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Special Report

Female Victims of Sexual Violence, 1994-2010

Michael Planty, Ph.D., and Lynn Langton, Ph.D., BJS
Statisticians
Christopher Krebs, Ph.D., Marcus Berzofsky, Dr.P.H., and Hope
Smiley-McDonald, Ph.D., RTI International

From 1995 to 2005, the total rate of sexual violence
committed against U.S. female residents age 12 or older
declined 64% from a peak of 5.0 per 1,000 females in 1995 to
1.8 per 1,000 females in 2005 (figure 1, appendix table 1).
It then remained unchanged from 2005 to 2010. Sexual violence
against females includes completed, attempted, or threatened
rape or sexual assault. In 2010, females nationwide
experienced about 270,000 rape or sexual assault
victimizations, compared to about 556,000 in 1995.

Completed rape or sexual assault accounted for more than 50%
of the total rape or sexual violent victimizations in 2010.
Between 1995 and 2010, the rate of completed rape or sexual
assault declined from 3.6 per 1,000 females to 1.1 per 1,000.
Over the same period, the rates of attempted rape or sexual
assault and victimizations involving the threat of rape
remained relatively stable.

Highlights

* From 1995 to 2010, the estimated annual rate of female rape
or sexual assault victimizations declined 58%, from
5.0 victimizations per 1,000 females age 12 or older to
2.1 per 1,000.

* In 2005-10, females who were age 34 or younger, who lived
in lower income households, and who lived in rural areas
experienced some of the highest rates of sexual violence.

* In 2005-10, 78% of sexual violence involved an offender who
was a family member, intimate partner, friend, or
acquaintance.

* In 2005-10, the offender was armed with a gun, knife, or
other weapon in 11% of rape or sexual assault victimizations.

* The percentage of rape or sexual assault victimizations
reported to police increased to a high of 56% in 2003 before
declining to 35% in 2010, a level last seen in 1995.

* The percentage of females who were injured during a rape or
sexual assault and received some type of treatment for their
injuries increased from 26% in 1994-98 to 35% in
2005-10.

* In 2005-10, about 80% of female rape or sexual assault
victims treated for injuries received care in a hospital,
doctor's office, or emergency room, compared to 65% in 1994-
98.

* In 2005-10, about 1 in 4 (23%) rape or sexual assault
victims received help or advice from a victim service agency.

The data in this report were drawn from the Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS). The NCVS collects information on nonfatal crimes reported and not reported to the police from a nationally representative sample of persons age 12 or older who live in U.S. households. Persons are interviewed every 6 months over 3 years with the first interview conducted in person and follow-up interviews conducted either in person or by phone. The NCVS produces national rates and levels of violent and property victimization, as well as information on the characteristics of crimes and victims and the consequences of victimization. Because the NCVS collects information from victims, it does not measure homicide. Unless noted, this report presents estimates for the aggregate of rape or sexual assault victimizations. The term sexual violence is used throughout to refer to rape or sexual assault victimizations, including attempts and threats. Victimization is the basic unit of analysis used throughout the report, and the number of victimizations is equal to the number of victims present during a criminal incident. Trend estimates are based on 2-year rolling averages centered on the most recent year. For example, estimates reported for 2010 represent the average estimates for 2009 and 2010. For other tables in this report, the focus is on aggregate data from 1994 through 1998, 1999 through 2004, and 2005 through 2010. These methods of analysis improves the reliability and stability of comparisons over time and between subgroups. For additional estimates not included in this report, see the NCVS Victimization Analysis Tool (NVAT) on the BJS website.

Measuring sexual violence using the NCVS

This report focuses on sexual violence that includes completed, attempted, and threatened rape or sexual assault. NCVS survey respondents are asked to respond to a series of questions about the nature and characteristics of their victimization. The NCVS classifies victimizations as rape or sexual assault even if other crimes, such as robbery or assault occur at the same time. The NCVS then uses the following rape and sexual assault definitions:

Rape is the unlawful penetration of a person against the will of the victim, with use or threatened use of force, or attempting such an act. Rape includes psychological coercion and physical force, and forced sexual intercourse means vaginal, anal, or oral penetration by the offender. Rape also includes incidents where penetration is from a foreign object (e.g., a bottle), victimizations against male and female victims, and both heterosexual and homosexual rape. Attempted rape includes verbal threats of rape.

Sexual assault is defined across a wide range of victimizations, separate from rape or attempted rape. These crimes include attacks or attempted attacks generally involving unwanted sexual contact between a victim and offender. Sexual assault may or may not involve force and includes grabbing or fondling. Sexual assault also includes verbal threats.

The measurement of rape and sexual assault presents many challenges. Victims may not be willing to reveal or share their experiences with an interviewer. The level and type of sexual violence reported by victims is sensitive to how items are worded, definitions used, data collection mode, and a variety of other factors related to the interview process. In addition, the legal definitions of rape and sexual assault vary across jurisdictions. The NCVS presents one approach to measuring and enumerating these incidents as well as other forms of violence and property crime. (For more information about the technical aspects of the NCVS, see Methodology.)

In 2005-10, females who were age 34 or younger, who lived in lower income households, and who lived in rural areas had some of the highest rates of sexual violence

The rate of sexual violence against females declined with age. In 2005-10, sexual violence was committed against females ages 12 to 34 at a rate of about 4 victimizations per 1,000, compared to a rate of 1.5 victimization per 1,000 for females ages 35 to 64 and 0.2 per 1,000 for age 65 or older (table 1). This pattern was consistent across all three aggregate time periods. Over time, the rate of sexual violence declined for both the 12-to-17 and 18-to-24 age groups. Females ages 12 to 17 had the largest decline, from 11.3 per 1,000 in 1994-98 to 4.1 in 2005-10.

For all racial and ethnic groups, the rate of sexual violence was lower in 2005-10 than it was in 1994-98. Within each time period, few differences existed in the rates of sexual violence across racial and ethnic groups. Non-Hispanic white females and black and Hispanic females had a similar rate of sexual violence over time. However, Hispanic females had lower rates of sexual violence than black females in 1999-04 and in 2005-10. Although American Indians and Alaska Natives appeared to experience rape or sexual assault victimization at rates higher than other racial and ethnic groups, these rates were based on small sample sizes and are not reliable.

Across all three time periods between 1994 and 2010, females who had never been married or who were divorced or separated at the time of the interview had higher rates of rape or sexual assault victimization than females who were married or widowed. ***Footnote 1 The NCVS collects information on respondent's marital status at the time of the interview, but it does not obtain marital status at the time of the incident or whether a change in marital status occurred after the incident.*** From 1994 to 2010, females who had never been married, those who were divorced or separated, and those who were married experienced about a 50% decline in the rate of sexual violence.

Males had lower rates of rape or sexual assault than females from 1995 to 2010

From 1995 to 2010, approximately 9% of all rape or sexual assault victimizations recorded in the NCVS involved male victims (figure 2). In 2010, the male rate of rape or sexual assault was 0.1 per 1,000 males compared to a rate of 2.1 per 1,000 for females (appendix table 3). Due to the relatively small number of sample cases, coupled with a low rate of victimization, estimates of male sexual violence from the NCVS cannot be used reliably for further disaggregation by victim and incident characteristics. Therefore, this report focuses exclusively on females.

Consistently across all three time periods, females living in households in the lowest income bracket (less than \$25,000 annually) experienced rape or sexual assault victimization at higher rates than females in higher income brackets. In 2005-10, females in households earning less than \$25,000 per year experienced 3.5 rape or sexual assault victimizations per 1,000 females, compared to 1.9 per 1,000 in households earning between \$25,000 and \$49,999 and 1.8 per 1,000 in households earning \$50,000 or more.

In 1994-98, the rate of rape or sexual assault victimization for females living in urban areas (5.1 per 1,000) was higher than the rate for females in suburban (3.9 per 1,000) and rural (3.9 per 1,000) areas. In 2005-10 this pattern reversed, and the rate of sexual violence for females in rural areas (3.0 per 1,000) was higher than the rate of sexual violence for females in urban (2.2 per 1,000) and suburban (1.8 per 1,000) areas.

The percentage of rape or sexual assault victimizations that occurred at or near the victim's home increased over time

In 2005-10, about 55% of rape or sexual assault victimizations occurred at or near the victim's home, and another 12% occurred at or near the home of a friend, relative, or acquaintance (table 2). The percentage of sexual violence that occurred at or near the home of the victim increased from 49% in 1994-98 to 55% in 2005-10. In comparison, the percentage of sexual violence that occurred at or near the home of a friend or in a commercial place or parking lot declined between 1994-98 and 2005-10. The number of rape or sexual assault victimizations occurring at or near the victim's home declined at a slower rate over time compared to the number of victimizations that occurred outside the home (not shown in table).

Over all three periods, between 41% and 48% of victims of sexual violence were undertaking activities at or around their homes at the time of the incident. In 2005-10, 12% of rape or sexual assault victimizations against females occurred while the victim was working, and 7% occurred while the victim was attending school. Another 29% of sexual violence occurred while the victim went to or from work or school, was out shopping, or was engaged in leisure activities away from the home.

About 3 in 4 victims of sexual violence knew the offender

About 90% of rape or sexual assault victimizations involved one offender, a percentage that was stable across the three periods (table 3). In 2005-10, most rape or sexual assault victims (78%) knew the offender. About 34% of all rape or sexual assault victimizations were committed by an intimate partner (former or current spouse, girlfriend, or boyfriend), 6% by a relative or family member, and 38% by a friend or acquaintance. Strangers committed about 22% of sexual violence, a percentage that was also unchanged from 1994 to 2010.

In 2005-10, about half of rape or sexual assault victimizations were committed by an offender age 30 or older (table 4). Fifteen percent of offenders were age 17 or younger and 34% were ages 18 to 29. These percentages were stable across the three periods from 1994 to 2010.

Across all three periods, white males committed the majority of sexual violence. ***Footnote 2 Males committed about 95% of all sexual violence against females. *** Over time, the percentage of sexual violence committed by white offenders declined from 70% in 1994-98 to 57% in 2005-10. The percentage of black offenders increased from 18% in 1994-98 to 27% in 2005-10. White males consistently accounted for more than 82% of the total U.S. population and black males accounted for 11%. The NCVS did not collect information on the ethnicity of the offender. Therefore, Hispanic offenders make up an unknown portion of the white, black, and other race of offender categories.

Consistent across all three periods, about 40% of victims believed the offender had been drinking or using drugs prior to the victimization. In 2005-10, in 30% of the victimizations the victim did not believe the offender had been drinking or using drugs, and in 30% the victim did not know whether there had been substance use.

About 1 in 10 rape or sexual assault victimizations involved a weapon

Across all three periods, the offender in the majority of rape or sexual assault victimizations did not have a weapon (table 5). In 2005-10, victims reported that the offender possessed or used a weapon in 11% of all sexual violence. The victim reported that the offender had a firearm in 6% of victimizations and a knife in 4%. The percentage of offenders armed with a weapon increased from 6% in 1994-98 to 11% in the two later periods. The NCVS does not ask victims if they were incapacitated in some manner, such as being drugged or intoxicated.

The percentage of female victims of sexual violence who received medical treatment increased between 1994-98 and 2005-10

In 2005-10, 58% of female victims of sexual violence suffered a physical injury during the victimization, such as cuts, bruises, internal injuries, broken bones, gunshot wounds, or rape injuries (table 6). Of the females who suffered an injury in 2005-10, 35% said that they received some type of treatment for their injuries, an increase from 26% in 1994-98. About 80% of victims who received treatment for their injuries in 2005-10 received this care in a hospital, doctor's office, or emergency room. The other 20% were treated at the scene, in their home, at a neighbor or friend's house, or in some other location. In comparison, in 1994-98, 65% of treated victims received care in a hospital, doctor's office, or emergency room, while 35% received first aid or treatment at the scene, at home, at a neighbor or friend's house, or in some other location.

In 2005-10, about 1 in 4 victims of sexual violence received help or advice from a private or public victim service agency (table 7). This percentage remained stable over the three periods.

The percentage of sexual violence reported to police increased to a high of 56% in 2003 before dropping to 35% in 2010, a level last seen in 1995

In 1995, 29% of rape or sexual assault victimizations against females were reported to police (figure 3). This percentage increased to 56% in 2003 before declining to 35% in 2010.

Of the 36% of rape or sexual assault victimizations reported to police in 2005-10, about 64% were reported directly by the victims, an increase from 50% in 1994-98 (table 8). The percentage of victimizations known to police because they were reported by another household member declined from 26% in 1994-98 to 10% in 2005-10, while the percentage reported by an official other than the police increased from 4% to 14%.

Of the rape or sexual assault victimizations that were reported to police in 2005-10, 28% were reported in an attempt to protect the victim from future victimizations, and 25% were reported to try to stop or prevent escalation of the victimization as it was occurring (table 9). Among rape or sexual assault victimizations that went unreported, the most common reason victims gave for not reporting the crime during 2005-10 was fear of reprisal (20%). The percentage of victimizations that went unreported because the victim considered the incident a personal matter declined from 23% in 1994-98 to 13% in 2005-10.

A lower percentage of sexual violence reported to police resulted in arrests in 2005-10 (31%) than in 1994-98 (47%)

The police may take a variety of actions in response to reported rape or sexual assault victimizations. During 2005-10, about 84% of victims stated that police came to the victim after being called, up from 75% during 1994-98 (table 10). About 1 in 10 victims who reported went directly to the police to report the incident, a percentage that has remained stable over time (not shown in table).

Across all three periods, when police responded after being notified, the most common police activity was to take a report from the victim, followed by questioning witnesses or conducting a search for the offender

(table 11). In 2005-10, police took the victim's report in 86% of victimizations reported to police, and the police questioned witnesses or conducted a search in 48% of cases. During the same period, about 19% of victims reported that the police collected evidence, up from 8% in 1994-98.

The percentage of reported rape or sexual assault victimizations against females that resulted in an arrest either at the scene or during a follow-up investigation decreased, from 47% in 1994-98 to 31% in 2005-10 (not shown in table). Out of the 283,200 annual average rape or sexual assault victimizations in 2005-10 both reported and not reported to the police, approximately 12% resulted in an arrest at the scene or during a follow-up investigation.

Methodology

Survey coverage

The National Crime Victimization Survey (NCVS) is an annual data collection conducted by the U.S. Census Bureau for the Bureau of Justice Statistics (BJS). The NCVS is a self-report survey in which interviewed persons are asked about the number and characteristics of victimizations experienced during the prior 6 months. The NCVS collects information on nonfatal personal crimes (rape or sexual assault, robbery, aggravated and simple assault, and personal larceny) and household property crimes (burglary, motor vehicle theft, and other theft) both reported and not reported to police. In addition to providing annual level and change estimates on criminal victimization, the NCVS is the primary source of information on the nature of criminal victimization incidents. Survey respondents provide information about themselves (such as age, sex, race and ethnicity, marital status, education level, and income) and whether they experienced victimization. The survey collects information for each victimization incident, including data about the offender (such as age, race and ethnicity, sex, and victim-offender relationship), characteristics of the crime (including time and place of occurrence, use of weapons, nature of injury, and economic consequences), whether the crime was reported to police, reasons why the crime was or was not reported, and experiences with the criminal justice system.

Trained interviewers administer the NCVS to persons age 12 or older from a nationally representative sample of households in the United States. The NCVS defines a household as a group of members who all reside at a sampled address that is their usual place of residence at the time of the interview and when they have no other usual place of residence. Once selected, households remain in the sample for 3 years, and eligible persons in the households are interviewed every 6 months for a total of seven interviews. New households rotate into the sample on an ongoing basis to replace outgoing households that have been in the sample for the 3-year period. The sample includes persons living in group quarters, such as dormitories, rooming houses, and religious group dwellings. Persons living in military barracks and institutional settings, such as correctional or hospital facilities, and the homeless are excluded from the sample. (For more detail, see the Survey Methodology in Criminal Victimization in the United States, 2008, NCJ 231173, BJS website, May 2011.)

In 2010, about 81,950 households and 146,570 individuals age 12 or older were interviewed for the NCVS. The response rate was 92.3% of households and 87.5% of eligible individuals. Victimization that occurred outside of the United States were excluded from this report.

Weighting adjustments for estimating
household victimization

Estimates in this report use data from the 1994 to 2010 NCVS data files. These files can be weighted to produce annual

estimates of victimization for persons age 12 or older living in U.S. households. Because the NCVS relies on a sample rather than a census of the entire U.S. population, weights are designed to inflate sample point estimates to known population totals and to compensate for survey nonresponse and other aspects of the sample design.

The NCVS data files include both person and household weights. Person weights provide an estimate of the population represented by each person in the sample. Household weights provide an estimate of the total U.S. household population. Both household and person weights, after proper adjustment, are also typically used to form the denominator in calculations of crime rates.

Victimization weights used in this analysis account for the number of persons present during an incident and for repeat victims of series incidents. The weight counts series incidents as the actual number of incidents reported by the victim, up to a maximum of 10 incidents. Series victimizations are similar in type but occur with such frequency that a victim is unable to recall each individual event or describe each event in detail. Survey procedures allow NCVS interviewers to identify and classify these similar victimizations as series victimizations and to collect detailed information on only the most recent incident in the series. In 2010, about 3% of all victimizations were series incidents. Weighting series incidents as the number of incidents up to a maximum of 10 incidents produces more reliable estimates of crime levels, while the cap at 10 minimizes the effect of extreme outliers on the rates. Additional information on the series enumeration is detailed in the report Methods for Counting High Frequency Repeat Victimization in the National Crime Victimization Survey, NCJ 237308, BJS website, April 2012.

Trend estimates are based on 2-year rolling averages centered on the most recent year or three 6-year periods. For example, estimates reported for 2010 represent the average estimates for 2009 and 2010. For other tables in this report, aggregate data for the time from 1994 through 1998, 1999 through 2004, and 2005 through 2010 are the focus. These methods of analysis improves the reliability and stability of estimate comparisons over time.

Standard error computations *****

When national estimates are derived from a sample, as is the case with the NCVS, caution must be taken when comparing one estimate to another estimate or when comparing estimates over time. Although one estimate may be larger than another, estimates based on a sample have some degree of sampling error. The sampling error of an estimate depends on several factors, including the amount of variation in the responses, the size of the sample, and the size of the subgroup for which the estimate is computed. When the sampling error around the estimates is taken into consideration, the estimates that appear different may not actually be statistically different.

One measure of the sampling error associated with an estimate is the standard error. The standard error can vary from one estimate to the next. In general, for a given metric, an estimate with a smaller standard error provides a more reliable approximation of the true value than an estimate with a larger standard error. Estimates with relatively large standard errors are associated with less precision and reliability and should be interpreted with caution.

In order to generate standard errors around numbers and estimates from the NCVS, the Census Bureau produces generalized variance function (GVF) parameters for BJS. The GVFs take into account aspects of the NCVS complex sample design and represent the curve fitted to a selection of individual standard errors based on the Jackknife Repeated Replication technique. The GVF parameters were used to generate standard errors for each point estimate (such as counts, percentages, and rates) in the report.

BJS conducted tests to determine whether differences in

estimated numbers and percentages in this report were statistically significant once sampling error was taken into account. Using statistical programs developed specifically for the NCVS, all comparisons in the text were tested for significance. The primary test procedure used was Student's t-statistic, which tests the difference between two sample estimates. To ensure that the observed differences between estimates were larger than might be expected due to sampling variation, the significance level was set at the 95% confidence level.

Data users can use the estimates and the standard errors of the estimates provided in this report to generate a confidence interval around each estimate as a measure of the margin of error. The following example illustrates how standard errors can be used to generate confidence intervals:

According to the NCVS, from 2005 to 2010, 36.4% of rape or sexual assault victimizations were reported to the police (see table 8). Using the GVF's, BJS determined that the estimate has a standard error of 2.7% (see appendix table 14). A confidence interval around the estimate was generated by multiplying the standard errors by ± 1.96 (the t-score of a normal, two-tailed distribution that excludes 2.5% at either end of the distribution). Therefore, the confidence interval around the 36.4% estimate is equal to $36.4\% \pm 2.7\% \times 1.96$ (or 31.1% to 41.7%). In other words, if different samples using the same procedures were taken from the U.S. population during the period from 2005 to 2010, 95% of the time the percentage of rape or sexual assault victimizations that were reported to police would fall between 31.1% and 41.7%.

In this report, BJS also calculated a coefficient of variation (CV) for all estimates, representing the ratio of the standard error to the estimate. CVs provide a measure of reliability and a means to compare the precision of estimates across measures with differing levels or metrics. In cases where the CV was greater than 50%, or the unweighted sample had 10 or fewer cases, the estimate was noted with a "!" symbol (interpret data with caution; estimate is based on 10 or fewer sample cases, or the coefficient of variation exceeds 50%).

Many of the variables examined in this report may be related to one another and to other variables not included in the analyses. Complex relationships among variables in this report were not fully explored and warrant more extensive analysis. Readers are cautioned not to draw causal inferences based on the results presented.

Methodological changes to the NCVS in 2006

Methodological changes implemented in 2006 may have affected the crime estimates for that year to such an extent that they are not comparable to estimates from other years. Evaluation of 2007 and later data from the NCVS conducted by BJS and the Census Bureau found a high degree of confidence that estimates for 2007, 2008, 2009, and 2010 are consistent with and comparable to estimates for 2005 and previous years. The reports, Criminal Victimization, 2006, NCJ 219413, December 2007; Criminal Victimization, 2007, NCJ 224390, December 2008; Criminal Victimization, 2008, NCJ 227777, September 2009; Criminal Victimization, 2009, NCJ 231327, October 2010; and Criminal Victimization, 2010, NCJ 235508, September 2011, are available on the BJS website. Although caution is warranted when comparing data from 2006 to other years, the aggregation of multiple years of data in this report diminishes the potential variation between 2006 and other years. In general, findings do not change significantly if the year 2006 is excluded from the analyses.

The Bureau of Justice Statistics is the statistical agency of the U.S. Department of Justice. William J. Sabol is the acting director.

This report was written by Michael Planty and Lynn Langton of BJS and Christopher Krebs, Marcus Berzofsky, and Hope Smiley-McDonald from RTI International. RTI International and

Jennifer Truman verified the report.

Catherine Bird and Jill Thomas edited the report, and Barbara Quinn and Tina Dorsey produced the report under the supervision of Doris J. James.

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