

Bureau of Justice Statistics Special Report

Recidivism of Prisoners Released in 1983

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Of the 108,580 persons released from prisons in 11 States in 1983, representing more than half of all released State prisoners that year, an estimated 62.5% were rearrested for a felony or serious misdemeanor within 3 years, 46.8% were reconvicted, and 41.4% returned to prison or jail. Before their release from prison, the prisoners had been arrested and charged with an average of more than 12 offenses each; nearly two-thirds had been arrested at least once in the past for a violent offense; and two-thirds had previously been in jail or prison. By yearend 1988 those prisoners who were rearrested averaged an additional 4.8 new charges. An estimated 22.7% of all prisoners were rearrested for a violent offense within 3 years of their release.

These findings were based on a sample of more than 16,000 released prisoners, representing all those released from prison in 11 States during 1983. The 11 States in the sample included California, Florida, Illinois, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, and Texas. These States accounted for more than 57% of all State prisoners released in the Nation during the year.

Other findings from the survey include the following:

Few criminal justice issues have matched recidivism in stirring public opinion and in engaging the attention of criminal justice professionals. This report is the fourth BJS study of offenders released from prison and their reinvolvement in crime.

The research reported here represents the most ambitious of the studies with data for a large sample of releasees, representing more than half of all persons released from State prisons in 1983. By linking State and FBI criminal-history records, the study assembles for the first time comprehensive criminal-history data both within and outside the States in which the prisoners were released.

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It provides the most precise estimates of recidivism available among prisoners of all ages and all types of postrelease supervision.

The Bureau gratefully acknowledges the contribution of the Identification Division of the FBI and officials of corrections departments and criminal-history repositories in California, Florida, Illinois, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, and Texas. This cooperation of State and Federal officials was vital to the success of this important research project.

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- An estimated 68,000 of the released prisoners were rearrested and charged with more than 328,000 new felonies and serious misdemeanors, including approximately 50,000 violent offenses (of which 17,000 were robberies and 23,000 were assaults), more than from 141,000 property offenses (of which 38,000 were burglaries), and 46,000 drug offenses.
- Recidivism rates were highest in the first year — 1 of 4 released prisoners were rearrested in the first 6 months and 2 of 5 within the first year after their release.
- Approximately 5% of the prisoners had been charged with 45 or more of offenses before and after their release from prison; 28% had been charged with at least 20 offenses.
- More than 1 of every 8 rearrests occurred in States other than the State in which the prisoners were released.
- Recidivism rates were higher among men, blacks, Hispanics, and persons who had not completed high school than among women, whites, non-Hispanics, and high school graduates.

Recidivism was inversely related to the age of the prisoner at time of release: the older the prisoner, the lower the rate of recidivism.

The more extensive a prisoner's prior criminal record, the higher the rate of recidivism — over 74% of those with 11 or more prior arrests were rearrested, compared to 38% of the first-time offenders.

The combination of a prisoner's age when released and the number of prior adult arrests was very strongly related to recidivism: an estimated 94.1% of prisoners age 18 to 24 with 11 or more prior arrests were rearrested within 3 years.

• More than 68% of the prisoners released for property offenses were rearrested within 3 years, compared to 59.6% of violent offenders, 54.6% of public-order offenders, and 50.4% of drug offenders.

• Approximately 40% of the released prisoners had previously escaped from custody, been absent without leave (AWOL), or had a prior revocation of parole or probation. An estimated 73% of these prisoners were rearrested within 3 years of their release.

• The amount of time served in prison did not systematically increase a prisoner's likelihood of rearrest. However, those prisoners who had served the longest, more than 5 years in prison, had lower rates of rearrest than other offenders during the followup period.

• Released prisoners were often rearrested for the same type of crime for which they had served time in prison. Within 3 years, 31.9% of released burglars were rearrested for burglary; 24.8% of drug offenders were rearrested for a drug offense; and 19.8% of robbers were rearrested for robbery.

• Released rapists were 10.5 times more likely than nonrapists to be rearrested for rape, and released murderers were about 10 times more likely than other offenders to be rearrested for homicide. An estimated 50% of released murderers were rearrested for homicide.

Table 1. Profile of prisoners released in 1983 and in 11-State recidivism study

Number of prisoners released in the 11 States	108,580
Percent of all States prisoners released in 1983, nationwide	57.3 %
Sex	
Male	94.1 %
Female	5.9
Race	
White	54.1 %
Black	45.1
Other	.8
Ethnicity	
Hispanic	12.1 %
Non-Hispanic	87.9
Median age when released	27 yrs.
Most serious offense	
Violent	34.5 %
Property	48.3
Drugs	9.5
Public-order	6.4
Other	1.1
Median time served	14 mos.
Number of prior arrests	
Mean	8.4
Median	6
Prior incarceration	
Yes	67.1 %
No	32.9
Note: Data are based on an estimated 108,580 prisoners who were released from prison in 11 States in 1983 and who were still alive in 1987.	

• Nearly 1 in 3 released violent offenders and 1 in 5 released property offenders were arrested within 3 years for a violent crime following their release from prison.

Measuring recidivism

Criminal-history data for the sample of released prisoners were obtained from the criminal identification bureaus in the 11 participating States and from the Federal Bureau of Investigation. Information was collected only on felonies and serious misdemeanors. These data included information on arrests, prosecutions, court appearances, and postsentencing statutes, such as incarceration, probation, and parole.

Additional information on prisoners released in 1983, including data on demographic characteristics, sentencing, time served, and postrelease supervision status, was collected from the department of corrections in each State as part of BJS' annual Nation Corrections Reporting Program (NCRP). (See table 1 for a summary profile of prisoners in the sample.)

Recidivism rates, as defined here, are estimates of the percentages of released prisoners who commit another offense. Estimates of recidivism vary with the length of the followup period and the measures selected. Three measures of recidivism were employed in this study: rearrest, reconviction, and reincarceration.

Rearrest refers to any arrest for a felony or serious misdemeanor that was reported to the State identification bureau or the FBI. Arrest data were reported on fingerprint cards which the arresting agency had submitted to the State criminal identification bureau and to the FBI.

Reconviction refers to a conviction on at least one charge after the date of release from prison. Data on reconvictions and other dispositions were reported by prosecutor's offices, courts, and correctional agencies.

Reincarceration refers to (1) any return to prison or (2) any admission to a local jail with a sentence for a new offense. Data on incarcerations were reported by receiving agencies, typically State or Federal prisons and local jails.

In previous studies of recidivism, criminologists have concluded that in the aggregate rearrest is the most reliably reported measure of recidivism.¹ Although some rearrested individuals may be innocent of the crime charged, using only reported convictions would understate the true recidivism rates because not all offenders are prosecuted or go to trial. Parolees, for example, often do not face prosecution for a new offense, but with their parole revoked they return to prison to serve the balance of their sentence. Moreover, new convictions were the most underreported of the three measures. Data on convictions and other dispositions were not reported for approximately 32% of all arrests in the criminal-history files. For some arrests that contained no court records, convictions were inferred from prison admissions for a new sentence.

¹For a discussion of problems with other measures of recidivism, see M.D. Maltz, *Recidivism* (Orlando, Fla.: Academic Press, 1984).

Table 2. Recidivism of State prisoners released in 1983, by time after release

or	Percent of released prisoners who were:		
	Rearrested	Reconvicted	Reincarcerated
6 months	25.0%	11.3%	8.4%
1 year	39.3	23.1	18.6
2 years	54.5	38.3	32.8
3 years	62.5	46.8	41.4

Recidivism and time after release

Within 3 years after their release from prison in 1983, an estimated 62.5% of the released prisoners had been rearrested; 46.8% had been reconvicted; and 41.4% had been reincarcerated (figure 1).

Recidivism rates were the highest in the first year. Four of every 10 released prisoners were rearrested in the first year; nearly 1 in 4 were convicted of a new crime; and nearly 1 in 5 were returned to prison or sent to jail (table 2).

Of all those who were rearrested during the 3-year followup period, approximately two-thirds were arrested by the end of the first year. Of all those reincarcerated, only 45% were reincarcerated in the first year.

Volume of crime

An estimated 87,898 of the 108,580 prisoners who were released in 1983 were rearrested and charged with 326,748 new offenses by yearend 1986 (table 3). More than 50,000 of the new charges were violent offenses, including 2,282 homicides, 1,451 kidnappings, 1,291 rapes, 2,626 other sexual assaults, 17,060 robberies, and 22,633 other assaults.

Cumulative percent of State prisoners released in 1983 who were rearrested, reconvicted, and reincarcerated, by 6-month intervals

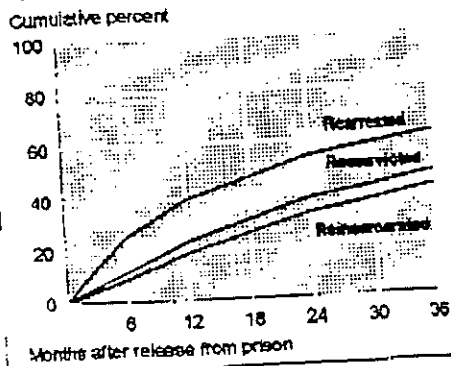


Figure 1

Table 3. Number of arrest charges for State prisoners released in 1983, by type of charge

Arrest charge	Number of arrest charges	
	Prior to release	After release 1983-86
Total	1,333,293	326,748
Violent offenses	214,778	50,121
Homicide*	12,185	2,282
Kidnaping	5,622	1,451
Rape	8,922	1,291
Other sexual assault	10,335	2,626
Robbery	84,166	17,060
Assault	84,487	22,633
Other violent	9,051	2,778
Property offenses	628,320	141,416
Burglary	184,690	36,433
Larceny/theft	199,450	51,268
Motor vehicle theft	54,157	8,648
Arson	3,294	647
Fraud	82,522	20,233
Stolen Property	80,873	13,738
Other property	43,334	10,388
Drug offenses	149,881	48,382
Possession	60,438	20,684
Trafficking	22,429	5,788
Other unspecified	58,014	19,910
Public-order offenses	307,191	79,773
Weapons	55,539	12,791
Probation/parole violations	44,862	15,395
Traffic offenses	35,300	5,844
Other public-order	171,390	45,743
Other offenses	12,957	1,111
Unknown†	20,166	7,843

Note: Data are based on an estimated 108,580 prisoners who were released from prison in 11 States in 1983 and who were still alive in 1987. *Homicide includes murder, negligent manslaughter, and negligent manslaughter. †Unknown charges include those that could not be converted to an NCRP offense code and those not coded because only 6 charges were recorded for each arrest.

More than 40% of the new charges were for property offenses. The released prisoners were rearrested for an estimated 51,268 larcenies, 36,433 burglaries, and 20,233 fraud offenses.

Prevalence of violence among State prisoners released in 1983

Among persons released from State prison in 1983, an estimated 77% had been arrested at least once in the past or rearrested after their release for a violent offense

Nature of violent record	Percent arrested at some time for a violent offense
Prior arrest charge	52.1%
Most serious charge when released	34.6
Arrest charge within 3 years after release	22.7
Ever charged	77.0

Nearly 25% of the new charges were for public-order offenses. Of the approximately 80,000 public-order offenses, 12,791 were weapons charges and 15,395 were violations of probation or parole or flight to avoid prosecution.

About 14% of the new charges were for drug offenses. Because sufficient detail was not recorded for more than 40% of the drug offenses, reliable estimates differentiating the number of possession and trafficking charges could not be made.

The released prisoners had been arrested in the past for more than 1.3 million offenses. Before their release from prison, they had been charged with an estimated 214,778 violent crimes, including more than 12,000 homicides, nearly 9,000 rapes, 5,600 kidnappings, and 84,000 robberies. When combined with the number of new arrest charges, these released prisoners had been arrested and charged with approximately 1.7 million offenses, an average of 15.3 charges each since their first adult arrest.

Table 4. Total number of arrest charge among State prisoners released in 1983

Total number of arrest charges*	Percent of all released prisoners	Cumulative percent of all released prisoners	Cumulative percent of all arrest charges
45 or more	5.0%	5.0%	19.4%
33-44	4.4	9.4	30.5
25-34	9.2	18.6	47.8
20-24	7.7	26.3	58.8
15-18	11.7	38.0	71.6
10-14	17.1	55.1	84.9
5-9	28.2	81.3	96.7
1-4	18.9	100.0	100.0

Note: percent may not add to 100% because of rounding. *Arrest charge include those made prior to

release and those between release in 1983 and December 31, 1986

small fraction of offenders were responsible for a disproportionate number of 5 million charges. An estimated 5 million prisoners were charged with 45 offenses each before and after their release in 1983 (table 4). This group of high-rate offenders accounted for nearly 50% of all arrest charges. Offenders with one or more charges represented 18.6% of all charges. Released prisoners with fewer than five arrest charges, however, represented 18.9% of all prisoners but only 3.3% of the arrest charges.

Percent of all arrests, 1983-86

One way of measuring the volume of crime attributable to released prisoners is to express the new charges as a percentage of arrest charges recorded for all offenders in the 11 States during the same time period. Exactly comparable data on arrests of all offenders, however, do not exist. The Uniform Crime Reports (UCR), collected annually by the Federal Bureau of Investigation, record arrests for all offenders and classify the arrests by the most serious charge. Not all offense categories are compiled by the FBI, and definitions of some offenses differ from those in this 11-State study. The offenses that are comparable, the UCR Index crimes, include murder and nonnegligent manslaughter, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft; therefore, the number of arrests of released prisoners for these offenses can be compared to the total number of arrests for index crimes.

Overall, between midyear 1983 and year-end 1986, prisoners released in 1983 accounted for 2.8% of the index crime arrests in the 11 States (table 5). The arrests of these released prisoners comprised 3.9% of the index crime arrests in the 6 months after their release in 1983, 3.4% of the arrests in 1984, 2.6% in 1985, and 2.1% in 1986. It should be noted that by the end of the first year after release nearly 1 in 5 prisoners had been reincarcerated and were not liable for rearrest, and by the second year nearly 1 in 3 had returned to prison or jail.

Table 5. Number of new arrest charges and comparison with UCR Index crimes for State prisoners released in 1983, by year, 1983-86

Year	Number of new charges	Number of arrests for UCR Index crimes among released prisoners*	Total number of arrests for index crimes in 11 States*	Percent of all arrests for index crimes
Total, 1983-86	326,748	93,574	3,308,498	2.8%
1983*	56,882	18,494	469,315	3.9
1984	101,024	30,571	904,951	3.4
1985	85,613	23,572	921,877	2.6
1986	82,219	20,937	1,012,353	2.1

Note: Subcategories may not add to total because of rounding.

*Includes only arrests in the State in which the prisoner was released. For arrests involving multiple charges, the most serious charge was selected. Index crimes include murder and nonnegligent manslaughter, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. Arson was excluded.

*Includes only adult arrests in the 11 States participating in the National Recidivism Reporting System (NRRS). *Because on average there were only 6 months of exposure to rearrest, the estimated total number of index crime arrests for 1983 was divided by 2.

Table 6. Percent of all index crime arrests in 11 States represented by State prisoners released in 1983, by type of arrest charge and year

Rearrest charge, Index crime	Years of arrest				
	Total 1983-86	1983	1984	1985	1986
Murder and nonnegligent manslaughter	2.3%	3.1%	2.5%	2.0%	1.9%
Rape	1.8	3.8	2.4	.9	1.1
Robbery	5.0	8.6	6.4	4.1	3.7
Aggravated assault	2.4	3.0	2.7	2.5	1.7
Burglary	4.8	6.8	5.9	4.3	3.4
Larceny/theft	2.0	2.8	2.3	1.8	1.5
Motor vehicle theft	3.3	4.6	3.7	3.3	2.3

Note: For each percent the numerator is the number of arrests for the index crime among prisoners released in 1983, and the denominator is the estimated number of arrests for index crimes among all offenders in the 11

States. Percents for 1983 were adjusted for partial-year exposure to rearrest.

For the entire 3½ year period, the percentage of UCR arrests attributable to these released prisoners was highest for robbery (5.0%) and burglary (4.8%) and lowest for larceny (2.0%) and rape (1.8%) (table 6). In 1984, the first full year after release, these prisoners accounted for an estimated 8.4% of the arrests for robbery and 5.9% for burglary.

Multistate offenders

The new offenses occurred not only in the States in which the prisoners were released from prison but in other States as well. More than 1 of every 8 rearrests were made in States other than the State in which the prisoner was released. An

estimated 5.5% of the released prisoners were rearrested only in States other than those in which they were released. An additional 4.7% of the prisoners were rearrested both in their State of release and in another State.

If data on arrests had been restricted only to the State of release, which is typical of most recidivism studies, the overall rearrest rate would have been an estimated 57.0% rather than the actual 62.5%. In addition, the number of prior arrests would have been underestimated: 26.5% of the prisoners had been arrested in more than one State in the past, and nearly 13.0% of all prior arrests had occurred in States other than the State of release in 1983.

Demographic characteristics

Men were more likely than women to be rearrested, reconvicted, and reincarcerated within 3 years of their release from prison (table 7). The rate of rearrest was 11 percentage points higher among men than among women.

Blacks had slightly higher recidivism rates than whites, approximately 5 to 8 percentage points higher for each measure. Released prisoners of Hispanic origin also had recidivism rates that were about 6 percentage points higher than those among non-Hispanics.

Recidivism was inversely related to the age of the prisoner at the time of release: the older the prisoner, the lower the rate of recidivism. More than 75% of those age 17 or younger when released from prison were rearrested, compared to 40.3% of those age 45 or older. However, rearrest rates declined by less than 5 percentage points among prisoners between the age of 18 and 34. (Prisoners in this age group comprised nearly 80% of those released in 1983.) The largest differences in recidivism were found among prisoners age 35 or older, but even those age 45 or older had rearrest rates of 40%.

The amount of prior education was also related to recidivism among released prisoners. Prisoners who had graduated from high school or had some college education had somewhat lower rates of rearrest, reconviction, and reincarceration than those who failed to complete high school.

Offense for which released

Prisoners released for property offenses had higher recidivism rates than those released for violent, drug, or public-order offenses (table 8). An estimated 68.1% of the property offenders released in 1983 were rearrested within 3 years, compared to 59.6% of the violent offenders, 54.6% of the public-order offenders, and 50.4% of the drug offenders. Property offenders also had higher rates of reconviction and reincarceration than other types of offenders.

Prisoners who had served time for motor vehicle theft had the highest recidivism rates of all types of offenders — 78.4%

Table 7. Recidivism rates of State prisoners released in 1983, by prisoner characteristics

Prisoner characteristics	Percent of all released prisoners	Percent of released prisoners who within 3 years were:		
		Rearrested	Reconvicted*	Reincarcerated**
All released prisoners	100.0%	62.5%	46.8%	41.4%
Sex				
Male	94.1%	63.2%	47.3%	41.9%
Female	5.9	51.9	38.7	33.0
Race				
White	54.1	58.7%	44.2%	38.0%
Black	45.1	67.1	49.9	45.3
Other	.8	58.7	50.6	45.3
Ethnicity				
Hispanic	12.1%	68.5%	52.4%	47.0%
Non-Hispanic	87.9	61.7	46.0	40.6
Age when released				
17 or younger	5%	75.6%	65.4%	50.6%
18-24	35.0	68.0	51.2	44.9
25-29	26.5	65.0	48.9	43.2
30-34	17.7	63.4	47.9	43.0
35-39	9.3	58.9	40.8	38.5
40-44	4.8	48.9	36.1	30.7
45 or older	6.2	40.3	28.6	25.7
Education				
8th grade or less	19.3%	61.9%	46.0%	38.4%
Some high school	48.0	65.1	46.9	40.9
High school graduate	25.3	57.4	39.8	35.0
Some college or more	6.8	51.9	38.1	30.4

Note: Data on sex were reported for 100% of 108,580 releases; data on race for 99.6%, Hispanic origin for 99.9%, age at time of release for 96.8%, and education for 46.6%. Subcategories may not add to total because of missing data.

*Because of the underreporting of court and custody data in Ohio, the percents reconvicted and reincarcerated exclude data from Ohio.

Table 8. Recidivism rates of State prisoners released in 1983, by most serious offense for which released

Most serious offense for which released	Percent of all released prisoners	Percent of released prisoners who within 3 years were:		
		Rearrested	Reconvicted*	Reincarcerated**
All offenses	100.0%	62.5%	46.8%	41.4%
Violent offenses	34.6%	59.6%	41.9%	36.5%
Murder*	3.1	42.1	25.2	20.8
Negligent manslaughter	1.4	42.5	27.9	21.8
Kidnaping	.8	54.5	35.7	31.3
Rape	2.1	51.5	38.4	32.3
Other sexual assault	2.1	47.9	32.8	24.4
Robbery	18.7	66.0	48.3	43.2
Assault	6.4	60.2	40.4	33.7
Other violent	.4	50.1	33.2	31.4
Property offenses	48.3%	66.1%	53.0%	47.7%
Burglary	25.8	69.6	54.6	48.4
Larceny/theft	11.2	67.3	52.2	46.3
Motor vehicle theft	2.6	78.4	59.1	51.8
Arson	.7	65.3	38.5	32.3
Fraud	9.5	60.9	47.1	43.3
Stolen property	1.7	67.9	54.9	50.5
Other property	.8	54.1	37.3	33.9
Drug offenses	9.5%	50.4%	35.3%	30.3%
Possession	1.2	62.8	40.2	36.7
Trafficking	4.5	51.5	34.5	29.4
Other/unspecified	3.9	45.3	34.5	29.1
Public-order offenses	6.4%	54.6%	41.5%	34.7%
Weapons	2.2	63.5	46.7	38.1
Probation/parole violations	4.2	49.9	38.9	33.0
Other offenses	1.1%	76.8%	62.9%	59.2%

Note: The offense distribution and percents rearrested are based on 106,216 released for whom most serious offense at release was known. Percents of those re-

convicted and reincarcerated are based on 99,103 releases, after data from Ohio were excluded. *Includes nonnegligent manslaughter.

Table 9. Rearrest rates of State prisoners released in 1983, by most serious offense at release and charge at rearrest

Rearrest charge	Percent of prisoners rearrested within 3 years of release whose most serious offense at time of release was:													
	Total all offenses	Violent offense						Property offense						
		Total	Murder ^a	Rape	Robbery	Assault	Total	Burglary	Larceny/theft	Motor vehicle theft	Fraud	Drug offense	Public-order offense	
All charges	62.5%	59.6%	42.1%	51.5%	66.0%	60.2%	68.1%	69.5%	67.3%	76.4%	60.9%	50.4%	54.6%	
Violent offenses	22.7%	30.4%	21.6%	27.5%	33.3%	31.5%	19.7%	20.9%	19.5%	23.0%	11.5%	12.2%	19.3%	
Homicide ^a	1.8	2.8	6.6	2.8	2.9	1.7	1.1	1.1	.8	1.4	1.1	.3	.9	
Rape	.9	1.7	.8	7.7	1.4	1.2	.5	.7	.4	.1	.4	.4	.8	
Robbery	9.9	14.1	7.0	8.5	19.6	9.1	8.4	9.1	8.7	12.8	3.6	4.2	5.9	
Assault	12.6	15.7	10.5	10.7	15.8	21.9	11.1	11.9	10.8	13.1	6.9	7.8	12.4	
Property offenses	39.7%	32.1%	18.6%	25.0%	38.9%	28.9%	49.8%	50.4%	50.3%	54.7%	47.4%	22.9%	28.2%	
Burglary	18.4	12.6	6.4	12.7	15.4	10.7	25.2	31.9	17.5	23.7	18.2	8.2	10.3	
Larceny/theft	21.2	16.3	7.4	7.4	21.0	14.4	27.2	25.3	33.5	26.3	26.0	12.2	14.9	
Motor vehicle theft	5.5	4.0	2.5	.7	5.0	3.7	7.2	6.0	8.2	18.6	5.1	2.3	3.7	
Fraud	6.5	4.2	2.3	1.8	5.5	2.9	8.6	6.0	6.7	8.5	21.6	4.3	5.7	
Drug offenses	16.6%	14.8%	9.1%	11.3%	18.0%	13.8%	16.2%	17.7%	15.1%	17.1%	14.8%	24.0%	14.0%	
Public-order offenses	29.9%	29.0%	19.2%	22.3%	32.0%	30.9%	31.0%	32.1%	30.5%	39.0%	24.3%	23.0%	33.7%	
Number of released prisoners	108,216	36,769	3,258	2,214	19,815	6,756	51,332	27,416	11,896	2,785	5,899	10,104	6,825	

Note: The numerator for each percent is the number of persons rearrested for a new charge, and the denominator is the number released for each type

of offense. Detail may not add to totals because persons may be rearrested for more than one type of charge.

^aIncludes negligent manslaughter.
^bIncludes murder, nonnegligent manslaughter, and negligent manslaughter.

were rearrested, 59.1% reconvicted, and 51.8% reincarcerated. Other released prisoners with relatively high recidivism included those classified as "others" (primarily juvenile-status offenders and classified felons (76.8%), burglars (69.6%), those released for possession or sale of stolen property (87.9%), larcenists (67.3%), and robbers (66.0%). Those released for murder or for negligent manslaughter had the lowest rates of recidivism (42.1% and 42.5%, respectively).

Rearrest offense

Released prisoners were often rearrested for the same type of crime for which they had served time in prison (table 8). For example, an estimated 33.5% of released larcenists, more than any other group, were rearrested for another larceny. The same pattern was observed for every other type of offender. Thus, released murderers were more likely than other prisoners to be rearrested for a new homicide (8.8%), released rapists were more likely than other prisoners to be rearrested for rape (7.7%), released robbers to be rearrested for robbery (4.6%), and so forth.

The relative likelihood of rearrest for a similar crime was highest among prisoners released for rape, sexual

Table 10. Relative likelihood of rearrest for a charge similar to (versus different from) the release charge among State prisoners released in 1983, by charge

Rearrest charge	Relative likelihood of rearrest
Violent offenses	1.9
Homicide ^a	4.9
Rape	10.5
Other sexual assault	7.5
Robbery	2.9
Assault	2.1
Property offenses	2.3
Burglary	3.0
Larceny/theft	2.1
Motor vehicle theft	4.2
Fraud	4.8
Stolen property	2.4
Drug offenses	1.8
Public-order offenses	1.2

Note: For each type of rearrest charge, the numerator is the odds of rearrest for that charge among prisoners released for the same type of offense; the denominator is the odds of rearrest for that charge among prisoners released for a different type of offense. Each ratio expresses the odds of rearrest among prisoners released on a similar offense relative to the odds of rearrest among those released on a different type of offense.

for rape. Prisoners who had served time for other sexual assaults were 7.5 times more likely than those who had not served time for sexual assault to be arrested for a new sexual assault. Those released after serving time for murder or nonnegligent manslaughter were nearly 5 times more likely than other prisoners to be rearrested for homicide.

Despite the tendency of released prisoners to be rearrested for the same type of crime for which they were released from prison, they were often rearrested for other crimes as well. Nearly a fifth of the released property and public-order offenders were rearrested for violent crimes during the followup period (table 9). Released property offenders were, however, much more likely than violent offenders to be rearrested for a property offense (49.8% compared to 32.1%). Except for released murderers, 20% or more of each type of released prisoner were subsequently arrested at least once for a public-order crime.

assault, homicide, or fraud and lowest among those released for public-order or drug offenses (table 10). Released rapists were 10.5 times more likely than non-rapists to have a subsequent arrest

Number of prior arrests

Recidivism rates were strongly related to the number of prior adult arrests: the more a prisoner's prior arrest record, the higher the rate of rearrest after release from prison (table 11). Prisoners with a greater number of prior adult arrests were also arrested more quickly than those with fewer prior adult arrests. Moreover, regardless of how long prisoners stayed away from rearrest following their release, those with longer prior records had higher rates of rearrest in subsequent time periods than those with shorter records.

More than a quarter of all prisoners released in 1983 had 11 or more prior adult arrests. (An adult arrest is one that occurred when the individual was of adult age, as defined by State law, or when the individual was a juvenile but charged or tried in court as an adult.) Nearly 75% of the prisoners with 11 to 15 prior arrests and 82.2% of those with 16 or more prior arrests were arrested again following their release from prison. Approximately three-quarters of those rearrested who had 11 or more prior arrests were rearrested within the first year.

In contrast, among those prisoners who had one previous arrest (9.1% of all released prisoners), approximately 38.1% were rearrested within 3 years. Nearly half of those rearrested among prisoners with one prior adult arrest were rearrested within the first year.

Table 11. Rearrest rates of State prisoners released in 1983, by number of prior adult arrests

Number of adult arrests prior to release*	Percent of all releases	Percent of releases who were rearrested	
		Within 3 years	Within 1 year
All released prisoners	100.0%	62.5%	39.3%
1 prior arrest	9.1	38.1	19.0
2	10.8	48.2	25.5
3	10.8	54.7	30.1
4	9.7	58.1	35.5
5	8.0	59.3	33.4
6	7.0	64.8	38.2
7-10	18.8	67.7	42.0
11-15	11.9	74.9	53.3
16 or more	14.0	82.2	61.5

Note: The percents were based on 108,308 weighted cases with valid data on the number of prior adult arrests. *An adult arrest is one that occurs when an individual is of adult age, as defined by State law, or when the individual is a juvenile but is charged or tried in court as an adult.

The percents of those rearrested among released prisoners were systematically related to the extensiveness of the prior records. For each 3-month interval during the followup period, the cumulative percent of those rearrested was higher for persons with more prior adult arrests (figure 2). Within the first 6 months, for example, released prisoners with 11 or more prior arrests were nearly 4 times more likely than those with 1 prior arrest and more than twice as likely as those with 2 or 3 prior arrests to have been rearrested for a new offense.

beginning of the period, were highest in the first several months following release from prison (table 12). Failure rates in the first 3 months after release were more than 3 times higher than those in the last 3 months of the followup period (14.2% compared to 4.5%). In addition, in almost every 3-month period those prisoners with longer arrest records had higher failure rates. Even after 33 months, prisoners with 11 or more prior arrests were more than twice as likely as those with 1 prior arrest to be rearrested within the next 3 months (7.0% compared to 2.8%).

Failure rates, defined as the number rearrested within a 3-month period divided by the number not yet rearrested at the

Cumulative percent of State prisoners released in 1983 who were rearrested by number of prior adult arrests, by 12-month intervals

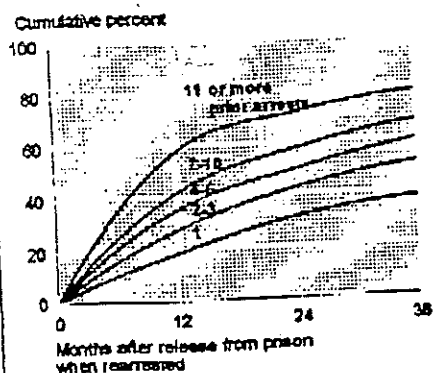


Table 12. Three-month failure rates of State prisoners released in 1983, by the number of prior adult arrests

Time period after release	All released prisoners	Of all prisoners not previously rearrested, the percent rearrested for the first time during each 3-month period after release, by number of prior arrests				
		1 prior arrest	2-3 arrests	4-6 arrests	7-10 arrests	11 or more arrests
1-3 months	14.2%	5.1%	8.1%	11.7%	15.3%	24.1%
4-6	12.5	6.4	8.9	10.9	13.2	20.6
7-9	11.2	5.4	7.1	10.8	10.7	17.7
10-12	8.9	3.5	7.2	8.3	11.8	14.7
13-15	7.9	4.1	6.7	7.8	10.5	10.4
16-18	7.3	4.4	6.1	6.9	8.9	10.6
19-21	6.8%	3.4%	5.1%	5.9%	7.4%	9.4%
22-24	6.0	3.2	4.8	6.2	6.8	9.1
25-27	6.3	3.0	4.7	5.8	5.9	6.8
28-30	4.6	3.0	4.6	4.8	5.2	6.5
31-33	4.4	2.8	3.3	4.2	5.0	6.2
34-36	4.6	2.8	3.6	4.8	6.4	7.0

Note: For each percent the denominator is the number of released prisoners who had not been rearrested before the 3-month period, and the numerator is the number who were rearrested during the period.

number of prior arrests remained strong predictor of recidivism among released prisoners for both males and females for each race or ethnic group. Within all age groups (tables 13 and 14), within each sex and racial category, the percent rearrested among released prisoners increased with the number of prior adult arrests. The percentage rearrested was slightly lower among Hispanics with 7 to 10 prior arrests than those with 4 to 6 prior arrests, but the difference was not statistically significant.

Within each prior arrest group, recidivism rates varied by sex, race, ethnicity, and age. Except for prisoners with 7 to 10 prior arrests, men had higher rates of rearrest than women. Black prisoners had rearrest rates that were 8 to 14 percentage points higher than those for whites, depending on the number of prior arrests. Hispanic prisoners, who could be white or black, also had rates higher than those for non-Hispanic whites within every category of prior arrests.

Within each prior arrest category, older prisoners had lower rates of rearrest than younger prisoners. Released prisoners with one prior adult arrest and were age 35 or older had the lowest recidivism rates of all prisoners: 6.8% of those age 35 to 39 and 12.1% of those age 40 or older were rearrested within 3 years. In contrast, an estimated 84.1% of the released prisoners who were age 18 to 24 and who had 11 or more prior arrests were rearrested during the followup period.

Age at first adult arrest

The age at which a released prisoner was first arrested and charged as an adult was inversely related to recidivism: the younger the age at first arrest, the higher the rate of recidivism (table 15). An estimated 72.2% of the prisoners first arrested before the age of 18 were rearrested within 3 years of their release, compared to 39.2% of those first arrested between age 25 and 29 and 26.6% of those first arrested at age 30 or older.

Previous studies have found a similar ongoing relationship between the age at which a criminal career began and the probability of recidivism.²

²M.E. Wolfgang, R. Figlio, and T. Sellin, *Delinquency in a Birth Cohort* (Chicago: University of Chicago Press, 1972); *Recidivism of Young Parolees*, BJS Special Report, NCJ-104916, May 1987.

Table 13. Rearrest rates of State prisoners released in 1983, by number of prior adult arrests, sex, and race or ethnicity

Number of prior adult arrest	Percent of State prisoners released in 1983, who were rearrested within 3 years				
	Sex		Race/ethnicity ^a		
	Male	Female	White non-Hispanic	Black non-Hispanic	Hispanic
All released prisoners	63.2%	61.9%	56.1%	67.1%	68.4%
1 prior arrest	39.5%	21.4%	31.1%	45.1%	40.9%
2-3	52.6	32.9	48.3	56.2	53.3
4-6	61.1	47.1	54.8	64.1	68.6
7-10	67.6	69.2	63.0	71.6	67.8
11 or more	79.0	78.5	73.2	81.4	84.6
Number of prisoners	101,902	8,392	46,205	47,854	13,079

^aToo few cases of other racial or ethnic groups existed to provide reliable estimates.

Table 14. Rearrest rates of State prisoners released in 1983, by age at time of release and number of prior adult arrests

Number of adult arrest prior to release	Percent of State prisoners released in 1983, who were rearrested within 3 years, by age at release					
	Age 17 or younger	18-24	25-29	30-34	35-39	Age 40 or older
All released prisoners	75.6%	68.0%	65.0%	63.0%	56.8%	43.7%
1 prior arrest	78.7%	48.6%	29.2%	24.8%	8.8%	12.1%
2-3	---	61.8	42.4	38.2	38.2	14.6
4-6	---	72.8	57.9	51.0	41.6	30.1
7-10	---	81.0	72.5	64.8	54.5	39.0
11 or more	---	94.1	87.6	80.5	76.0	61.2
Number of prisoners	523	37,932	28,712	19,281	10,083	11,972

Notes: Cases with missing data on the number of prior adult arrests or age at time of release were excluded.

--- Too few cases to provide a reliable estimates.

Table 15. Rearrest rates of State prisoners released in 1983, by age at first adult arrest and number of prior adult arrest

Number of adult arrest prior to release	Percent of State prisoners released in 1983, who were rearrested within 3 years, by age at first arrest				
	Age 17 or younger	18-24	20-24	25-29	Age 30 or older
All released prisoners	72.2%	68.4%	55.1%	39.2%	26.6%
1 prior arrest	65.0%	53.5%	30.6%	15.9%	15.1%
2-3	62.1	56.5	46.4	35.5	22.6
4-6	68.6	61.2	55.7	45.4	32.4
7-10	69.3	69.3	65.3	60.2	41.9
11 or more	82.7	79.8	71.4	50.9	62.6
Number of prisoners	35,837	38,058	22,470	6,653	4,763
Percent of all released prisoners	33.2%	35.3%	20.8%	6.2%	4.4%

Notes: Cases with missing data on the number of prior adult arrests and age at first adult arrest were excluded.

Because records of arrest and prosecution of juveniles were not reported in State or Federal criminal files, unless the offender was charged or tried in court as an adult, an exact measure of the age at first arrest was not available. Nevertheless, more than 1 of every 4 released prisoners in 1983 had a record of an arrest before they were 18 years old. It should be noted that some arrests may have occurred in States in which the age of majority is under 18.

Age at first adult arrest and recidivism were related regardless of the number of prior arrests. Within almost every category of prior arrests, the older the prisoners had been when first arrested, the lower the rate of rearrest following their release from prison. Among prisoners with one prior arrest, those first arrested at age 17 or younger were about 4.3 times more likely to be rearrested than those first arrested at age 30 or older. Among those with 11 or more prior arrests, those age 17 or younger when first arrested were nearly 1.3 times more likely than those age 30 or

lder to be rearrested. Overall, both age
 & first adult arrest and the number of prior
 arrests were related to the likelihood of
 re-arrest among prisoners released in

length and intensity of prior record

The length of a prisoner's criminal history,
 defined as the time between the first adult
 arrest and most recent prison admission
 prior to release in 1983, was also
 associated with recidivism (table 16). An
 estimated 51% of the prisoners who had
 been arrested for the first time in the year
 before their most recent admission to
 prison were rearrested within 3 years,
 compared to 62% or more rearrested
 among prisoners with longer criminal
 histories.

The intensity of prior record rather than
 length, however, was more strongly
 associated with the likelihood of a
 prisoner's rearrest. Prisoners with a large
 number of prior arrests in a short period
 of time were more likely to be rearrested
 than those with fewer prior arrests in a
 longer period of time. Within almost every
 arrest category, the longer the
 period of time over which the prior arrests
 occurred, the lower the percentage rear-
 rested among released prisoners. Among
 prisoners with two or three prior arrests,
 for example, nearly 59% of those with a
 criminal history of a year or less were
 rearrested, compared to 26% of those with
 a criminal history of over 10 years.

Time served in prison

The amount of time served by prisoners
 on their most recent offense before
 their release in 1983 was not associated
 with an increased likelihood of their
 rearrest (table 17). Only the prisoners
 who had served the longest, the estimated
 4.1% who had been in prison for more
 than 5 years, had lower rates of rearrest
 during the 3-year followup period. An
 estimated 48.3% of those who had served
 more than 5 years in prison were
 rearrested, compared to 59.0% or more
 those who had served less time.

**Table 16. Rearrest rates of State prisoners released in 1983,
 by length of criminal history and number of prior adult arrests.**

Number of adult arrest prior to release	Percent of State prisoners released in 1983, who were rearrested within 3 years, by length of criminal history ^a				
	12 months or less	13-24 months	25-60 months	61-120 months	More than 120 months
All released prisoners	50.9%	61.6%	68.0%	65.3%	64.3%
1 prior arrest	39.0%	37.5%	35.1%	22.8%	—
2-3	58.9	57.7	50.6	39.4	28.0
4-6	71.9	71.0	63.3	55.8	40.5
7-10	—	72.9	77.7	72.1	54.8
11 or more	—	—	82.2	83.8	75.7
Number of prisoners	18,921	9,779	22,437	27,537	31,541
Percent of all released prisoners	15.6%	9.0%	20.7%	25.4%	29.1%

Note: Cases with missing data on the number of prior adult arrests, date of birth, and date of most recent admission before release in 1983 were excluded.
 ...Too few cases to provide reliable estimates.

^aLength of criminal history is defined as the number of months from the first adult arrest to the most recent admission to prison before release in 1983.

Table 17. Rearrest rates of State prisoners released in 1983, by time served in prison

Time served in prison	Percent of all first releases	Percent of prisoners rearrested within 3 years following a first release
6 months or less	14.5%	61.2%
7-12	27.7	54.8
13-18	18.3	53.0
19-24	12.8	64.6
25-30	8.3	60.7
31-36	5.2	61.3
37-60	9.0	59.0
61 months or more	4.1	48.3

Note: A first released, as defined here, includes only those offenders leaving prison for the first time since beginning their sentence. It excludes those who left prison in 1983 but who had previously been released under the same sentence and had returned to prison for violating the conditions of release.
 Figures on time served are based on 65,263 cases.

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general, despite controls for the effects of prior record, age when released, age at first arrest, and type of offense for which released, no relationship was found between recidivism and length of time served in prison (table 18). Within each of the groups considered, differences in the likelihood of rearrest among those who served varying amounts of time in prison were inconsistent and often statistically insignificant. Though prisoners who had served more than 5 years had lower rates of rearrest, in order to make reliable comparisons, they were grouped with all those who had served more than 3 years.

Regardless of the length of time prisoners had served, the number of prior arrests, age when released, and age when first arrested as an adult remained strong predictors of recidivism. Further, with the exception of prisoners who had served between 19 months and 24 months, released property offenders had higher rates of rearrest than violent offenders. In every category of time served, released drug offenders had the lowest rates of rearrest.

Characteristics of prior record
 Prior violent arrests

Recidivism rates were related to the prevalence of violence in the prior record (table 19). An estimated 52.1% of all prisoners released in 1983 had been arrested for a violent crime before the crime for which they were released in 1983. Regardless of the offense category for which they were released, prisoners with a prior arrest for a violent offense had a greater likelihood of rearrest than other released prisoners. More than 68% of those with a prior violent arrest, compared to 56.2% of other prisoners, were rearrested within 3 years of their release.

Prior incarceration

Approximately 2 of every 3 released prisoners had previously been incarcerated in prison or jail for a crime other than the one for which they had served and were then released in 1983. Rearrest rates among prisoners who had been incarcerated before their most recent admission to prison were nearly 20 percentage points higher than the rates among prisoners who had been incarcerated for the first time.

Table 18. Rearrest rates of State prisoners released in 1983, by time served in prison and selected characteristics

	Percent of State prisoners released in 1983, who were rearrested within 3 years, by time served in prison					
	6 months or less	7-12 months	13-18 months	19-24 months	25-36 months	37 months or more
Number of prior adult arrests						
1 arrest	35.2%	42.9%	40.7%	41.9%	42.7%	25.6%
2-3	47.0	53.3	51.2	58.2	55.4	44.5
4-6	60.3	62.0	55.1	65.7	58.2	56.3
7-10	75.9	73.2	69.8	63.8	60.3	64.6
11 or more	81.2	82.7	82.0	78.5	75.3	72.7
Age when released						
19 or younger	72.8%	72.6%	81.4%	68.0%
20-24	63.7	68.1	65.7	71.9	68.9	64.1
25-29	60.8	66.4	65.1	62.8	63.8	62.9
30-34	81.1	68.0	59.6	67.6	60.9	58.5
35 or older	51.2	48.9	52.0	47.5	45.8	41.5
Age at first adult arrest						
17 or younger	78.6%	77.5%	77.0%	76.9%	70.7%	65.2%
18-19	63.1	70.0	68.2	68.1	64.7	65.0
20-24	55.1	56.1	52.2	60.2	54.2	44.0
25-29	39.7	44.9	40.1	38.2	25.9	15.1
30 or older	30.5	35.5	20.2	27.6	27.1	12.8
Most serious offense at release						
Violent	64.1%	61.5%	60.0%	68.5%	58.7%	53.9%
Property	65.4	69.5	69.4	68.5	68.8	64.8
Drug	45.0	53.3	45.8	50.6	43.1	47.2
Public-order	48.9	54.5	56.3	51.6	57.5	60.8

Note: Table includes only first releases with valid data on time served. Figures on numbers of prior arrests are based on 55,127 weighted cases; on age when released, 55,249; on age at first adult arrest, 54,877. ...Too few cases to provide reliable estimates.

Table 19. Rearrest rates of State prisoners in 1983, by most serious offense at release and selected characteristics of prior record

Characteristics of prior record	Percent of State prisoners released in 1983, and rearrested within 3 years, by most serious offense at release					
	Percent of all releases	All offenses	Violent	Property	Drugs	Public-order
All released prisoners	100.0%	62.5%	59.6%	68.1%	50.4%	54.5%
Prior arrest for a violent crime						
Yes	52.1	68.3	63.5	75.8	64.4	59.1
No	47.9	56.2	53.1	61.8	39.4	48.1
Prior incarceration						
Yes	67.1	69.1	67.3	72.7	62.8	57.7
No	32.9	48.1	47.6	56.7	29.3	45.8
Prior escape or revocation of probation or of parole^a						
Yes	39.9	73.1	70.3	76.1	67.8	68.3
No	60.1	55.5	54.8	61.2	41.3	44.4
Prior arrest for a drug offense^b						
Yes	37.9	68.6	68.1	76.3	53.2	65.1
No	62.1	58.8	55.2	64.2	40.0	49.4

Note: Percents of all releases are based on 108,580 weighted cases, that is, all persons released in 1983 who survived to 1987. ^aIncludes escape, absconding, absent without leave, revocation of parole, mandatory release, furlough, other conditional release or probation, and flight to avoid prosecution. ^bPrisoners whose most serious offense when released was a drug offense were coded "no" if there was no prior drug arrest.

Prior escape or revocation

Almost 40% of all prisoners released in 1993 had at some time in their past [redacted] from custody, been absent [redacted] at leave (AWOL) or had a prior parole or sentence to probation formally revoked. Approximately 73.1% of such prisoners were rearrested within 3-years followup period. Depending on the type of crime for which they had served time in prison, these prisoners had rearrest rates that were about 15 to 26 percentage points higher than the rates among prisoners with no prior revocation or history of escape or AWOL.

Prior arrest for a drug offense

Based on the most serious offense at their release, an estimated 9.5% of all prisoners had served time for a drug offense. However, this figure under estimates the extent of prior drug arrests among these prisoners. Nearly 38% of all released prisoners either had previously been arrested for a drug offense or had been incarcerated for drugs in conjunction with a more serious offense before their release in 1983.

Prisoners with one or more prior drug arrests were more likely than those without a prior drug arrest to be rearrested within the 3-year followup period (68.6% compared to 58.8%). In addition, within each offense category for which prisoners were released, a prior drug arrest was associated with a higher rate of rearrest.

The relative effect of selected risk factors

Numerous factors have been found to be related to the likelihood of rearrest. These factors were considered independently. With the exception of controls for the number of prior adult arrests and most serious offense for which released, the relationships among these risk factors and their relative contribution to the likelihood of rearrest have not been examined.

To avoid misinterpretation of the findings, the impact of each risk factor could be evaluated relative to that of other factors. Such a multifactor examination might or might not reveal,

for instance, that the higher rate of rearrest among certain types of property offenders than among violent offenders and drug offenders is the result of differences in the criminal histories or age composition of these offender groups rather than any unique attributes of the property offenders. In addition, the numbers of prior arrests, a prior revocation or escape, a prior incarceration, a prior arrest for a violent offense, or a prior drug arrest may not be uniquely related to the likelihood of rearrest. The effect of these factors may overlap, and some effects may be more important than others.

Logit analysis separates the effects of the risk factors by simultaneously controlling for the relationship between each factor and the likelihood of rearrest. In logit equations, one variable is considered dependent upon variation induced by others. The odds of rearrest (that is, the ratio of the number rearrested to the number not rearrested) for each combination of categories among risk factors is a multiplicative function of the effects of these factors. When transformed by logarithms, the effects of these factors are additive.³

Eight of nine risk factors examined here have independent net effects on the odds of rearrest (table 20). The length of criminal history has no statistically significant effect, primarily due to its close relationship to age when released and number of prior arrests. The effects of the remaining eight factors are reported in descending order of their overall net impact: age when released is found to have the largest impact, followed by the number of prior arrests, prior escape or revocation, most serious offense, prior incarceration, age at first arrest, prior violent arrest, and prior drug arrest. The effects of age at first arrest, prior arrest for a violent offense, and prior drug arrest, though statistically significant, are relatively weak (adding between 0.5% and 1.5 to the overall fit to the data) and may be excluded from the final equation.

The estimated effects, or logit coefficients, show more precisely the magnitude and direction of the effect that each category

³For an elaboration of logit analysis as well as other log-linear techniques, see G.E. Fienberg, *The Analysis of Cross-Classified Data* (Cambridge: MIT Press, 1977); or D. Knoke and O.J. Barck, *Log-linear Models* (Beverly Hills: Sage Publications, 1980).

Table 20. The relationship of selected risk factors to the odds of rearrest within 3 years

Factor	Logistic coefficient ^a	
	Initial	Final
Overall level of rearrest ^b	.354	.317
Age when released		
24 or younger	.661	.721
25-34	.017 ^c	.015
35 or older	-.678	-.736
Number of prior adult arrest		
1-3 arrests	-.472	-.582
4-6	-.066	-.112
7 or more	.568	.694
Prior escape of revocation of probation or of parole		
Yes	.232	.224
No	-.232	-.224
Most serious offense for which released		
Robbery, burglary, larceny, motor vehicle theft, or stolen property	.179	.178
Other offenses	-.179	-.178
Prior incarceration		
Yes	.155	.175
No	-.155	-.175
Age at first arrest		
17 or younger	.178	-
18-20	-.028 ^c	-
21 or older	-.152	-
Prior arrest for a violent offense		
Yes	.117	-
No	-.117	-
Prior arrest for a drug offense		
Yes	.068	-
No	-.068	-

Note: Coefficients are based on an equation in which the log of the odds of rearrest is predicted for each combination of categories among risk factors. Age at first arrest, prior violent arrest, and prior drug arrest are excluded from the final equation because they contribute only slightly to the overall fit of the equation. The final equation accounts for 85.1% of the change in the likelihood chi-square statistic from a baseline model of no effects (not shown).
^aNot statistically significant.
^bExcluded from the final prediction equation.
^cRepresents deviations from the overall level of rearrest.
^dRepresents the mean of the log odds in all cells of the cross-classification of risk factors.

among the risk factors has on the likelihood of rearrest. A positive coefficient implies an increase in the predicted logarithm of the odds (or log odds) of rearrest; a negative coefficient implies a decrease. The contribution to the predicted log odds of rearrest by prisoners who were age 24 or younger (.721) is larger than that by those with 7 or more prior arrests (.694), which in turn is larger

in that by those with a prior escape or location (.224), those released after serving time for a high-risk offense (.178), and those with a prior incarceration (.175).

Together the coefficients imply that individuals with all five of the high-risk characteristics have more than a 10-to-1 odds of rearrest. To calculate these odds exactly, the coefficient for the overall level of rearrest and for each category are summed (for example, $.721 + .694 + .24 + .178 + .175 + .317$ (a constant) = 3.09). The inverse of the natural logarithm of this sum provides an estimate of the odds, or 10.064 to 1. In terms of the predicted percent rearrested, these odds imply that 90.4% of the prisoners with these five characteristics will be rearrested within 3 years.

Estimates for released prisoners with other combinations of these five risk factors may also be computed. Individuals with the lowest risk of rearrest, for instance, are those who are age 35 or older, who had three or fewer prior arrests, who have no prior escape or revocation, who served time for a low-risk offense, and who have been previously incarcerated. The predicted odds of rearrest for this low-risk group is .208 to 1, or 17.1%. The odds of rearrest for prisoners with other combinations of risk factors will vary between 17.1% and 90.4%.

The finding reveals that the odds of rearrest are predictable from each of the five factors. However, the finding do not suggest that the risk factors excluded from the equation are either statistically or substantively insignificant. Each is strongly related to the likelihood of rearrest but also related to one or more of the factors in the final equation. Age at first arrest, for instance, is related to both current age and the number of prior arrest. No attempt has been to specify further the relationships among these factors. The final equation simply identifies the factor with the largest net effect on arrests.

Overall, these findings should not be used to predict the future behavior of any individual; however, they may be used to estimate the likelihood of rearrest for specific groups of released prisoners that are identified by particular characteristics. When interpreting these finding, the

difference between risk assessment and the prediction of individual behavior must be kept in mind.⁴ The statistical test of the final equation was not based on the prospective number of "right" or "wrong" predictions from the classification of individuals on these characteristics. The equation merely provides an assessment of risk posed by released prisoners with specific characteristics.

Methodology

Sample description

A sample of prisoners released in 1983 was obtained from records submitted by participating States in the National Corrections Reporting Program (NCRP). Individual corrections records were linked with records of arrests and prosecutions (rap sheets) maintained by the criminal identification bureaus in the 11 States. Rap sheet data on offenders who were arrested in more than one State were obtained from the Federal Bureau of Investigation.

The States represented in the sample were California, Florida, Illinois, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, and Texas.

State and Federal rap sheets were found for 16,355 of the 18,374 prisoners in the original sample. Excluding the 159 prisoners who died during the followup period, complete records were obtained for 90% of the original sample. Most of the sampled prisoners with incomplete records did not have an FBI identification number in their corrections record or on the State rap sheet. Without this number, FBI rap sheets could not be obtained. There was no evidence of any systematic difference between those persons with complete records and those lacking either a State or FBI rap sheet.

Findings in this study are representative of an estimated 108,580 prisoners who were released in the 11 States and who were alive in 1987. Only released prisoners with sentences to State prison of greater than 1 year are included. Administrative releases, prisoners who were absent

⁴See L.W. Shannon, "Risk Assessment vs. Read Prediction: The Prediction Problem and Public Trust," *Journal of Quantitative Criminology* (June 1985) 1(2):159-182.

without leave (AWOL), escapees, transfers, releases on appeal, and those who died in prison are excluded from the sample.

A separate, self-representing sample of male and female prisoners was drawn within each of the participating States, except Minnesota, in which all released prisoners were selected. Within each gender group in the 10 sampled States, prisoners were grouped into 24 strata that were defined by categories of race, age, and type of offense. Prisoners were selected systematically from each strata to yield independent samples of males and females within each State.

To adjust for differences in the sampling rate among State and for differences among strata in the coverage of rap sheets, a series of weights were introduced. The weights were applied so that individuals in each State and stratum were properly represented in the combined 11-State sample.

Comparison with the 1983 NCRP

Eight of the 11 selected States, excluding Florida, New Jersey, and New York, were among the 29 States participating in the 1983 National Corrections Reporting Program. Released prisoners in the 11 States closely resembled all those reported in the NCRP (Appendix table). The sex, race, age, and offense distributions were nearly identical in both groups of States. A slightly higher percentage of prisoners in the NCRP States than in the 11-State sample had served 6 months or less before their release in 1983 (16.8% compared to 14.5%). However, the difference may reflect longer time served by prisoners in Florida, New Jersey, and New York rather than sampling error.

Precision of the sample

Overall, the 95% confidence interval for the percent of all released prisoners who were rearrested within 3 years (62.5%) was approximately plus or minus 1 percentage point. The precision of other estimates varied by item, size of the estimate, and sample size for each group. The precision of estimates of the percent rearrested based on 1,000 sampled

prisoners, for example, varied between 1% and 3.5%, depending on the percent rearrested.

Additional details on the sampling procedures and precision of the sample are available upon request. Unless otherwise noted, differences cited in the text between groups of released at the 95% confidence level.

Coverage of criminal-history files

Criminal-history information maintained by the State identification bureaus and the FBI includes all felonies and serious misdemeanors. These files exclude arrests and court actions, involving charges such as drunkenness, vagrancy, disturbing the peace, curfew violation, loitering, false fire alarms, unspecified charges of suspicion or investigation, and traffic violations (except manslaughter, driving under the influence of drugs or liquor, and hit and-run, which are included in the files).

Information on offenses committed by juvenile offenders is not reported in the rap unless the offender was charged or tried in court as an adult. Consequently, figures presented in this report refer to adult arrests only.

Arrests for serious offenses are not always recorded in the criminal-history files, largely because of the absence of readable fingerprint cards. To correct for this underreporting, incarceration records lacking prior arrest records were counted as arrests in the calculation of rearrest rates, time to first rearrest, and the number of prior adult arrests.

Offenses

The offenses reported in the criminal-history files were recorded following definitions outlined in *BJS Crime Definitions*, which is available upon request. For each arrest in the files, the total number of charges and counts was recorded. However, the type of charge, disposition, and sentence were coded on a maximum of six charges per arrest. For prisoners released in 1983 after serving time in prison for more than one offense, the offense with the longest sentence was defined as the most serious.

Appendix table. Comparison of 11-State sample with 29 States in the 1983 National Corrections Reporting Program (NCRP), by characteristics of released prisoners

Selected characteristic	Percent of all prisoners released in 1983	
	11-State sample	29 States in NCRP
Sex		
Male	94.1%	93.2%
Female	5.9	6.8
Race		
White	54.1%	54.2%
Black	45.1	44.8
Other	.8	1.0
Age		
17 or younger	.5%	.5%
18-24	35.0	35.4
25-29	26.5	26.5
30-34	17.7	17.1
35-39	8.3	8.3
40-44	4.8	4.9
45 or older	6.2	6.3
Most serious offense for which released		
Violent	34.6%	32.5%
Property	48.3	51.0
Drugs	9.5	8.2
Public-order	6.4	6.9
Other	1.1	1.3
Time served in prison before release^a		
6 months or less	14.5%	18.8%
7-12	27.7	27.3
13-18	18.3	17.3
19-24	9.2	12.3
25-30	8.3	7.5
31-36	5.2	5.0
37-60	9.0	9.0
61 months or more	4.1	4.8
Number of released prisoners^b	106,580	120,358
Percent of all released State prisoners, nationwide	57.3%	62.9%

Note: Data include only those prisoners who had sentences longer than 1 year and who were released from correctional custody in 1983. Administrative releases, AWOLs, escapes, transfers, releases on appeal, and death were excluded.
^aBased on first-release only.
^bThe 11-State sample includes only released prisoners in 1983 who were alive in 1987; for the NCRP States, all prison releases are included. Figures for the 11-State sample are based on weighted data.

Bureau of Justice Statistics
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