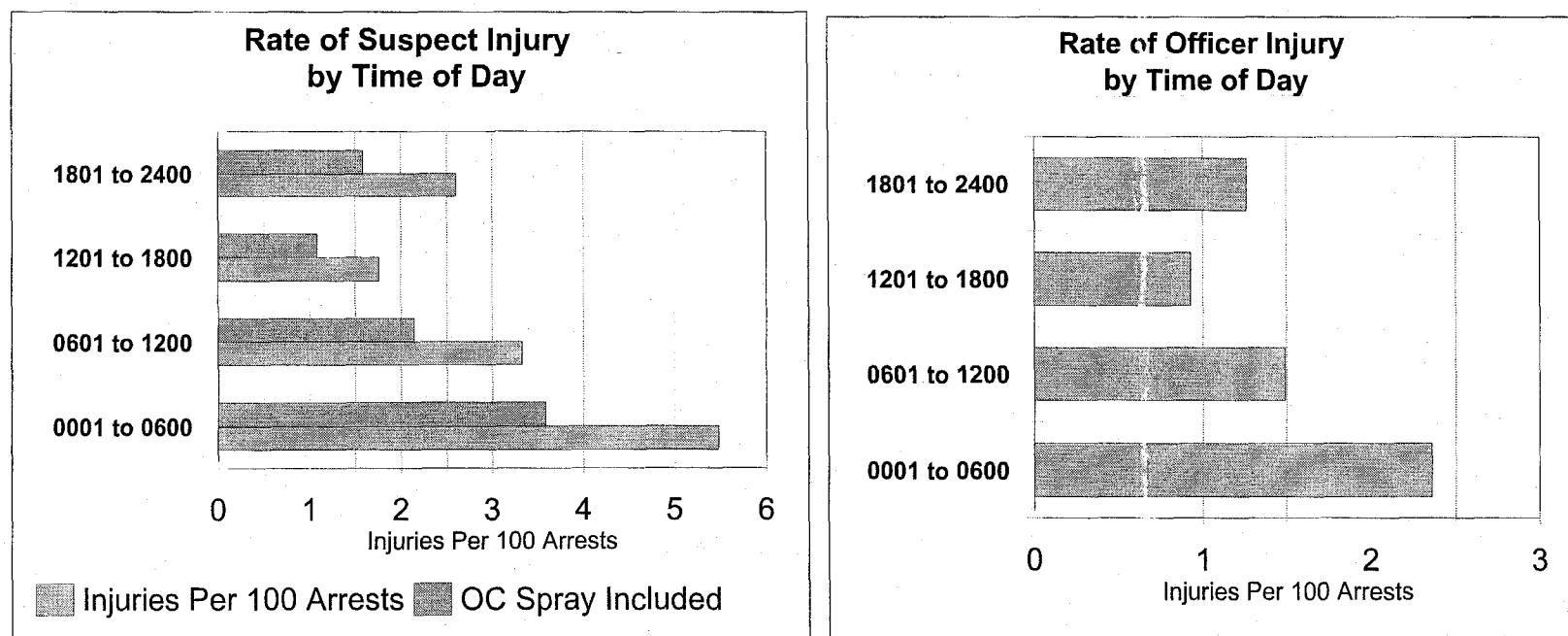


Table 15a: Rate of Force by Type of Offense

	Number of Arrests	Force Used		Weapon Used	
		Number	Rate	Number	Rate
All Arrests	30,209	1,782	5.9	731	2.4
Type of Offense					
Violence	6,761	1,086	16.1	352	5.2
Property	11,071	153	1.4	82	0.7
Drugs	9,180	111	1.2	54	0.6
Disorderly Conduct	456	119	26.1	83	18.2
Other	2,741	313	11.4	160	5.8

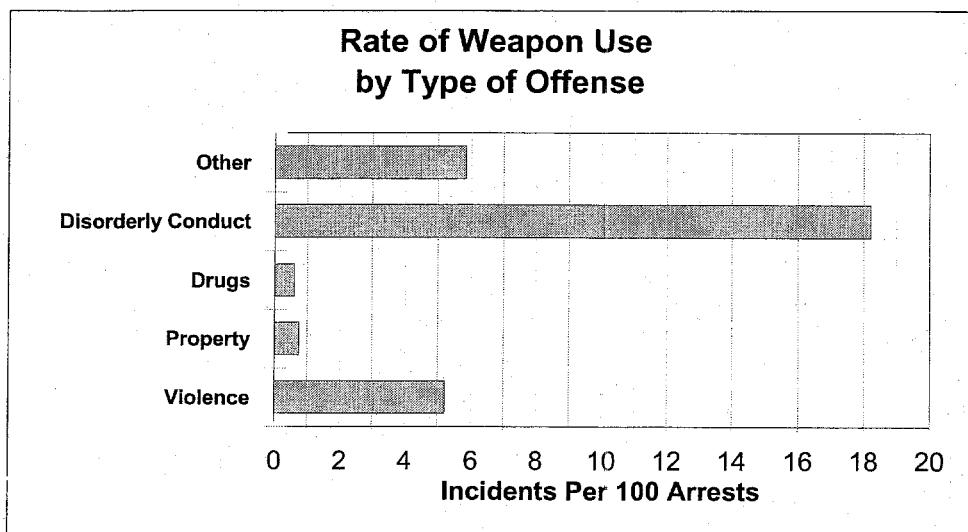
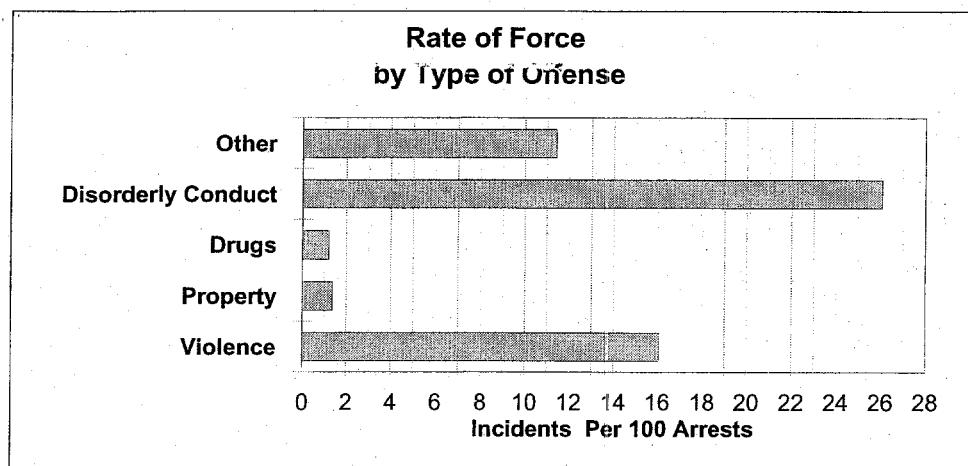


Table 15b: Injury Rate by Type of Offense

	Number of Arrests	Officer Injury Number	Rate	Suspect Injury			
				(OC Spray Included)	(OC Spray Excluded)	Number	Rate
All Arrests	30,209	434	1.4	929	3.1	585	1.9
Type of Offense							
Violence	6,761	298	4.4	484	7.2	342	5.1
Property	11,071	33	0.3	103	0.9	57	0.5
Drugs	9,180	35	0.4	80	0.9	57	0.6
Disorderly Conduct	456	14	3.1	81	17.8	31	6.8
Other	2,741	54	2.0	181	6.6	98	3.6

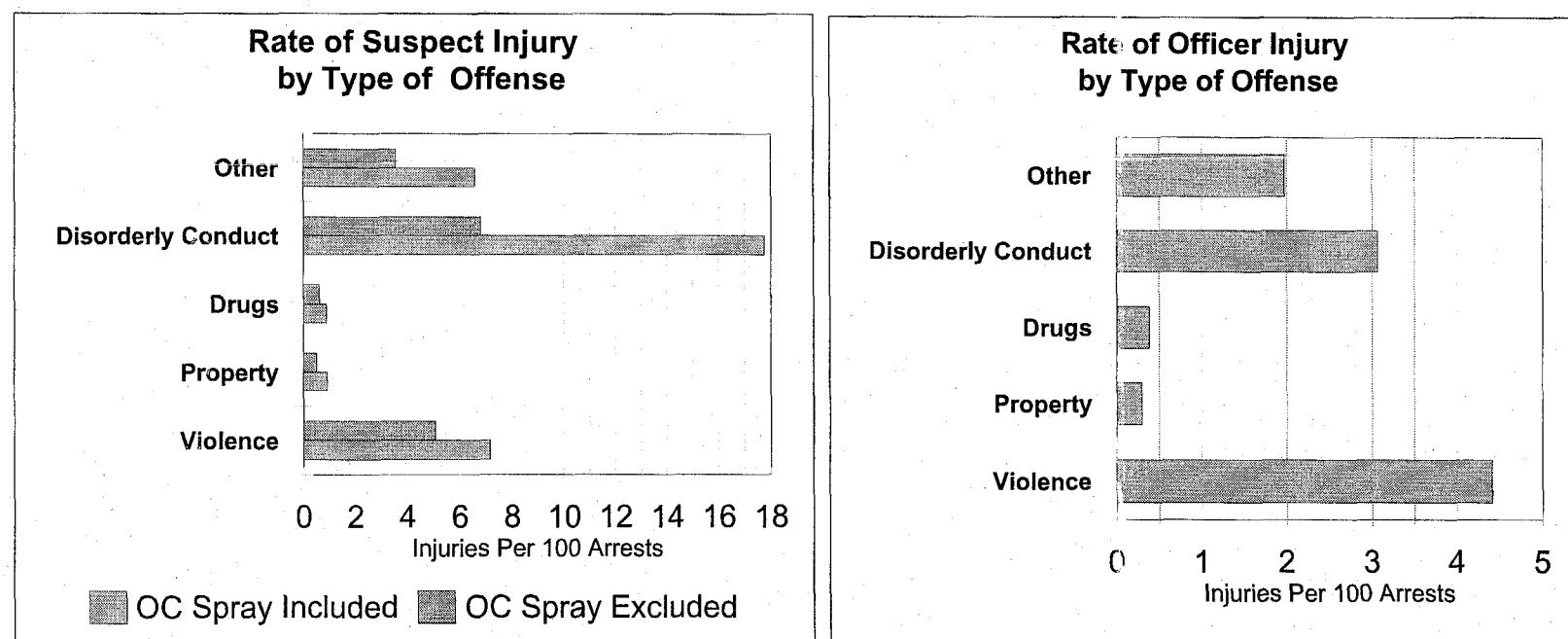


Table 16a: Rate of Force by Police District

	Number of Arrests	Force Used		Weapon Used	
		Number	Rate	Number	Rate
Total	30,209	2,184	7.2	869	2.9
Police District					
Bethesda	3,588	314	8.8	120	3.3
Germantown	6,365	174	2.7	51	0.8
Rockville	5,737	567	9.9	184	3.2
Silver Spring	8,979	438	4.9	154	1.7
Wheaton/Glenmont	5,540	556	10.0	274	4.9

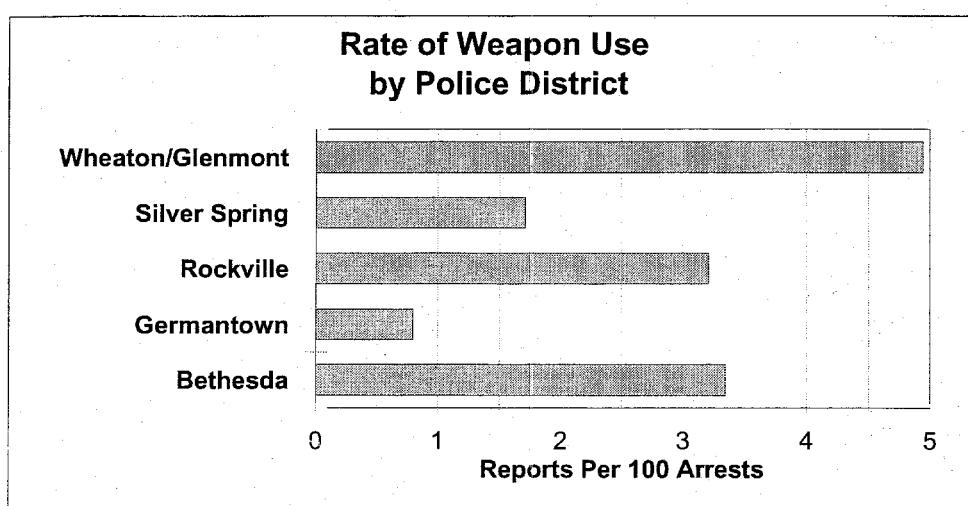
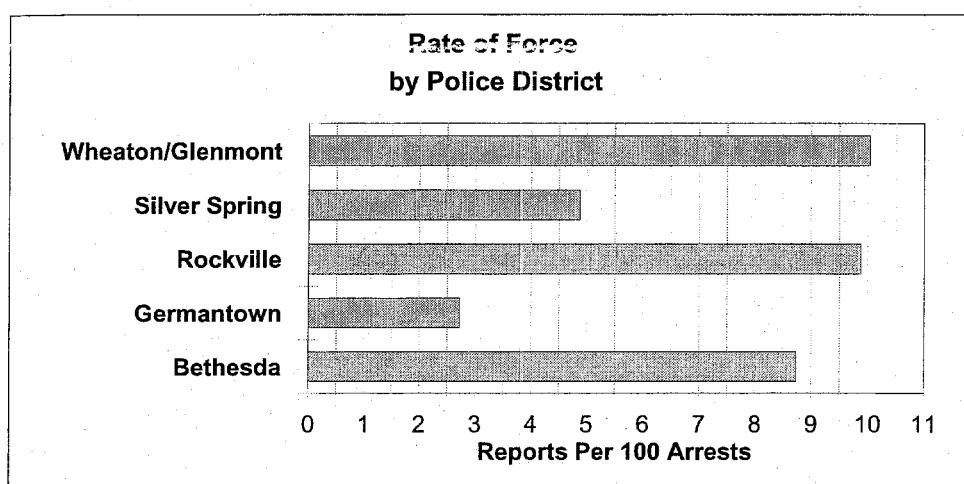


Table 16b: Injury Rate by Police District

	Number of Arrests	Officer Injury		Suspect Injury		(OC Spray Excluded)	
		Number	Rate	(OC Spray Included)	Number	Rate	Number
Total	30,209	569	1.9	1,167	3.9	766	2.5
Police District							
Bethesda	3,588	76	2.1	135	3.8	75	2.1
Germantown	6,365	46	0.7	107	1.7	73	1.1
Rockville	5,737	156	2.7	275	4.8	209	3.6
Silver Spring	8,979	120	1.3	247	2.8	162	1.8
Wheaton/Glenmont	5,540	132	2.4	321	5.8	205	3.7

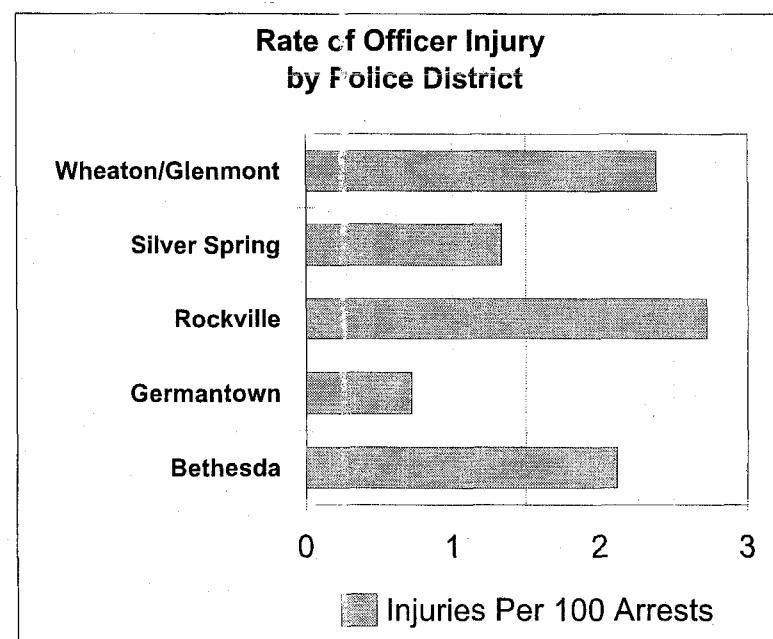
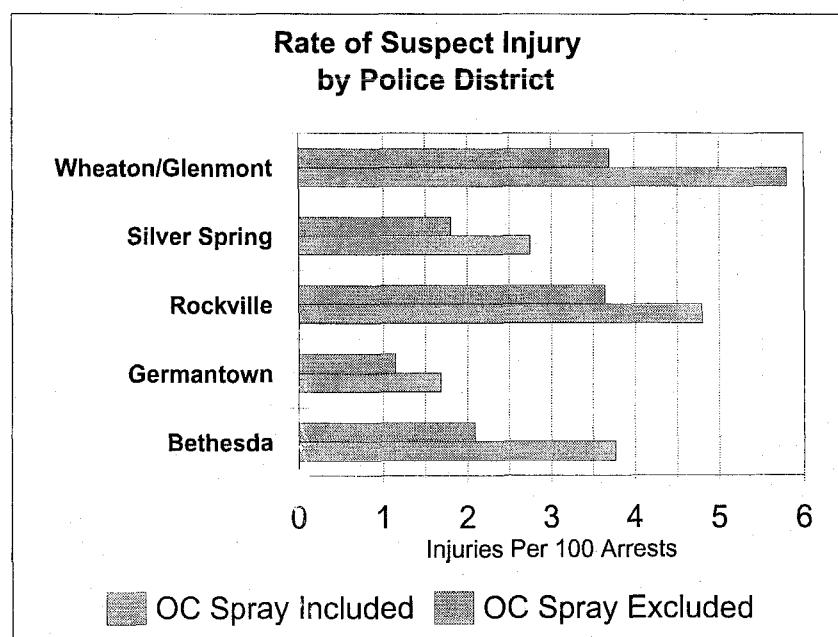


Table 17a: Rate of Force by Age of Suspect

	Number of Arrests	Force Used		Weapon Used	
		Number	Rate	Number	Rate
All Arrests	30,209	1,782	5.9	731	2.4
Age of Suspect					
18 to 20	6,321	227	3.6	89	1.4
21 to 25	6,182	343	5.5	146	2.4
26 to 30	4,935	333	6.7	148	3.0
31 to 35	4,739	319	6.7	143	3.0
36 to 40	3,853	262	6.8	114	3.0
41 to 45	2,262	156	6.9	53	2.3
46 or Older	1,917	142	7.4	38	2.0

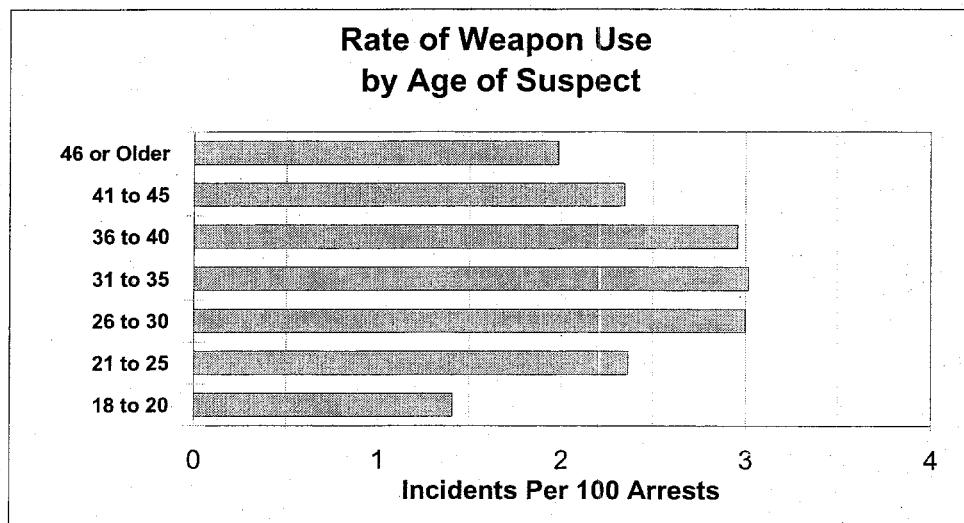
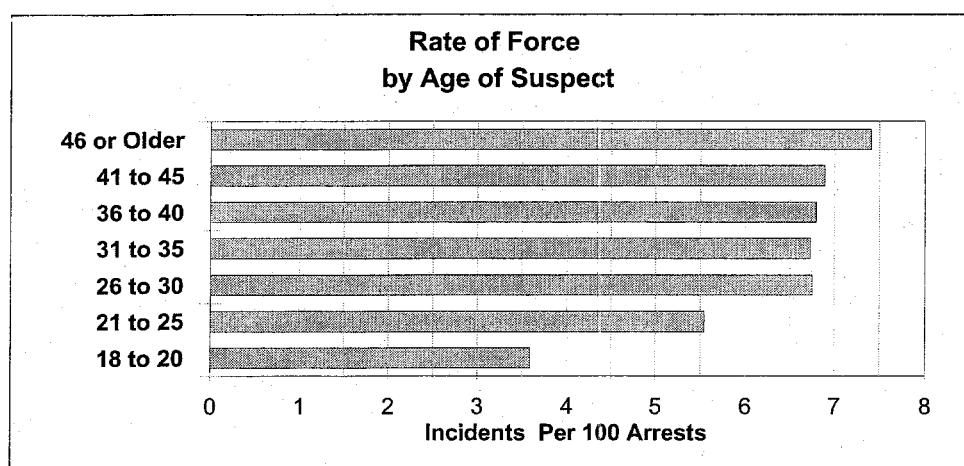


Table 17b: Injury Rate by Age of Suspect

	Number of Arrests	Officer Injury		(OC Spray Included)		(OC Spray Excluded)	
		Number	Rate	Number	Rate	Number	Rate
All Arrests	30,209	434	1.4	929	3.1	585	1.9
Age of Suspect							
18 to 20	6,321	59	0.9	110	1.7	67	1.1
21 to 25	6,182	86	1.4	183	3.0	101	1.6
26 to 30	4,935	91	1.8	184	3.7	110	2.2
31 to 35	4,739	71	1.5	150	3.2	97	2.0
36 to 40	3,853	61	1.6	156	4.0	102	2.6
41 to 45	2,262	40	1.8	83	3.7	56	2.5
46 or Older	1,917	26	1.4	63	3.3	52	2.7

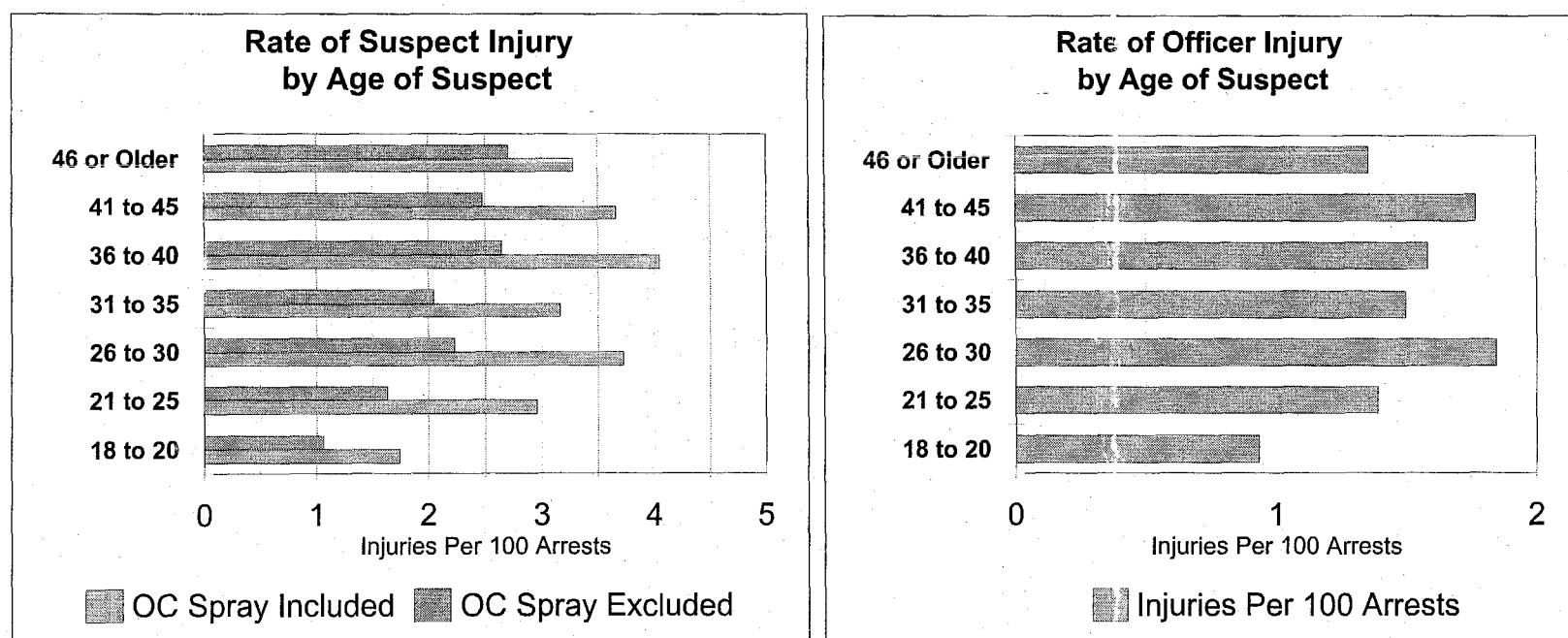
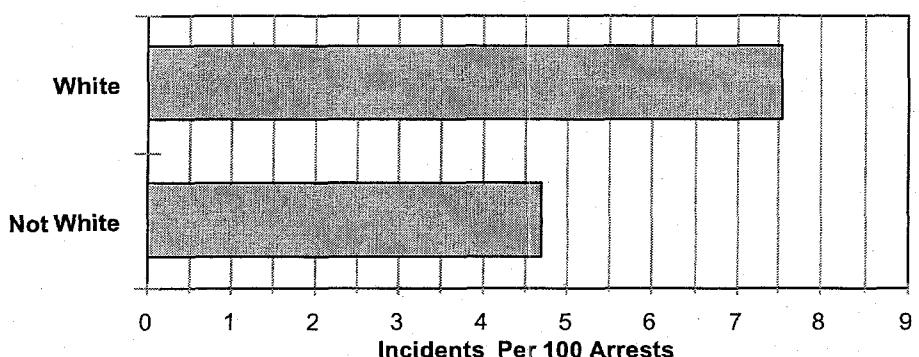


Table 18a: Rate of Force by Race of Suspect

	Number of Arrests	Force Used Number	Rate	Weapon Used Number	Rate
All Arrests	30,209	1,782	5.9	731	2.4
Race of Suspect (Hispanic = White)					
Not White	17,534	825	4.7	363	2.1
White	12,675	957	7.6	368	2.9

**Rate of Force
by Race of Suspect**



**Rate of Weapon Use
by Race of Suspect**

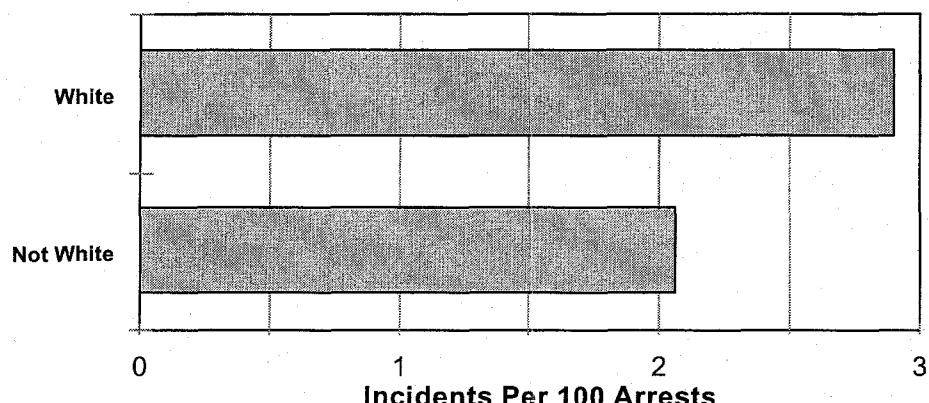
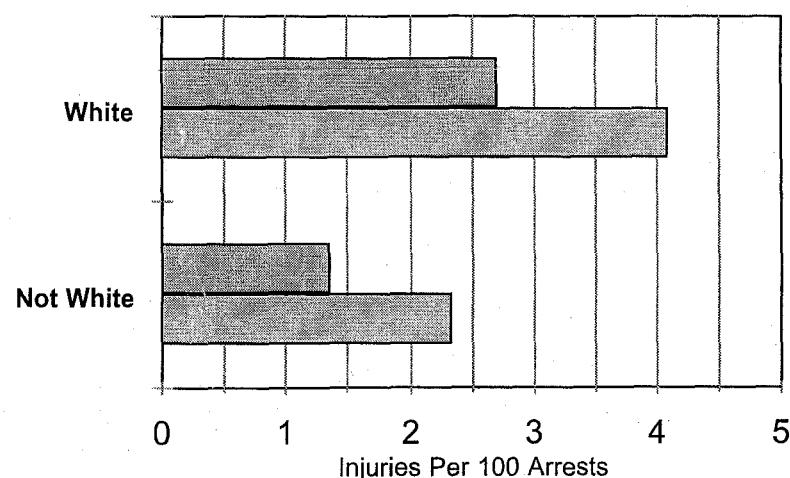


Table 18b: Injury Rate by Suspect Race

	Number of Arrests	Officer Injury		Suspect Injury		(OC Spray Included)		(OC Spray Excluded)	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate
All Arrests	30,209	434	1.4	929	3.1	585	1.9		
Race of Suspect (Hispanic = White)									
Not White	17,534	216	1.2	410	2.3	240	1.4		
White	12,675	218	1.7	519	4.1	345	2.7		

**Rate of Suspect Injury
by Race of Suspect**



■ OC Spray Included ■ OC Spray Excluded

**Rate of Officer Injury
by Race of Suspect**

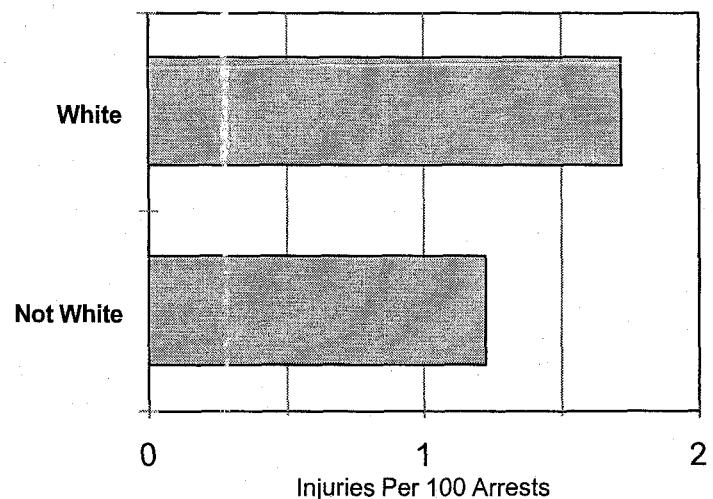


Table 19a: Rate of Force by Sex of Suspect

	Number of Arrests	Force Used Number	Force Used Rate	Weapon Used Number	Weapon Used Rate
All Arrests	30,209	1,782	5.9	731	2.4
Sex of Suspect					
Female	5,153	275	5.3	60	1.2
Male	25,056	1,507	6.0	671	2.7

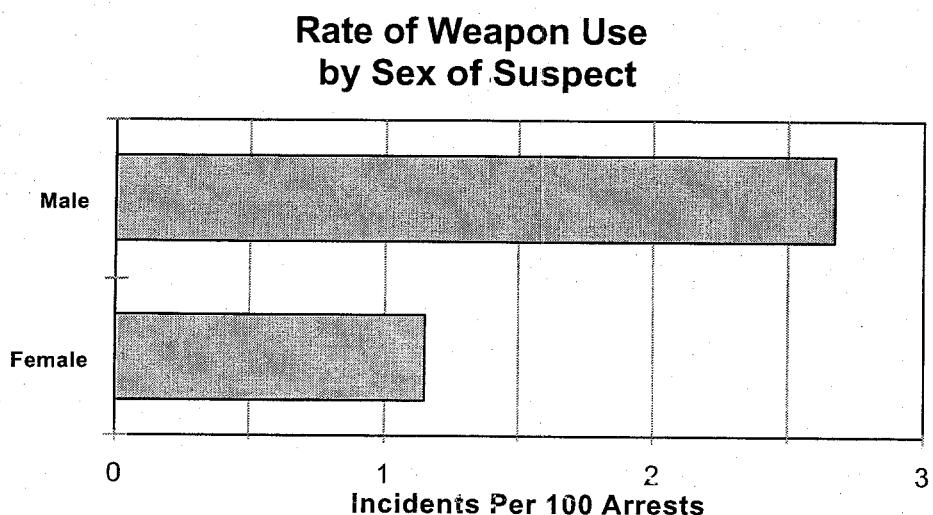
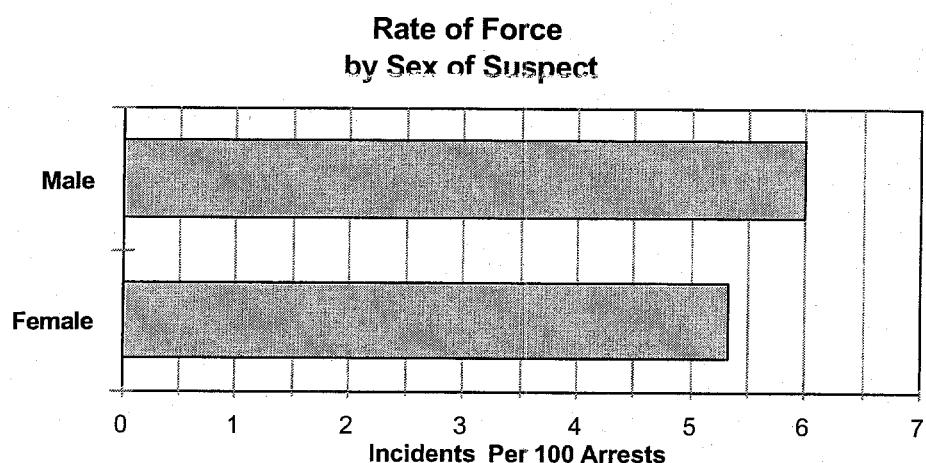


Table 19b: Injury Rate by Suspect Sex

	Number of Arrests	Officer Injury		(OC Spray Included)		Suspect Injury (OC Spray Excluded)	
		Number	Rate	Number	Rate	Number	Rate
All Arrests	30,209	434	1.4	929	3.1	585	1.9
Sex of Suspect							
Female	5,153	73	1.4	97	1.9	72	1.4
Male	25,056	361	1.4	832	3.3	513	2.0

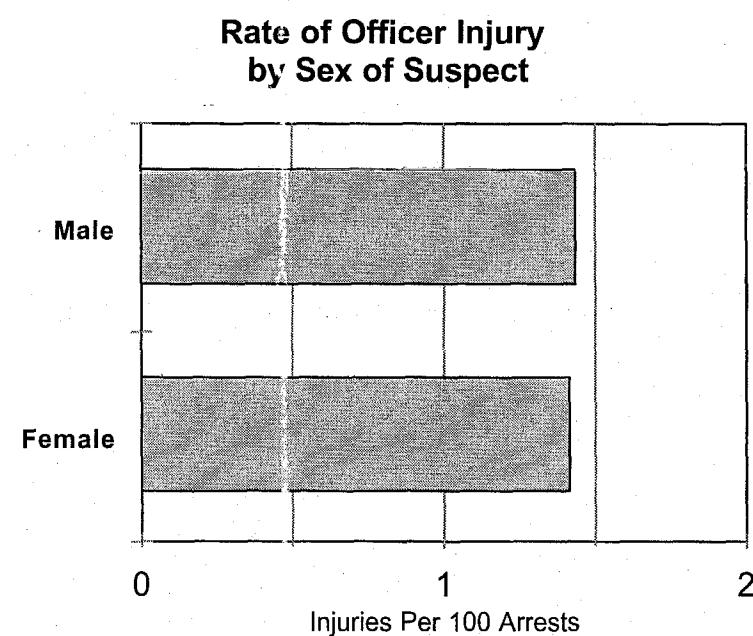
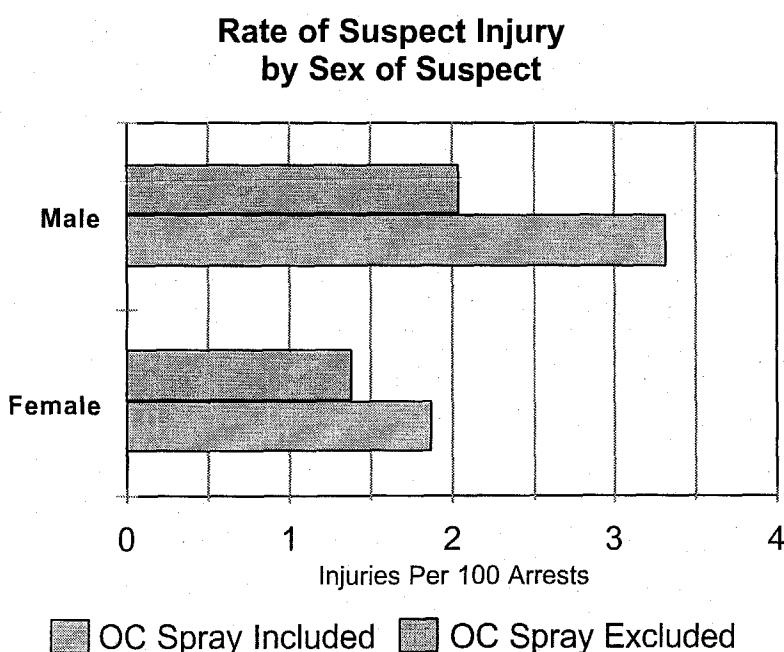


Table 20a: Rate of Force by Officer Age

	Number of Arrests	Force Used		Weapon Used	
		Number	Rate	Number	Rate
Total	30,209	2,184	7.2	869	2.9
Age of Officer					
21 to 25	4,549	292	6.4	93	2.0
26 to 30	12,587	925	7.3	334	2.7
31 to 35	6,830	505	7.4	202	3.0
36 to 40	2,938	262	8.9	126	4.3
41 to 45	1,673	120	7.2	65	3.9
46 or Older	1,632	80	4.9	49	3.0

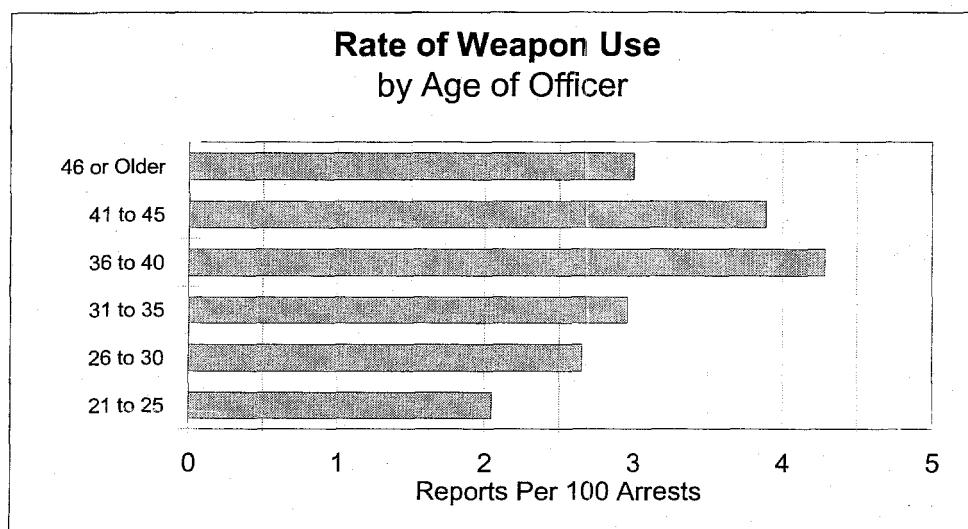
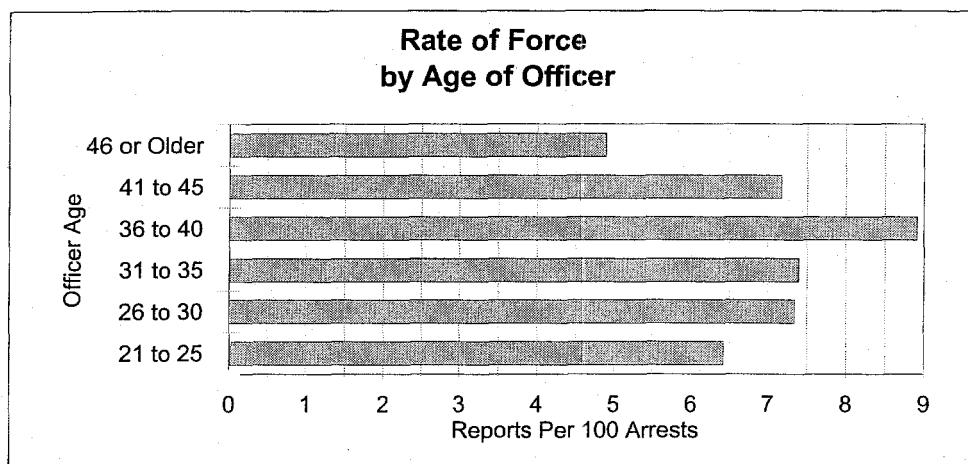
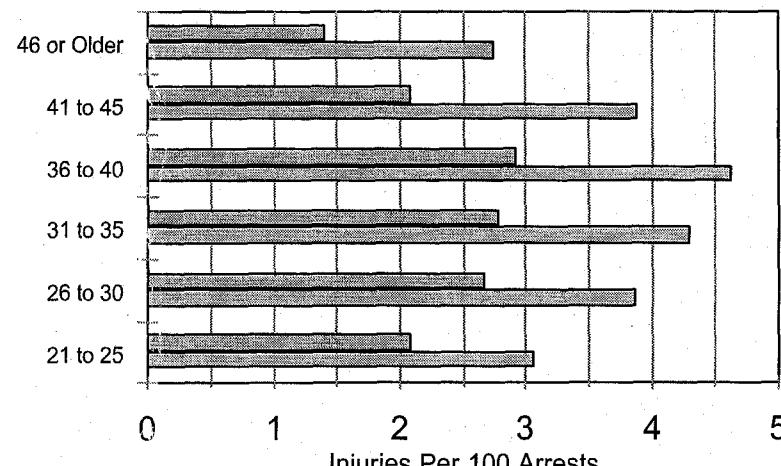


Table 20b: Injury Rate by Officer Age

Age of Officer	Number		Officer Injury(OC Spray Included)			Suspect Injury (OC Spray Excluded)		
	of Arrests	Number	Rate	Number	Rate	Number	Rate	
Total	30,209	569	1.9	1167	3.9	766	2.5	
Age of Officer								
21 to 25	4,549	71	1.6	140	3.1	95	2.1	
26 to 30	12,587	225	1.8	487	3.9	337	2.7	
31 to 35	6,830	130	1.9	294	4.3	190	2.8	
36 to 40	2,938	83	2.8	136	4.6	86	2.9	
41 to 45	1,673	37	2.2	65	3.9	35	2.1	
46 or Older	1,632	23	1.4	45	2.8	23	1.4	

**Rate of Suspect Injury
by Age of Officer**



■ OC Spray Included ■ OC Spray Excluded

**Rate of Officer Injury
by Age of Officer**

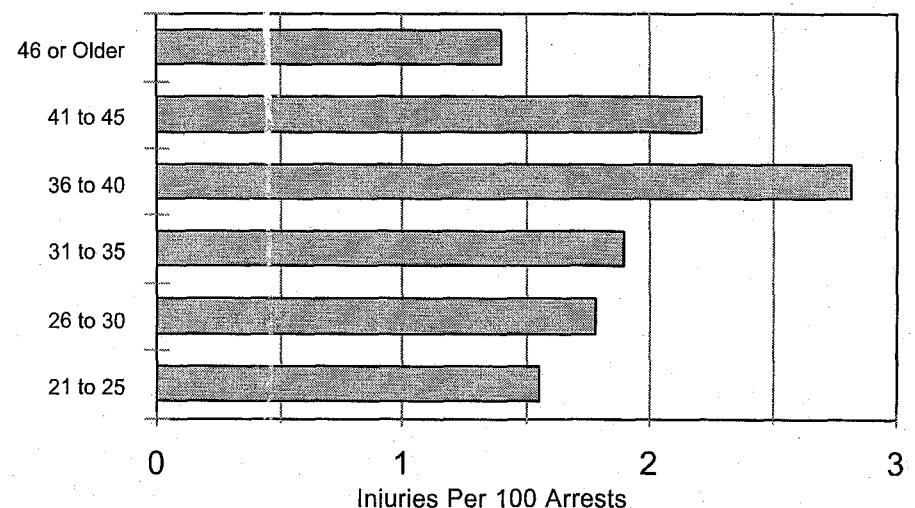
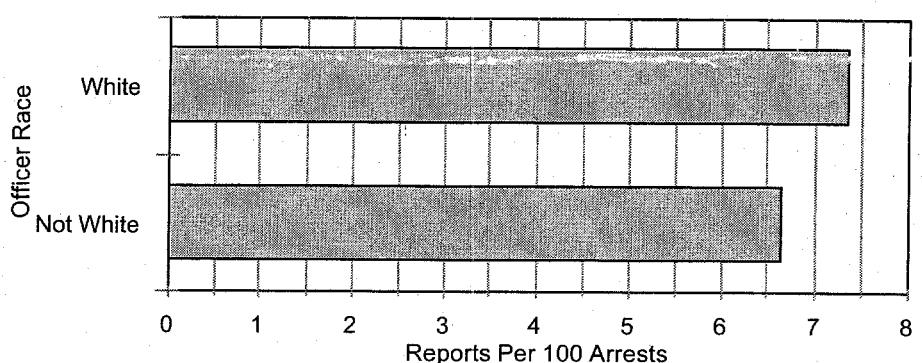


Table 21a: Rate of Force by Officer Race

	Number	Force Used	Weapon Used		
	of Arrests	Number	Rate	Number	Rate
Total	30,209	2,184	7.2	869	2.9
Race of Officer					
Not White	6,359	424	6.7	147	2.3
White	23,850	1,760	7.4	722	3.0

**Rate of Force
by Race of Officer**



**Rate of Weapon Use
by Race of Officer**

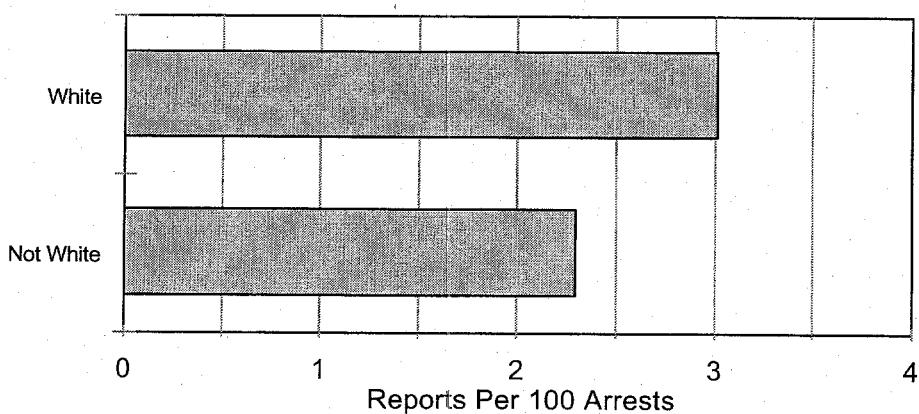


Table 21b: Injury Rate by Officer Race

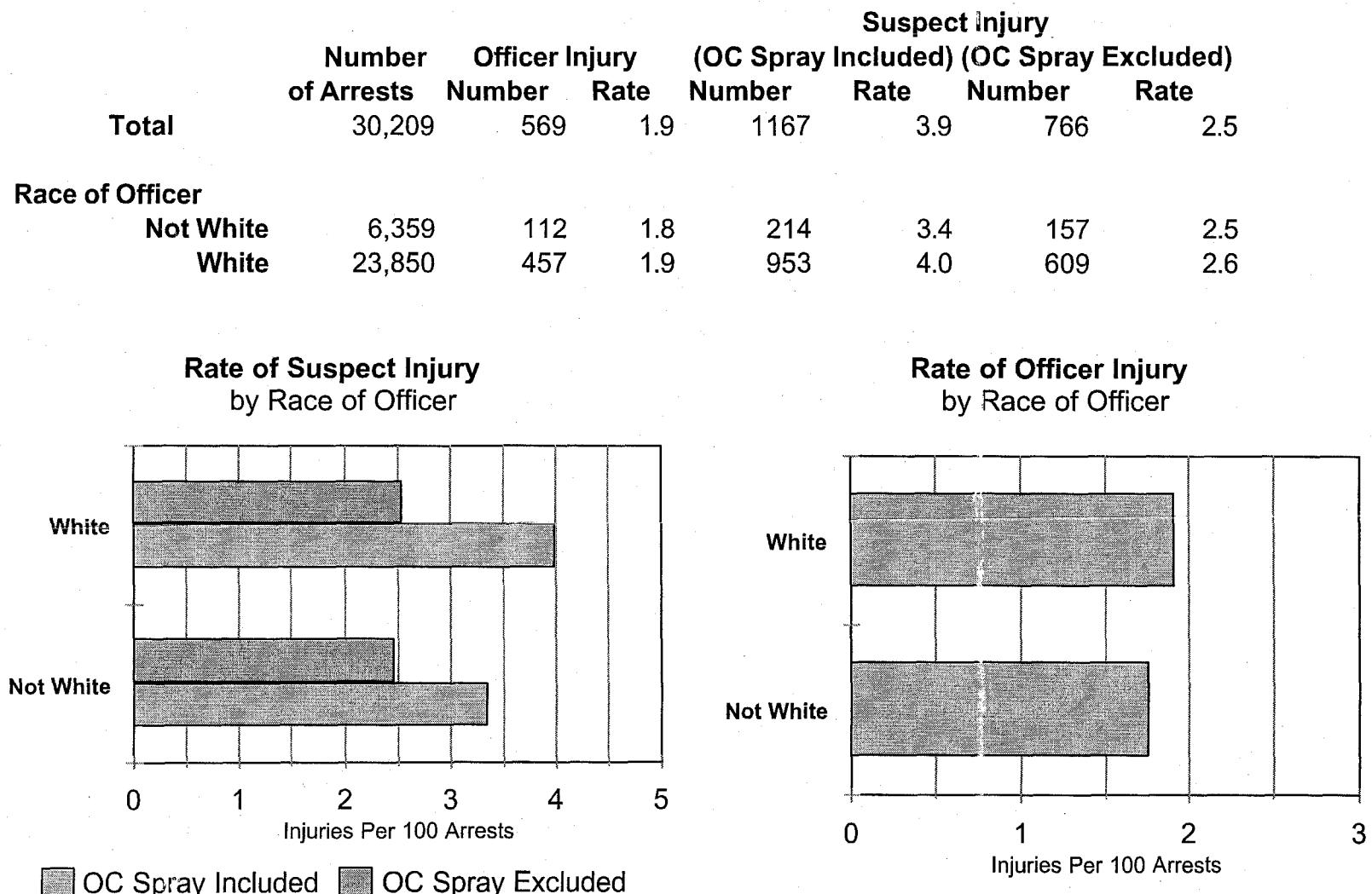
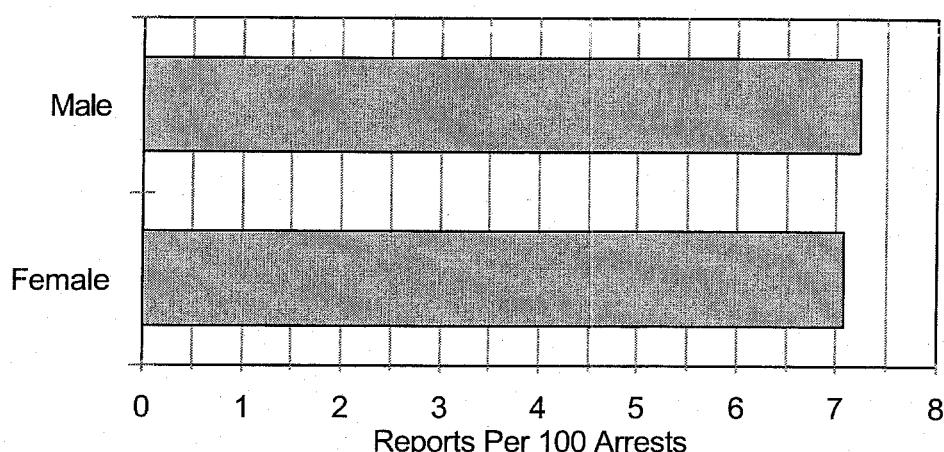


Table 22a: Rate of Force by Officer Sex

	Number of Arrests	Force Used		Weapon Used	
	Total	Number	Rate	Number	Rate
	30,209	2,184	7.2	869	2.9
Sex of Officer					
Female	4,329	307	7.1	111	2.6
Male	25,880	1,877	7.3	758	2.9

**Rate of Force
by Sex of Officer**



**Rate of Weapon Use
by Sex of Officer**

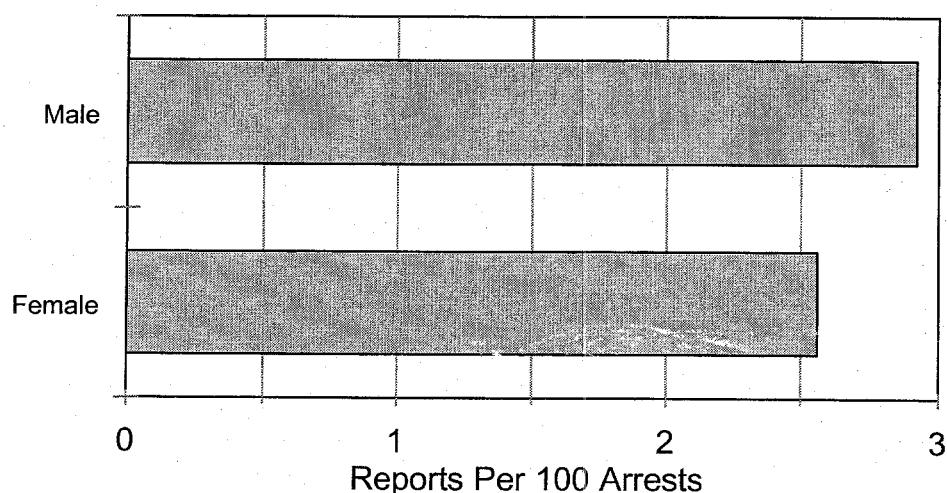
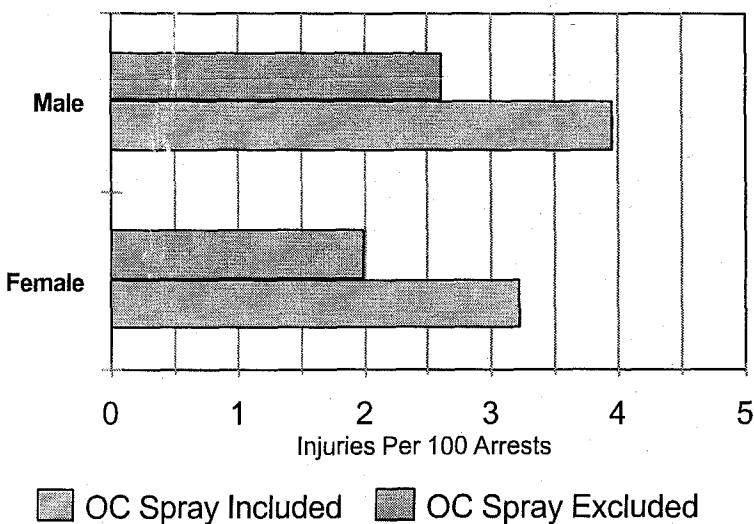


Table 22b: Injury Rate by Officer Sex

	Number of Arrests	Officer Injury		Suspect Injury			
		Number	Rate	(OC Spray Included)	(OC Spray Excluded)	Number	Rate
Total	30,209	569	1.9	1167	3.9	766	2.5
Sex of Officer							
Female	4,329	98	2.3	140	3.2	87	2.0
Male	25,880	471	1.8	1027	4.0	679	2.6

**Rate of Suspect Injury
by Sex of Officer**



**Rate of Officer Injury
by Sex of Officer**

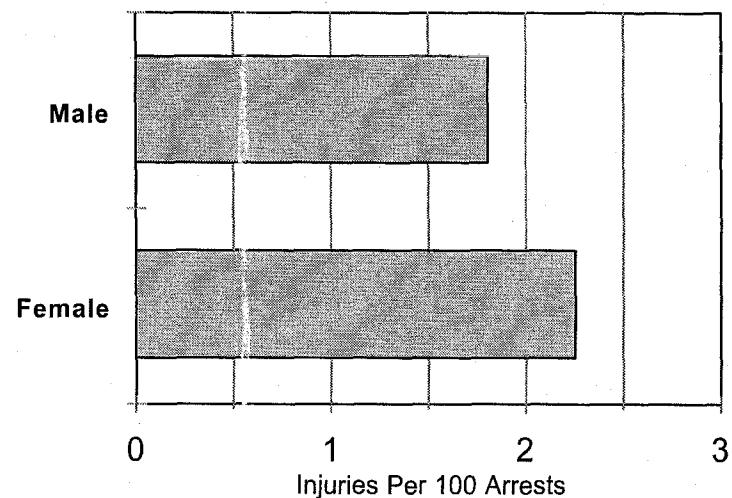
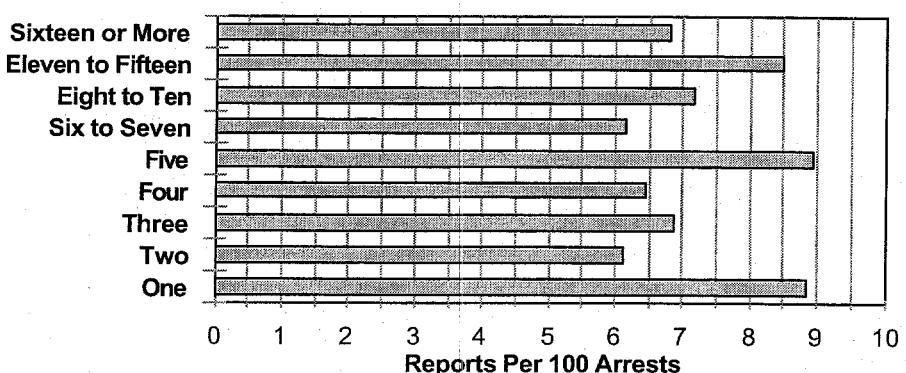


Table 23a: Rate of Force by Officer Years of Service

	Number of Arrests	Force Used Number	Force Used Rate	Weapon Used Number	Weapon Used Rate
Total	30,209	2,184	7.2	869	2.9
Officer's Years of Service					
One	3,215	285	8.9	86	2.7
Two	4,116	253	6.1	80	1.9
Three	3,718	256	6.9	102	2.7
Four	3,224	209	6.5	78	2.4
Five	2,833	254	9.0	77	2.7
Six to Seven	4,087	253	6.2	108	2.6
Eight to Ten	3,451	248	7.2	117	3.4
Eleven to Fifteen	2,673	228	8.5	107	4.0
Sixteen or More	2,892	198	6.8	114	3.9

**Rate of Force
by Years of Service**



**Rate of Weapon Use
by Years of Service**

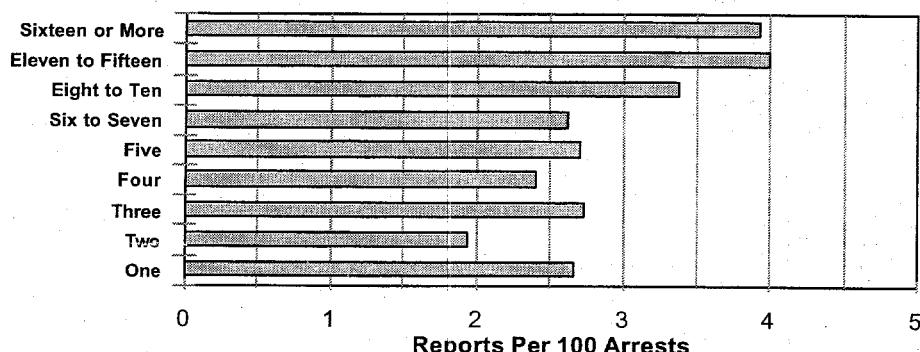
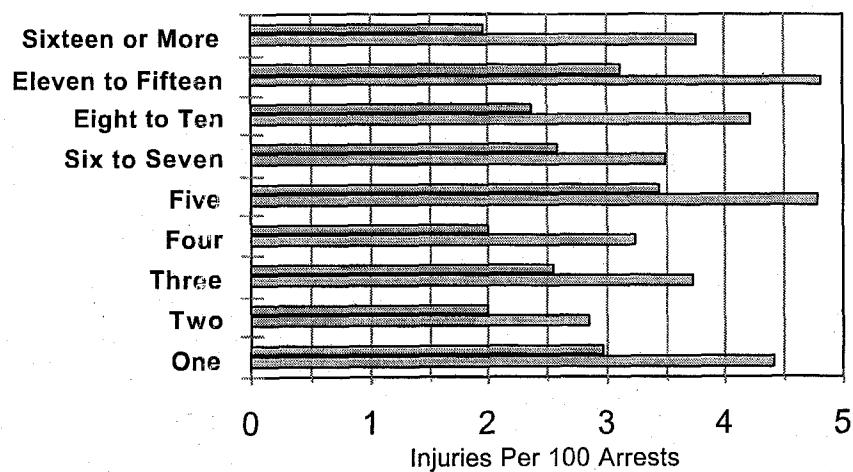


Table 23b: Injury Rate by Officer Years of Service

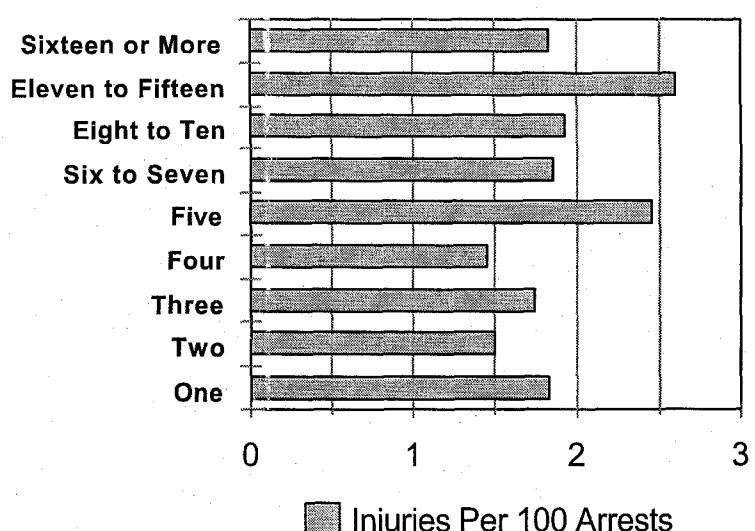
	Number of Arrests	Suspect Injury			
		Officer Injury Number	Rate	(OC Spray Included) Number	(OC Spray Excluded) Rate
Total	30,209	569	1.9	1,167	3.9
Officer's Years of Service					
One	3,215	59	1.8	142	4.4
Two	4,116	62	1.5	118	2.9
Three	3,718	65	1.7	139	3.7
Four	3,224	47	1.5	105	3.3
Five	2,833	70	2.5	136	4.8
Six to Seven	4,087	76	1.9	143	3.5
Eight to Ten	3,451	67	1.9	146	4.2
Eleven to Fifteen	2,673	70	2.6	129	4.8
Sixteen or More	2,892	53	1.8	109	3.8
				766	2.5

**Rate of Suspect Injury
by Years of Service**



■ OC Spray Included ■ OC Spray Excluded

**Rate of Officer Injury
by Years of Service**

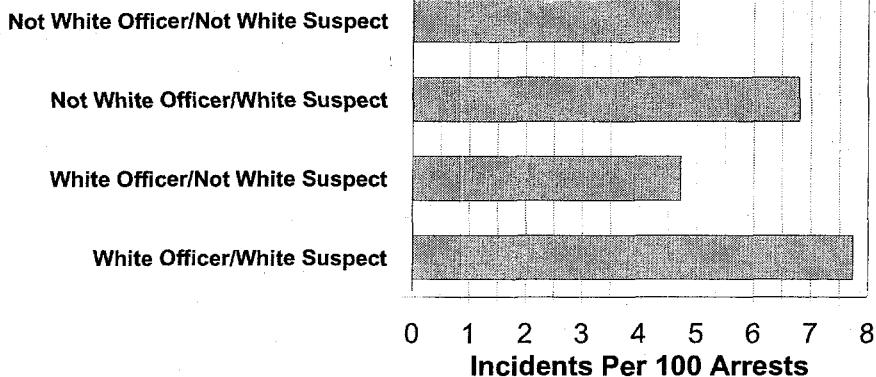


■ Injuries Per 100 Arrests

Table 24a: Rate of Force by Officer and Suspect Race

	Arrests Number	Force Used Number	Rate	Weapon Used Number	Rate
All Incidents	30,209	1,782	5.9	731	2.4
Race of Officer and Suspect (Hispanic=White)					
White Officer/White Suspect	10,203	789	7.7	318	3.1
White Officer/Not White Suspect	13,647	643	4.7	290	2.1
Not White Officer/White Suspect	2,472	168	6.8	50	2.0
Not White Officer/Not White Suspect	3,887	182	4.7	73	1.9

Rate of Force by Race of Officer and Suspect



Rate of Weapon Use by Race of Officer and Suspect

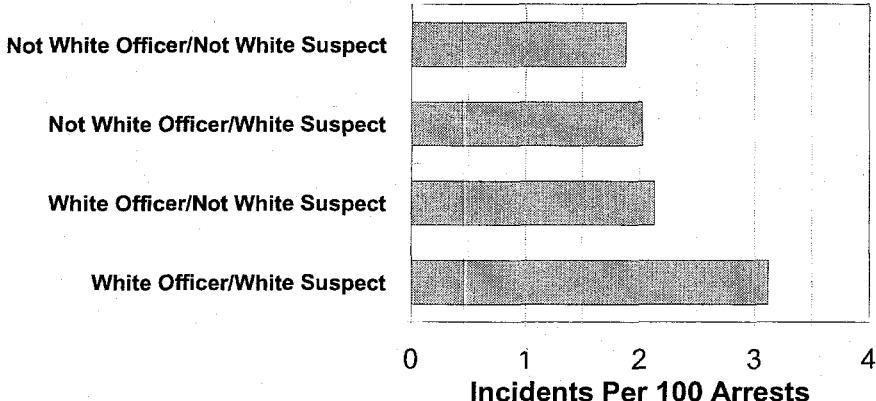


Table 24b: Rate of Injury by Officer and Suspect Race

	Arrests Number	Officer Injury Number	Rate	Suspect Injury	
				(OC Spray Included)	(OC Spray Excluded)
All Incidents	30,209	434	1.4	929	3.1
Race of Officer and Suspect (Hispanic=White)					
White Officer/White Suspect	10,203	184	1.8	428	4.2
White Officer/Not White Suspect	13,647	166	1.2	330	2.4
Not White Officer/White Suspect	2,472	34	1.4	91	3.7
Not White Officer/Not White Suspect	3,887	50	1.3	80	2.1

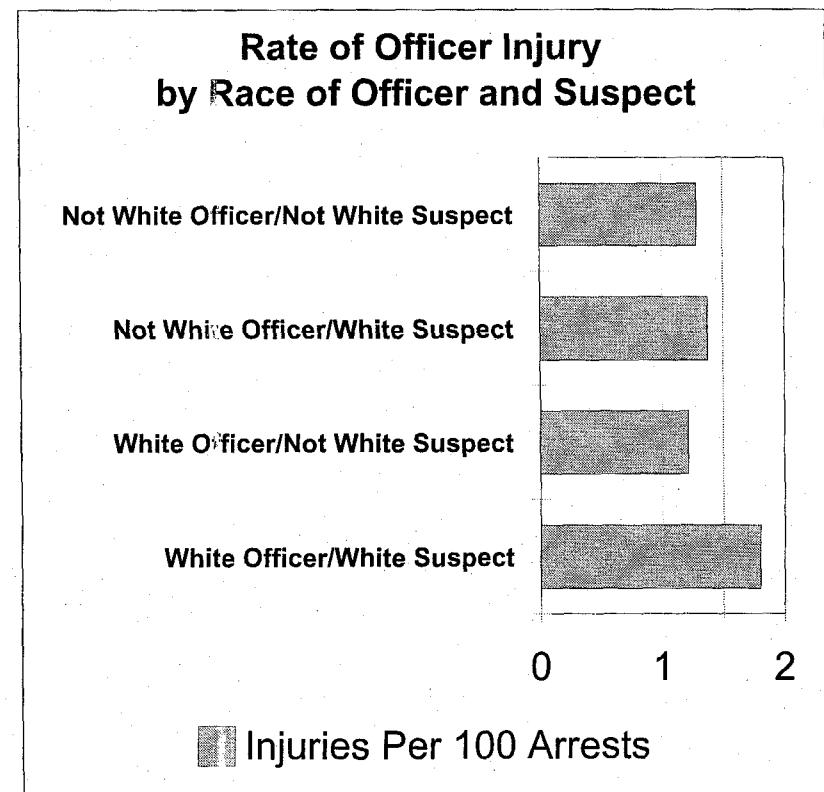
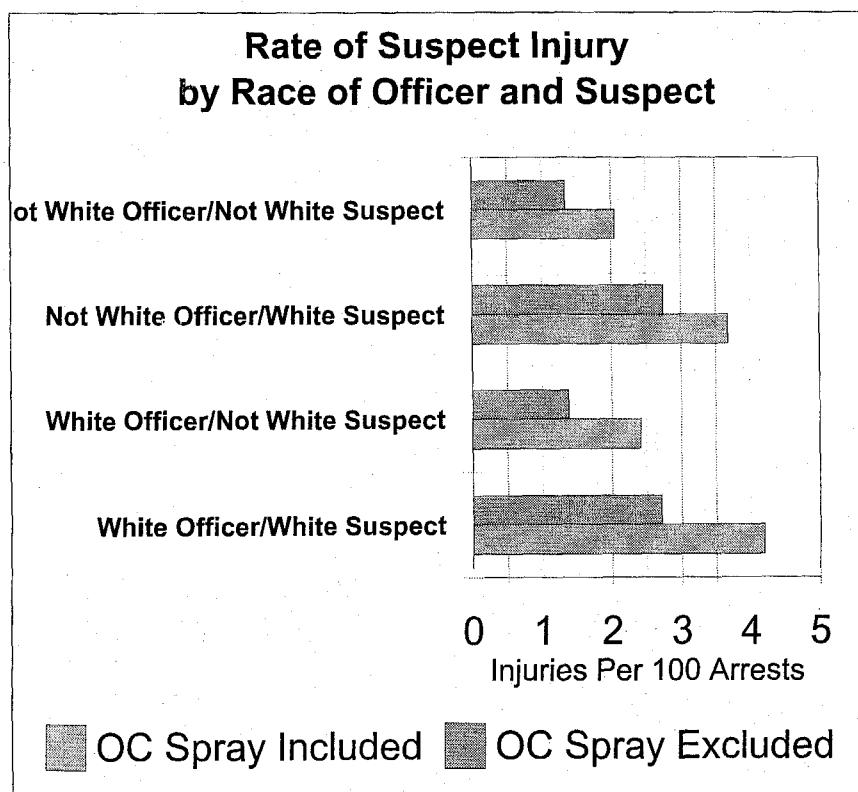


Table 25a: Rate of Force by Officer and Suspect Sex

	Arrests	Force Used	Weapon Used		
	Number	Number	Rate	Number	Rate
All Incidents	30,209	1,782	5.9	731	2.4
Sex of Officer and Suspect					
Both Male	21,763	1,335	6.1	601	2.8
Male Officer/Female Suspect	4,117	195	4.7	39	0.9
Female Officer/Male Suspect	3,293	172	5.2	70	2.1
Both Female	1,036	80	7.7	21	2.0

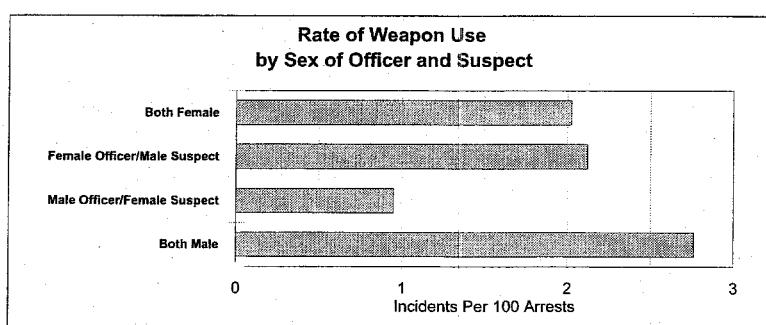
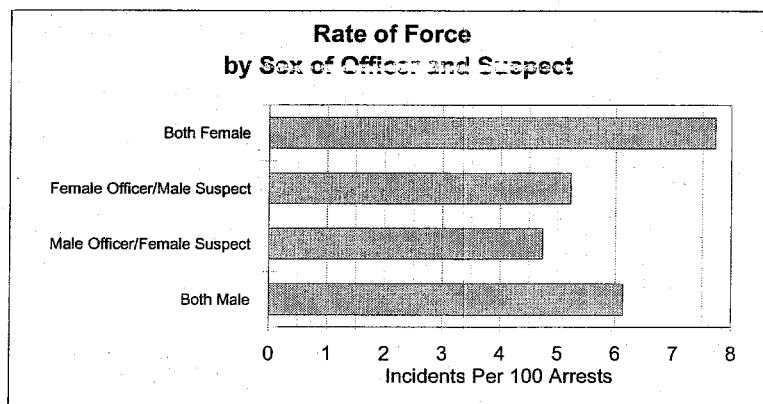
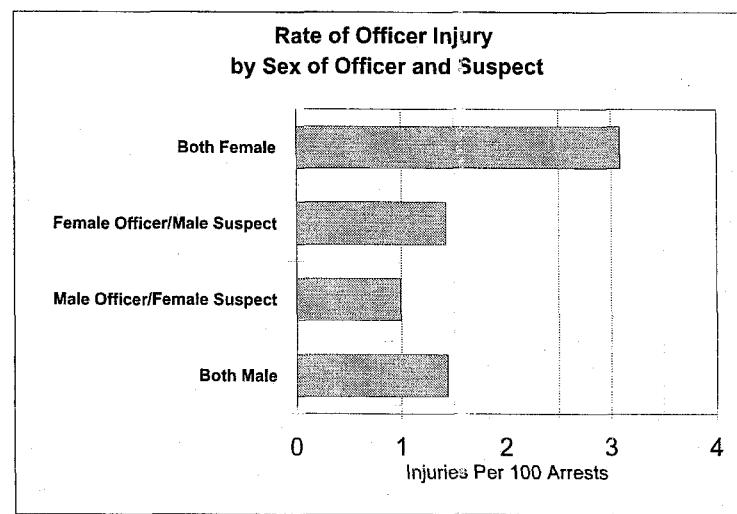
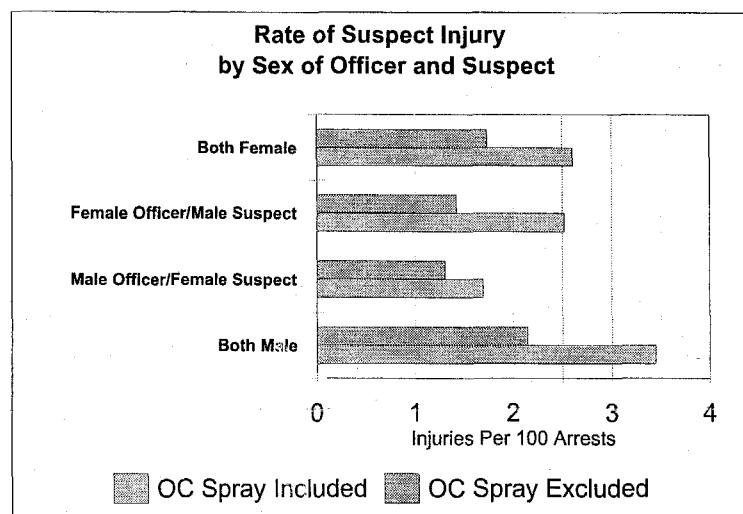


Table 25b: Rate of Injury by Officer and Suspect Sex

	Arrests Number	Officer Injury				Suspect Injury	
		Number	Rate	(OC Spray Included) Number	Rate	(OC Spray Excluded) Number	Rate
All Incidents	30,209	434	1.4	929	3.1	585	1.9
Sex of Officer and Suspect							
Both Male	21,763	314	1.4	749	3.4	466	2.1
Male Officer/Female Suspect	4,117	41	1.0	70	1.7	54	1.3
Female Officer/Male Suspect	3,293	47	1.4	83	2.5	47	1.4
Both Female	1,036	32	3.1	27	2.6	18	1.7





Department of Police
Montgomery County, Maryland

MCP 37
Rev. 07/98

USE OF FORCE REPORT

Officer Information		Supervisor Notified – Name:		ID#:	
Last Name:		First Name:		ID#:	Rank:
Race:	Sex:	DOB:	Age:	Hgt:	Wgt:
Date:	/ /	(MM/DD/YY)	Time:	(Mil)	Day of Week:
Location:			District of Occurrence:		
Number of Officers in Vehicle:		Number of Officers Assisting:		Event Classification:	
Duty Status at Time of Incident: (Duty/Off)			Officer Clothing at Time of Incident: (Uniform/Civilian)		
Officer Injured: (Y/N)		Treated by: Officer	DFRS	Hospital (Name)	
Describe Injuries:					
Activity/Force Used		Activity Codes			
Type of Activity	(Insert Code):			Attempt Arrest	AA
Type of Forced Used	(Insert Code):			Transporting	TR
Defendant Force Used	(Insert Code):			Traffic Stop	TS
If Code is "Other" Explain in Supplementary Narrative				Mental/EEP	EP
				Amoush	AM
				Suspicious Situation	SS
Disorderlies		Demonstration		OT	
Defending an Assault		Family Fight		OT	
Animal Destruction		Other		OT	
Concealed Forces					
Handgun	HG	OC Aerosol	OC		
Shotgun	SG	Handcuffs	HC		
Rifle	RI	Hands/Pists	HF		
Automatic Weapon	AW	Feet	FT		
ASP	AS	Vehicle	VH		
Flashlight	FL	CS Chemical Agent	CS		
Canine	CA	Other	OT		
Report Is Being Completed Because:					
<input type="checkbox"/> A. Physical Force – the use of any body part	<input type="checkbox"/> B. Protective Instruments	<input type="checkbox"/> C. Deadly Force – force that is intended or likely to cause death or serious physical injury			
<input type="checkbox"/> D. Use of Force to counteract a physical struggle	<input type="checkbox"/> E. Use of Force was a Canine infliction of injury, in conjunction with search, arrest (attempt or apprehension)	<input type="checkbox"/> F. Animal Destruction			
<input type="checkbox"/> G. Assault on a Police Officer					
Defendant	Last Name:	First Name:			
Race:	Sex:	DOB:	Age:	Address:	MCP ID #
Nature of Injuries:					
Treated By:	Officer	DFRS	Hospital (Name)		Refused

Supplementary Narrative	Completion of this portion of the form is being done under duress. Complete only if further information is necessary to clarify above or to describe Code: "Other."	

Function Code: 131
CALEA: 1.3.6, 1.3.13
Proponent Unit: Office of Staff Inspections

Attach copy of Event Report (except animal destruction).
Distribution: (See FC 131 for Routing Instructions)
Previous Editions Are Cancelled And Should Be Destroyed

Review	Date	Initials
Bureau Chief		
Deputy Chief		
Chief of Police		

Appendix 1: MCPD Use of Force Policies and Use of Force Forms, 1992 to 1998

Date	Policy or Form Instructions
10/15/83	The first available reference to what might be termed a "use of force form" appears in a policy entitled "Use of Force/deadly force/firearms" dated 10-15-83 (revised 11-15-83). Under this policy a supervisor had to prepare a memorandum on any use of force resulting in death or injury requiring medical attention or use of firearms (except range practice or animal destruction).
12/91	There is a Form 37 dated 12/91 states it is to be used to report assaults on officers. It has defendant force codes but not officer force codes. It does not appear to be in our data base.
3/31/92	There is a reference to a 3/31/92 Form 37 but do not have the form itself. This appears to be the first form 37 that is in the data base. It seems to have been the first Form 37 that contains both defendant and officer force codes.
4/6/92	A policy entitled "Use of Force" dated 4/6/92 refers to the use of the Use of Force Report (MCP 37) and states that this form was revised March 31, 1992. Completion of this report is required any time force is used, which: <ul style="list-style-type: none">* results in an injury to an individual, or*where an individual claims he/she is injured as a result of the amount of force used, or*where force is applied by use of a protective instrument, whenever a firearm is discharged (other than authorized target practice).*whenever a departmental canine inflicts injury to any subject or suspect in conjunction with a search, arrest attempt, or apprehension. The policy notes that display of a firearm to assure officer safety does not require a force report.

NOTES: (1) This policy does not seem to cover use of hands, fists, and feet where no injury results. The protective instruments listed are PR24 baton/flashlight/riot baton/gas grenade/stun gun/blackjack. (2) We do not have the 3/31/92 form; the first blank MCP#37 in our file is the 9/1/92 revision. Note: the first case on the data base is listed as 4/12/92. (3) The 4/6/92 policy does not mention OC spray.

Date	Policy or Form Instructions
9/92	The 9/92 version of Form 37 has the following force codes: HG- Handgun, SG - Shotgun, RI-Rifle, AW-Automatic Weapon, BA-Baton, FL-Flashlight, BJ, HC- Handcuffs, HF-Hands, FT-Feet, VH-Vehicle, OT-Other. This form does not mention OC spray.
9/30/92	A policy memorandum on completion of Form 37 entitled "Use of Force Report MCP #37 dated 9-30-92 (amended 5/1/93) expands the reporting requirement to (A) whenever a police officer uses any form of force, (B) whenever a police officer is the victim of any type of force or is assaulted. This memorandum specifically covers the use of MCP # 37 and the reporting of force and requires completion in a broader set of cases than the paragraph about reporting force that is in the general use of force memorandum of 4/6/92. The key point is that it appears that the reporting requirements between 4/6/92 and 9/30/92 were considerably narrower than those put into effect on 9/30/92.
1/1/93	The 1/3/93 version of Form 37 is the primary document in the data base. This adds force codes OC (pepper spray) and CS (chemical substance).
2/93	The first mention of OC spray is in a 1-25-93 policy on chemical agents that probably was issued on or after 2/1/93 (the date the chief initialed the signature sheet), and in a 1/1/93 revision of form 37 (which has an OC spray code).
8/15/94	The use of force policy dated 8-15-94 (draft) lists protective instruments as only the following: PR24 baton & blackjack (to be replaced by expandable baton); flashlight; riot baton; gas grenades, OC spray; and expandable baton.
1/15/95	The policy titled "Use of Force" dated 1-15-95 appear inconsistent with the 9/30/92 (amended 5/1/93) policy on completion of the MCP 37. The 1-15-95 policy uses the language from the 4/6/92 policy. Whether officers would follow this policy or continue to use the more specific 5/1/93 policy for reporting is not known.
1/97	There is a copy of a 1/97 form (but this form may not have been put into effect as the completed forms through 12/97 use the 1/93 form. This form deleted the trichotomous reason for completion of the report from the top of the report and substituted a seven choice reason for completion of the form in the middle of the form. Whether intended or not, the revisions on the 1/97 form - on their face - do not require completion if all three of the following are present: only hands/fists/or feet were used; there was no injury resulting or claimed; and there was no assault on a police officer. Thus, if a suspect ran away and was tackled but uninjured, there is no requirement to complete the form.

Date	Policy or Form Instructions
5/11/98	<p>The general use of force policy dated 5-11-98 uses slightly different wording for completion of the MCP 37:</p> <ul style="list-style-type: none"> *any time force is used to counteract a physical struggle; *following use of force resulting in injury to an individual; * when an individual claims to have been injured as a result of the amount of force used; *whenever force is applied by the use of a protective instrument; *where force is applied by use of a protective instrument, whenever a firearm is discharged (other than authorized target practice).
8/98	<p>This wording may be interpreted more narrowly than the 9/92 specific policy on completion of Form 37.</p> <p>The 7/98 revision of the form adds CA (canine) as a force code and AS (asp). Codes for baton and blackjack are removed and changes unit of assignment to district of occurrence. It also only requires a narrative at the officer's discretion or to explain an OT (Other) code. There is also an additional item for level of force used (physical force, protective instruments, deadly force) that allows for multiple codes. The new form also allows for multiple items to be coded in some cases; Whether intended or not, the revisions on the 7/98 form - on their face - do not require completion if all three of the following are present: only hands/fists/or feet were used; there was no injury resulting or claimed; and there was no assault on a police officer.</p>