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National Crime Victimization Survey

Criminal Victimization, 2007

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In 2007 U.S. residents experienced an estimated 23 million violent and property victimizations, according to the National Crime Victimization Survey (NCVS). Criminal victimizations in 2007 included approximately 5.2 million violent crimes and 17.5 million property crimes. The rates for every major violent and property crime measured by the NCVS in 2007 were at or near the lowest levels recorded since 1973, the first year that such data were available.¹

The overall victimization rate in 2007 for violent crimes was 20.7 per 1,000 persons, which was not significantly different from the 2005 rate of 21.1 per 1,000 persons (table 1). For property crimes, the overall rate of 146.5 per 1,000 households in 2007 was somewhat lower than the rate of 154.2 per 1,000 households in 2005. As in previous years, about half of the violent crimes and almost two-thirds of the property crimes measured by the NCVS in 2007 were not reported to police.

NCVS is an annual data collection conducted by the U.S. Census Bureau for the Bureau of Justice Statistics (BJS). This report provides the initial release of data for 2007 from the NCVS.

This bulletin describes the substantial fluctuations in the survey measure of crime from 2005 through 2007. As discussed in the *Technical Notes*, these changes do not appear to be due to changes in the rate of criminal activity during this period. Evaluation of the NCVS estimates suggest that changes in the sample design and implementation of the survey account for the fluctuations in crime rates measured from 2005 to 2006 and from 2006 to 2007.

¹The discussion of victimization rate trends excludes NCVS estimates for 2006 because of the methodological inconsistencies between the data for that year and the data for other years.

Table 1. Criminal victimization, numbers, rates, and percent change, by type of crime, 2005 and 2007

Type of crime	Number of victimizations		Rates ^a		Percent change 2005-2007 ^c
	2005 ^b	2007	2005 ^b	2007	
All crimes	23,452,100	22,879,700	~	~	
Violent crimes^d	5,162,400	5,177,100	21.1	20.7	-1.9%
Rape/sexual assault	190,600	248,300	0.8	1.0	25.0
Robbery	630,100	597,300	2.6	2.4	-7.7
Assault	4,341,600	4,331,500	17.8	17.3	-2.8
Aggravated	1,046,500	858,900	4.3	3.4	-20.9*
Simple	3,295,200	3,472,600	13.5	13.9	3.0
Personal theft^e	229,500	194,100	0.9	0.8	-11.1%
Property crimes	18,060,200	17,508,500	154.2	146.5	-5.0%**
Household burglary	3,464,500	3,215,100	29.6	26.9	-9.1**
Motor vehicle theft	981,900	979,600	8.4	8.2	-2.4
Theft	13,613,800	13,313,800	116.3	111.4	-4.2

Note: Detail may not add to total because of rounding. Total population age 12 or older was 244,505,300 in 2005 and 250,344,870 in 2007. Total number of households was 117,099,820 in 2005 and 119,503,530 in 2007. Estimates for 2006 were not presented because they are not comparable to other years.

~Not applicable.

*Difference is significant at the 95%-confidence level.

**Difference is significant at the 90%-confidence level.

^aEstimates for 2005 have been updated and do not match those presented in previous editions of this bulletin.

^bVictimization rates are per 1,000 persons age 12 or older or per 1,000 households.

^cPercent change calculated based on unrounded estimates.

^dExcludes murder because the NCVS is based on interviews with victims and therefore cannot measure murder.

^eIncludes pocket picking, completed purse snatching, and attempted purse snatching.

Changes to the NCVS and their impact upon the survey's estimates in 2006 are discussed in the *Criminal Victimization, 2006 Technical Notes*. The bulletin and technical notes are available online at: <<http://www.ojp.usdoj.gov/bjs/pub/pdf/cv06.pdf>>.

BJS continues to work with the U.S. Census Bureau to better understand the impact of these changes upon survey estimates. Once the research is complete, BJS will publish a technical report to describe the findings. If adjustments to the reported crime rates for 2006 and 2007 are warranted, or if other changes to the data are identified, BJS will issue a revised report to provide users with a more comparable set of figures. Based on research completed to date, there is a high degree of confidence that survey estimates for 2007 are consistent with and comparable to those for 2005 and previous years.

While the estimates for 2007 are close to the levels for 2005, they are substantially below the levels for 2006. Changes in 2006 included the introduction of a new sample based on the 2000 decennial census, a transition from paper-and-pencil interviewing (PAPI) to computer-assisted interviewing (CAPI), and the use of first-time interviews in the new sample areas in the production of survey estimates.

In 2007, three additional changes were made largely for budgetary reasons to the NCVS program:

- The sample was reduced by 14% in July 2007.
- First-time interviews from all sample areas were used in the production of 2007 estimates.
- Computer-assisted interviews from centralized telephone centers were discontinued in July 2007.

Analyses of the 2007 estimates indicate that the program changes made in 2007 had relatively small effects on NCVS estimates. As discussed in *Criminal Victimization, 2006*, the substantial increases in victimization rates from 2005 to 2006 do not appear to be due to actual changes in crime during that period. The increases were attributed to the impact of the methodological changes in the survey.²

These effects were reversed in 2007, suggesting that the 2006 findings represent a temporary anomaly in the data. The methodological changes implemented in 2007, their impact on the survey estimates, and the NCVS methodological research program are described more fully in the *Technical Notes* on page 7.

²Users are encouraged to focus on the comparison between 2005 and 2007 victimization rates until the changes to the NCVS in 2006 are better understood.

NCVS collects information from victims of nonfatal violent crimes and property crimes

The NCVS collects information on nonfatal crimes, reported and not reported to the police, against persons age 12 or older from a nationally representative sample of U.S. households. It produces national rates and levels of personal and property victimization. Information on homicide presented in this report was obtained from the Uniform Crime Reporting (UCR) program of the Federal Bureau of Investigation (FBI).

Violent crimes measured by the NCVS include rape, sexual assault, robbery, aggravated assault, and simple assault. Property crimes include household burglary, motor vehicle theft, and theft. The survey also measures personal theft, which includes pocket picking and purse snatching.

In 2007, 41,500 households and 73,600 individuals age 12 or older were interviewed for the NCVS. Each household was interviewed twice during the year. The response rate was 90.3% of households and 86.2% of eligible individuals.

Violent and property victimization rates remain at historic lows in 2007

The 2007 violent crime rate was 43% lower than in 1998 due to a decline in crime between 1998 and 2002 (figure 1). This rate has remained generally stable since 2003. Rates for robbery and simple assault followed similar patterns across the 10-year period. The crime rate for rape declined marginally between 1998 and 2007. For aggravated assault, the crime rate fell during both five-year periods, between 1998 and 2002 and between 2003 and 2007.

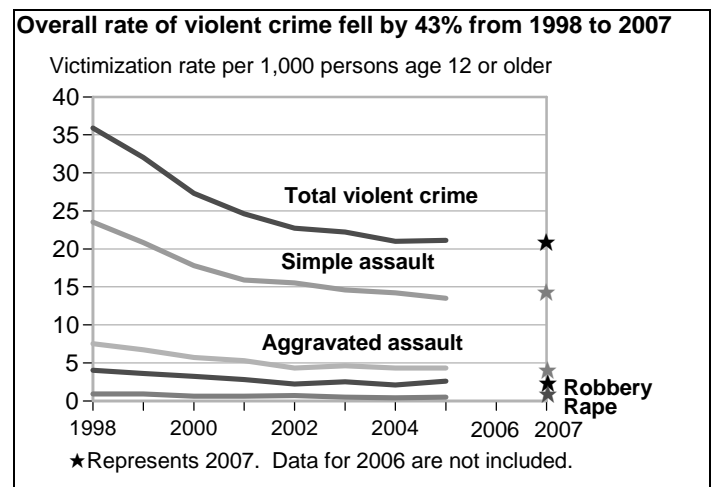


Figure 1

From 1998 to 2007, the rate of overall property crime fell by 33% (figure 2). The property crime rate has had a long-term declining trend for most of the survey's 36-year history.

The overall rates for property crime and theft fell in both the first and second half of the 10-year period, with a greater decline from 1998 to 2002 than from 2003 to 2007. The burglary rate fell from 1998 to 2002 and also declined slightly from 2003 to 2007. For motor vehicle theft, the rate declined from 1998 to 2002 and has remained stable since 2003 (table 2).

Victimization rates in 2007 were near the levels experienced in 2005

The overall violent crime rate in 2007 was not statistically different from the rate in 2005. In comparison, the 2007 property crime rate was marginally lower than the rate in 2005. Of the violent crimes measured by the NCVS, aggravated assault was the only crime with a significantly lower rate in 2007 than in 2005. The rate of victimization for overall property crime and household burglary were somewhat lower in 2007, compared to 2005.

Comparisons are made between the rates for 2005 and 2007 because 2006 was an anomalous year due to the impact of the methodological changes introduced to the survey. A new sample introduced in 2006 affected the NCVS estimates in new areas, especially in non-urban areas. The new sample required hiring and training a large number of new interviewers in the new areas. The variation in the amount and rates of crime was too extreme to be attributed to actual year-to-year changes. These effects were reversed in 2007, suggesting that the 2006 findings represent a temporary anomaly in the data (table 3). See *Technical Notes* on page 7.

Property crime rates overall fell by 33% from 1998 to 2007

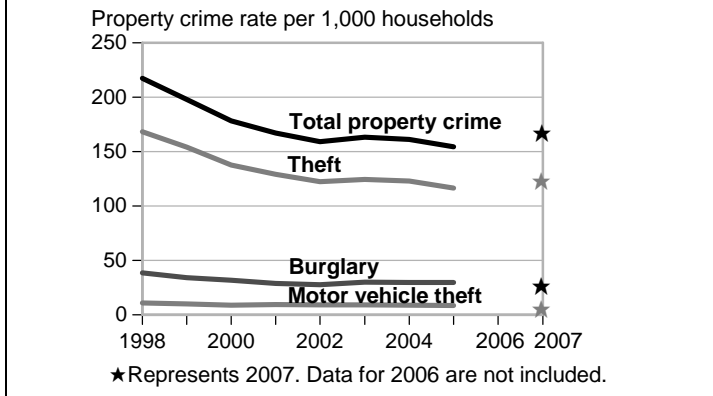


Figure 2

Table 2. Rates of criminal victimization and percent change, by type of crime, 1998 and 2007

Type of crime	Victimization rates (per 1,000 persons age 12 or older or per 1,000 households)		
	1998	2007	Percent change ^a 1998-2007
Violent crimes^b	36.6	20.7	-43.4%*
Rape/sexual assault	1.5	1.0	-33.3*
Robbery	4.0	2.4	-40.0*
Assault	31.1	17.3	-44.4*
Aggravated	7.5	3.4	-54.7*
Simple	23.5	13.9	-40.9*
Personal theft^c	1.3	0.8	-38.5%*
Property crimes	217.4	146.5	-32.6%*
Household burglary	38.5	26.9	-30.1*
Motor vehicle theft	10.8	8.2	-24.1*
Theft	168.1	111.4	-33.7*

Note: In 1998 the total population age 12 or older was 221,880,960 and 250,344,870 in 2007. The total number of households in 1998 was 105,322,920 and 119,503,530 in 2007.

*Difference is significant at the 95%-confidence level.

^aDifferences between the annual rates shown do not take into account changes that may have occurred during interim years.

^bExcludes murder because the NCVS is based on interviews with victims and therefore cannot measure murder.

^cIncludes pocket picking, completed purse snatching, and attempted purse snatching.

Table 3. National crime victimization rates and percent change in rates, by type of crime, 2005-2007

Type of crime	Rates per 1,000 persons or households			Percent change 2005-2006	Percent change 2006-2007	Percent change 2005-2007
	2005	2006	2007			
Violent crime	21.1	24.7	20.7	17.1%	-16.2%	-1.9%
Rape/sexual assault	0.8	1.1	1.0	37.5	-9.1	25.0
Robbery	2.6	2.9	2.4	11.5	-17.2	-7.7
Assault	17.8	20.7	17.3	16.3	-16.4	-2.8
Aggravated	4.3	5.4	3.4	25.6	-37.0	-20.9
Simple	13.5	15.3	13.9	13.3	-9.2	3.0
Personal larceny without contact	0.9	0.7	0.8	-22.2%	14.3%	-11.1%
Property crime	154.2	160.5	146.5	4.1%	-8.7%	-5.0%
Burglary	29.6	30.2	26.9	2.0	-10.9	-9.1
Motor vehicle theft	8.4	8.4	8.2	0.0	-2.4	-2.4
Theft	116.3	121.9	111.4	4.8	-8.6	-4.2
Populations						
Persons age 12 or older	244,505,300	247,233,100	250,344,900			
Households headed by persons age 12 or older	117,099,800	117,858,400	119,503,500			

Characteristics of victims of violent crimes in 2007 were similar to previous years

As in previous years, males, blacks, and persons age 24 or younger in 2007 continued to experience violent crime victimizations at higher or somewhat higher rates than females, whites, and persons age 25 or older (table 4).

Gender of victims

Overall, males were victims of violent crime, robbery, and aggravated and simple assault at rates higher than females. Females were more likely than males to be victims of rape or sexual assault. Differences between male and female victims of simple assault were not statistically significant.

Race of victim

Blacks were more likely than whites to be victims of robbery, and somewhat more likely than whites to be victims of overall violence. Blacks were also more likely than persons of other races (American Indian, Alaska Native, Asian, Native Hawaiian, and other Pacific Islander) to be victims of overall violence, robbery, and aggravated and simple assault.

Since 2003, survey respondents have been able to report more than one racial identity. In 2007, persons of two or more races were victims of violence at higher rates than blacks, whites, and persons of other races.

Hispanic origin of victim

In 2007, there were no significant differences in the rates of victimization for overall violent crime and aggravated assault between Hispanics and non-Hispanics. Hispanics were more likely than non-Hispanics to be victims of robbery. Non-Hispanics had a somewhat higher rate of simple assault compared to Hispanics.

Age of victim

As in previous years, a general pattern of decreasing crime rates was observed in 2007 for persons in older age groups. For victims of violent crimes, persons age 12 to 15 and age 16 to 19 were victimized at a significantly higher rate than persons in all other groups age 25 or older. Persons age 16 to 19 also experienced higher violent crime rates than those age 20 to 24. Persons age 50 and older were victims of violent crime at lower rates than persons in younger age groups.

Table 4. Rates of violent crime and personal theft, by gender, race, Hispanic origin, and age, 2007

Demographic characteristic of victim	Population	Victimizations per 1,000 persons age 12 or older							
		Violent crimes					Assault		Personal theft ^a
		All	Rape/sexual assault	Robbery	Total	Aggravated	Simple		
Gender									
Male	122,122,700	22.5	0.1 [^]	3.4	19.1	4.5	14.5	0.9	
Female	128,222,170	18.9	1.8	1.4	15.6	2.4	13.2	0.7	
Race									
White	203,470,370	19.9	1.0	1.9	17.0	3.2	13.9	0.6	
Black	30,385,460	24.3	0.5 [^]	4.9	18.8	4.4	14.4	1.9	
Other race ^b	13,340,930	11.4	1.2 [^]	1.8 [^]	8.3	2.7	5.7	1.1 [^]	
Two or more races	3,148,100	73.8	5.5 [^]	10.8	57.5	13.3	44.2	0.6 [^]	
Hispanic origin									
Hispanic	34,423,520	18.6	0.3 [^]	3.9	14.5	3.0	11.4	1.0 [^]	
Non-Hispanic	215,499,060	21.0	1.1	2.2	17.8	3.5	14.3	0.7	
Age									
12-15	16,755,440	43.4	1.0 [^]	4.2	38.2	2.8	35.5	0.8	
16-19	16,981,750	50.1	2.4	6.4	41.4	7.2	34.2	1.6 [^]	
20-24	20,752,030	35.2	2.9	3.5	28.7	7.5	21.2	1.1 [^]	
25-34	40,349,730	24.7	1.2	3.4	20.1	4.8	15.3	1.1	
35-49	65,636,410	17.7	1.0	1.4	15.3	3.2	12.1	0.6	
50-64	53,677,460	11.6	0.3 [^]	1.7	9.5	2.3	7.2	0.3 [^]	
65 or older	36,192,050	2.5	0.1 [^]	0.6 [^]	1.8	0.3 [^]	1.5	0.8 [^]	

Note: The National Crime Victimization Survey includes as violent crime rape, sexual assault, robbery, aggravated assault, and simple assault. Because the NCVS interviews persons about their victimizations, murder and manslaughter cannot be included.

[^]Based upon 10 or fewer sample cases.

^aIncludes pocket picking, completed purse snatching, and attempted purse snatching.

^bOther race includes American Indians, Alaska Natives, Asians, Native Hawaiians, and other Pacific Islanders.

Rates for property crimes were higher in lower income households and large households

Rates of overall property crime were higher for lower income households compared to higher income households. Households earning less than \$7,500 per year were victims of property crime at a rate that was about 1.5 times higher than households earning \$75,000 per year or more. Households earning less than \$15,000 per year had higher property crime rates than households in all other income categories (table 5).

Patterns in the rates of household burglary and property theft were similar to that of overall property crime. Households in the two lowest income categories—less than \$7,500 per year and \$7,500 to \$14,999 per year—were victims of burglary and theft at higher or marginally higher rates than households in all other income categories. For motor vehicle theft, there was no significant difference in the crime rate across most income categories.

Property crime rates overall were higher for persons living in larger households than for those living in smaller households. Households with six or more persons were about 2.6 times more likely to be victims of property crime than single person households. For property theft and motor vehicle theft, patterns across households of different sizes were similar to that of overall property crime. For household burglary, the rate for households with six or more persons was higher than that for households in most other income categories.

Federal Bureau of Investigation, Uniform Crime Reports, 2005-2007

Violent crime as measured by the FBI through the Uniform Crime Reports (UCR) includes murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. Property crime includes burglary, larceny-theft, and motor vehicle theft. UCR measures crimes reported to the police, including commercial crimes.

The violent crime rate as measured by the UCR increased by 1% between 2005 and 2006 from 469 per 100,000 persons to about 474.

- Between 2006 and 2007, the violent crime rate declined by 1.4% from about 474 per 100,000 persons to about 467.
- In 2007, the FBI reported 16,929 murders and non-negligent manslaughters.
- Between 2006 and 2007, the homicide rate declined by about 1%, from 5.7 per 100,000 persons to 5.6.
- The property crime rate declined by 2.8% between 2005 and 2006, from 3,432 per 100,000 persons to 3,335.
- Between 2006 and 2007, the property crime rate declined by 2.1%, from 3,335 per 100,000 persons to 3,264.

Table 5. Property crime rates, by household income and household size, 2007

Characteristics of household	Number of households	Victimizations per 1,000 households			
		Total	Burglary	Motor vehicle theft	Theft
Household income					
Less than \$7,500	4,381,010	213.1	57.6	11.1	144.4
\$7,500-\$14,999	6,757,910	201.3	51.2	10.8	139.4
\$15,000-\$24,999	9,552,980	167.0	33.5	11.0	122.4
\$25,000-\$34,999	10,084,590	154.6	25.2	9.5	119.8
\$35,000-\$49,999	13,292,780	151.2	28.3	7.6	115.2
\$50,000-\$74,999	14,932,280	144.3	21.8	7.9	114.6
\$75,000 or more	22,886,490	146.3	17.2	7.1	122.0
Size of household					
One person	33,322,630	105.7	26.2	5.4	74.0
Two or three persons	59,490,690	137.7	25.4	8.2	104.2
Four or five persons	23,021,800	207.5	29.6	11.2	166.7
Six or more persons	3,668,420	277.5	40.7	15.1	221.7

The general character of violent crime was unchanged in 2007

Historically, females have been most often victimized by someone they knew, while half or more of the crimes against males have been committed by strangers. Those general patterns continued in 2007.

In 2007, males were equally likely to be victimized overall by a stranger or a nonstranger (table 6). Male victims of robbery and aggravated assault were more likely to be victimized by strangers. For simple assault, male victims were more likely to have been victimized by someone they knew.

Females who were victims of violence were more likely to be victimized by a nonstranger than by a stranger for all measured violent crimes, except robbery. Equal percentages of women reported that they were victims of robberies by strangers and nonstrangers (48%).

About 623,000 violent crimes—554,000 against female victims and 69,000 against male victims—were committed by an intimate partner in 2007. The percentage of female victims (23%) of intimate partner violence was nearly 8 times that of male victims (3%).

An estimated 20% of all violent crime incidents were committed by an armed offender (table 7). As in previous years, the presence of a firearm was related to the type of crime.

In 2007, 1% of rape or sexual assaults, 5% of assaults, and 25% of robberies were committed by an offender with a firearm.

Between 1998 and 2007, the overall rate of firearm violence declined from 3.0 to 1.6 victimizations per 1,000 persons age 12 or older. In 2007, firearms were used in 7% of all violent crime incidents. Over the 10-year period, about 7% to 9% of all violent crimes were committed by offenders using firearms (not shown in table).

Firearm	1998	2007
Incidents	557,200	348,910
Victimizations	670,500	394,580
Firearm crime		
Rate per 1,000 persons age 12 or older	3.0	1.6
Percent of all violent incidents	7.5%	7.1%

Nearly half of all violent victimizations were reported to the police in 2007

During 2007, 46% of all violent victimizations and 37% of all property crimes were reported to the police. The percentage of robberies (66%) reported to the police was higher than the percentage of rape or sexual assaults (42%) and simple assaults (41%).

Table 6. Victim and offender relationship, 2007

Relationship to victim	Violent crime		Rape/sexual assault		Robbery		Aggravated assault		Simple assault	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Male victims										
Total	2,752,030	100%	11,300	100%	411,450	100%	555,010	100%	1,774,290	100%
Nonstranger	1,264,850	46%	6,600	58%^	89,180	22%	227,870	41%	941,200	53%
Intimate	69,100	3	0	0^	5,960	1^	16,000	3^	47,140	3
Other relative	104,810	4	0	0^	5,710	1^	24,120	4^	74,980	4
Friend/acquaintance	1,090,940	40	6,600	58^	77,510	19	187,760	34	819,080	46
Stranger	1,380,230	50%	4,690	42%^	302,520	74%	303,530	55%	769,480	43%
Relationship unknown	106,960	4%	0	0%^	19,740	5%^	23,610	4%^	63,610	4%
Female victims										
Total	2,425,100	100%	236,980	100%	185,880	100%	303,930	100%	1,698,310	100%
Nonstranger	1,677,000	69%	150,830	64%	89,690	48%	186,670	61%	1,249,810	74%
Intimate	554,260	23	55,110	23	37,310	20	69,010	23	392,830	23
Other relative	192,250	8	6,530	3^	14,470	8^	27,340	9^	143,920	9
Friend/acquaintance	930,480	38	89,190	38	37,910	20	90,320	30	713,060	42
Stranger	689,780	28%	72,780	31%	89,760	48%	108,690	36%	418,550	25%
Relationship unknown	58,330	2%	13,370	6%^	6,430	4%^	8,570	3%^	29,960	2%^

Note: Percentages may not total to 100% because of rounding.

^Based on 10 or fewer sample cases.

Table 7. Presence of weapons in violent incidents, 2007

Presence of offender's weapon	Violent crime		Rape/sexual assault		Robbery		Simple and aggravated assault	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	4,892,000	100%	248,280	100%	566,270	100%	4,077,450	100%
No weapon	3,510,330	72%	226,410	91%	230,910	41%	3,053,000	75%
Weapon	996,980	20%	13,980 [^]	6% [^]	265,900	47%	717,100	18%
Firearm	348,910	7	2,830 [^]	1 [^]	144,200	25	201,880	5
Knife	276,150	6	6,280 [^]	3 [^]	66,670	12	203,190	5
Other	319,760	7	4,870 [^]	2 [^]	44,110	8	270,780	7
Type not ascertained	52,160	1	0 [^]	0 [^]	10,910 [^]	2 [^]	41,250	1
Don't know	384,690	8%	7,890 [^]	3% [^]	69,460	12%	307,350	8%

Note: Percentage may not total to 100% because of rounding. If the offender was armed with more than one weapon, the crime is classified based on the most serious weapon present.

[^]Based upon 10 or fewer sample cases.

Fifty percent of burglaries and 31% of household thefts were reported to the police. Motor vehicle theft (85%) was the property crime most frequently reported to the police.

	Percent of crime reported to police, 2007
Violent crime	46.3%
Rape/sexual assault	41.6
Robbery	65.6
Aggravated assault	57.2
Simple assault	40.6
Property crime	37.2%
Burglary	50.1
Motor vehicle theft	85.3
Theft	30.6

Violent crimes against males (45%) and females (47%) were equally likely to be reported to the police in 2007. The same was true for property crimes for households headed by males and those headed by females (table 8).

Rates of reporting did not differ for males in different racial groups. Violent crimes against black females were more likely to be reported to the police than such crimes against white females or females of other races. For both males and females, there were no differences among Hispanics and non-Hispanics in the likelihood of reporting violent crime to police.

Technical Notes

Changes implemented in the NCVS in 2007 had minor impacts on estimates

Three changes were made to the NCVS for budgetary reasons in 2007:

- The sample was reduced by 14% beginning July 2007.
- To offset the impact of reducing the sample, first-time interviews (or bounding interviews) were used in the production of 2007 NCVS estimates. Adjustment factors were applied to the first-time interviews to counteract the effect of including unbounded interviews.

Table 8. Crimes reported to the police, by gender, race, and Hispanic origin, 2007

Victim gender, race, and Hispanic origin	Percent of crime reported to police, 2007	
	Violent	Property
Total	46.3%	37.2%
Male	45.4%	38.2%
White	46.5	38.1
Black	43.6	36.6
Other*	53.0	45.0
Hispanic	46.0%	35.7%
Non-Hispanic	45.4	38.6
Female	47.3%	36.2%
White	45.1	36.3
Black	60.2	38.5
Other*	35.3	26.7
Hispanic	49.8%	35.2%
Non-Hispanic	46.9	36.5

Note: Total includes estimates for persons identifying with two or more races, not shown separately. Racial categories displayed are for persons who identified with one race.

*Other race includes American Indians, Alaska Natives, Asians, Native Hawaiians, and other Pacific Islanders.

- In July 2007, computer assisted telephone interviews (CATI) from centralized interviewing centers were discontinued, and all interviewing was conducted by field interviewers using computer-assisted personal interviewing (CAPI).

The U.S. Census Bureau undertook a number of analyses to determine the impact of the changes to the NCVS in 2007. Initial reviews of processes and workload data uncovered no factors that would explain the overall year-to-year differences between the victimization rates for 2006 and 2007.

Further analyses concentrated on three areas: the NCVS sample reduction implemented in July 2007, the bounding adjustment, and the elimination of CATI interviews in July 2007.

Victimization estimates in 2007 were relatively unaffected by the 14% sample reduction

The U.S. Census Bureau evaluated whether victimization rates for cases dropped from the NCVS sample in July were similar to cases that remained in the sample. Victimization rates from January to June 2007 were calculated for cases removed from the sample and for those that remained in sample.

The analysis determined that the sample reduction cases had nominally higher personal and property crime rates than those that remained in the sample. An overall 14% sample reduction was not large enough to explain the observed changes in victimization rates from 2006 to 2007.

	Rate per 1,000 persons or households, January - June 2007	
	Personal crimes	Property crimes
Cases remaining in sample after July 2007	23.6	151.1
Cases removed from sample in July 2007	26.6	166.0

Bounding adjustment effectively compensated for the impact of unbounded interviews

The NCVS uses a rotating panel design in which households remain in sample for three years. All residents age 12 or older are interviewed at 6-month intervals for a total of seven interviews. As discussed more fully in the *Criminal Victimization, 2006, Technical Notes*, this panel design produces a time-in-sample effect on survey estimates.

Respondents tend to report more victimizations during first-time interviews than in subsequent interviews. In part, this is because respondents new to the survey tend to recall events as having taken place at a time that was more recent than when they actually occurred.

To offset this bias, a bounding procedure in which first-time interviews are not included in the production of estimates has traditionally been used for the NCVS (i.e., seven interview rotations minus the bounding interview). Prior to 2006, victimizations reported during first-time interviews were used only to bound future interviews.

In July 2007, interviews with first-time households were used in the production of survey estimates to offset the impact of the 14% sample reduction. During the year, one-seventh of all sampled households were interviewed each month for the first time. Using first-time interviews to calculate victimization estimates helped to ensure that the overall sample size would remain consistent with previous years.

Without an adjustment for the time-in-sample effects of first-time interviews, including those households would have introduced an upward bias in the survey estimates. Weighting adjustments were developed to counteract an

upward bias in the NCVS estimates in 2007. The adjustment process was similar to the one used in 2006 to eliminate the impact of using first-time interviews in the incoming sample associated with the sample redesign.

Analyses of the 2007 estimates demonstrate that the bounding adjustment effectively countered the impact of including unbounded interviews (table 9). Estimates adjusted for the bounding or first-time interviews were virtually identical to the estimates produced using the second through seventh interviews.

Changes in the survey mode and sample redesign impacted estimates to a greater extent in 2006 than in 2007

The NCVS transitioned from a paper-and-pencil interview (PAPI) to a computer-assisted interview (CAPI) to become a fully automated data collection in July 2006. Interviews were completed by field representatives either by telephone or in person using questionnaires loaded into laptop computers.

Both before and after the transition, a substantial proportion of interviews were conducted using computer-assisted-telephone interviews (CATI) from two U.S. Census Bureau telephone centers. CATI is a telephone survey technique in which the interviewer follows a script provided by a software application. From 2004 through 2006, the percentage of sample cases interviewed using CATI declined from about 30% to 15% of all interviews.

Cases assigned to be interviewed by CATI were not random assignments. They were generally selected from primary sampling units (PSUs) with large numbers of sample cases. Cases assigned to CATI were considered easier to enumerate and were usually in urban and suburban areas. If a case could not be completed in CATI, it was returned to a field representative to attempt to complete the interview.

Table 9. Type of crime, with bounding adjustment and without first interview, 2007

Type of crime	Rate per 1,000 persons or households	
	With bounding adjustment	Without first interview
Violent crime	20.7	20.5
Rape/sexual assault	1.0	1.0
Robbery	2.4	2.3
Assault	17.3	17.2
Aggravated	3.4	3.5
Simple	13.9	13.8
Personal larceny	0.8	0.7
Property crime	146.5	144.9
Burglary	26.9	26.9
Motor vehicle theft	8.2	8.2
Theft	111.4	109.9

In July 2007, CATI as an interview technique was discontinued due to the cost and time involved to transfer cases to and from the telephone centers. Beginning in the second half of 2007, all NCVS interviewing was conducted using CAPI. Analysis by the U.S. Census Bureau indicated that the transition from PAPI to CAPI affected the 2006 personal crime (violent crime and personal theft) rates. Those effects were reduced in 2007 (figure 3).

As standard practice, the U.S. Census Bureau updates its sample areas for ongoing household surveys about mid-decade. To account for shifts in the population and household locations that occur over time, a new sample was introduced to the NCVS in 2006. Analysis of personal crime rates before and after the sample redesign showed an extensive effect in 2006 and a reduced effect beginning April 2007.

Personal crime rates for outgoing sample areas in 2005 were generally lower than those in areas that continued in sample across the redesign. Incoming or new sample areas in 2006 generally had higher personal crime rates than continuing areas. Not all differences measured quarterly—January through March, April through June, July through September, and October through December—were statistically significant (figure 4).

The transition from PAPI to CAPI as an interview technique affected the property crime rates in 2006. Those effects were reduced in 2007 (figure 5). In 2007, there was little evidence that the household crime rates for outgoing or incoming areas were different than the rates for continuing areas (figure 6).

Increased rates of victimization for personal crimes were observed in 2006 during the transition from PAPI to CAPI

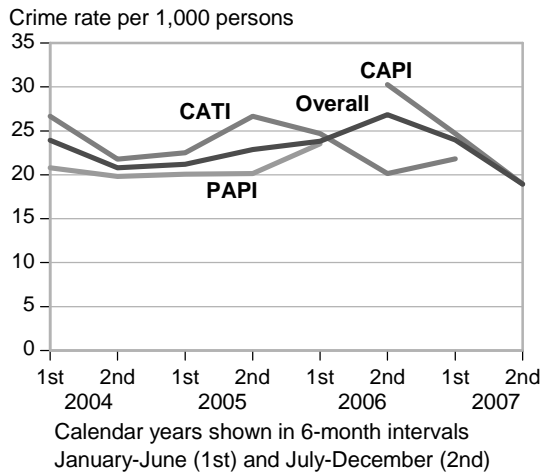


Figure 3

Transition from PAPI to CAPI in 2006 affected the victimization rate reported for property crime

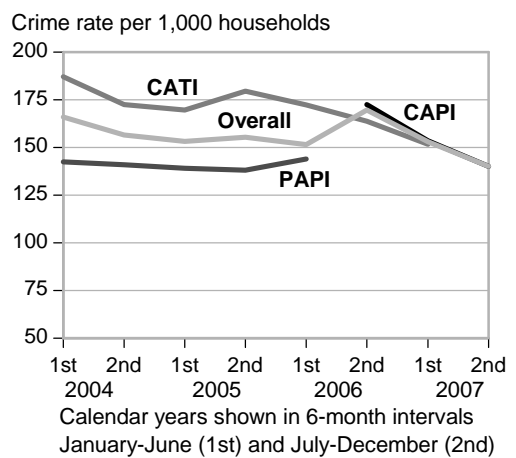


Figure 5

Personal crime rates were generally higher for incoming or new sample areas after CAPI was introduced in July 2006

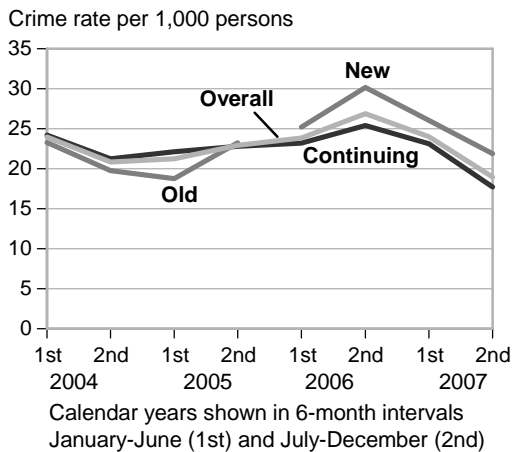


Figure 4

Property crime rates in 2007 were about the same for incoming, continuing, and outgoing sample areas

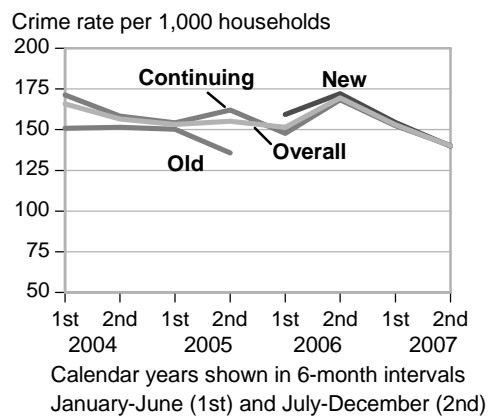


Figure 6

Analysis of the 2006 and 2007 estimates revealed interactions between survey mode and sample type (i.e., old versus new versus continuing). When CAPI interviewing was introduced in July 2006, interviews conducted in incoming sample areas produced much higher personal crime rates than CAPI interviews in continuing areas, an effect attributed to the impact of new interviewers in the new sample areas. This effect appeared to diminish in the second quarter, April to June 2007. In comparison, no such clear patterns were evident for property crime rates when mode—PAPI, CATI, and CAPI—and sample type were examined.

The transition from PAPI to CAPI and the effects of the sample redesign resulted in increases in crime rates in 2006 and prevented comparing those NCVS estimates with earlier years. The effects were primarily in rural areas, which had a larger percentage than urban and suburban areas of incoming or new sample areas and outgoing areas.

The observed effects on the 2006 estimates diminished in 2007. This decrease was consistent with the explanation that the selection of a new sample requires hiring and training new interviewers to administer the survey during every redesign. Interviewers new to the survey and the training associated with the redesign resulted in higher victimization rates being reported.

The effects of the sample redesign and changes in the survey administration or mode in 2006 decreased in 2007. The NCVS estimates in 2007 are comparable to those in 2005 and earlier years.

BJS and the U.S. Census Bureau continue to examine the impact of methodological changes on survey estimates

Analyses undertaken by BJS and the U.S. Census Bureau established that the year-to-year 2005 to 2006 and 2006 to 2007 NCVS estimates were not comparable as a result of the methodological changes introduced to the survey in 2006. The apparent increase in victimization from 2005 to 2006 has been largely attributed to implementing a new sample design, training interviewers new to the survey, and changing the mode of collecting the data.

These changes were most heavily felt in new sample areas in 2006, which were mainly rural areas. Data collected in those areas appeared to coincide with the greatest shifts in reported crime rates from 2005 to 2006.

Urban and suburban areas surveyed in 2006 using both the old and new sample designs were designated as continuing areas. Estimates of violent and property crime did not change significantly from 2005 to 2006 in those continuing areas. In comparison, violent and property victimization rates in new areas—areas included in the new sample design only—increased greatly, compared to the old areas they replaced.

The substantial changes in victimization estimates from 2005 to 2006 and from 2006 to 2007 were too extreme to be attributable to actual year-to-year changes. Users should focus on the comparison of the 2005 and 2007 rates until these issues are resolved. It is emphasized that the impact of the changes is on estimates of the extent and rates of crime, not on the attributes of victims or crime incidents. Based on research completed to date, the data for 2007 as presented in this report are comparable with estimates for 2005 all previous years of the NCVS.

Methodology

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 collects information on nonfatal crimes, reported and not reported to the police, against persons age 12 or older from a nationally representative sample of U.S. households. Violent crimes measured by the NCVS include rape or sexual assault, robbery, aggravated assault, and simple assault. Property crimes include household burglary, motor vehicle theft, and theft.

The survey results in this report are based on data gathered from residents living throughout the United States, including persons living in group quarters, such as dormitories, rooming houses, and religious group dwellings. Armed Forces personnel living in military barracks and institutional persons, such as correctional facility inmates, were not included in the scope of this survey.

Each housing unit selected for the National Crime Victimization Survey (NCVS) remains in the sample for three years, with each of seven interviews taking place at 6-month intervals. An NCVS field representative's first contact with a household selected for the survey is in person. The field representative may conduct subsequent interviews by telephone. To elicit more accurate reporting of incidents, the NCVS uses a self-respondent method that requires a direct interview with each person 12 years or older in the household.

Annual collection year estimates of the levels and rates of victimization are derived by accumulating estimates quarterly. The weights of all crimes reported during the interviews in that year are summed, regardless of when the crime occurred. The base for the collection year rate for

personal crimes is the sum of all person weights. The base for the property crime rates is the sum of all household weights. For more detail, see *Criminal Victimization in the United States, Statistical Tables, Methodology* at <<http://www.ojp.usdoj.gov/bjs/abstract/cvusst.htm>>.

The NCVS sample was reduced by 14% in 2007 based on new budgetary constraints. To offset this reduction beginning with the 2006 NCVS, BJS included the data from the first interview in the production of estimates.

Earlier research conducted during the development of the NCVS found that persons often report crimes that occurred before the reference period. Prior to 2006, the first of seven interviews was used to bound subsequent interviews and not in the production of NCVS estimates. The second interview was the first data used in the analysis.

To reduce costs and leverage more of the data in 2006, and to account for the sample reduction in 2007, BJS applied a bounding adjustment to the first interview to nullify any over-reporting of crime. This allowed BJS to use the survey's full data collection. Further research showed that the bounding adjustment had no appreciable effect on the estimates. This change did not explain the fluctuation in the rates observed from 2005 through 2007.

Comparisons of percentages and rates in this report were tested to determine if observed differences were statistically significant. Differences described as higher, lower, or different passed a test at the 0.05 level of statistical significance (95%-confidence level). Differences described as somewhat, slightly, marginally, or some indication passed a test at the 0.10 level of statistical significance (90%-confidence level). Caution is required when comparing estimates not explicitly discussed in this bulletin.



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This report in portable document format and in ASCII and its related statistical data are available at the BJS World Wide Web Internet site: <<http://www.ojp.usdoj.gov/bjs/abstract/cv07.htm>>

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The Bureau of Justice Statistics is the statistical agency of the U.S. Department of Justice. Michael D. Sinclair is deputy director.

BJS Bulletins present the first release of findings from permanent data collection programs.

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