

ARIZONA INMATE RECIDIVISM STUDY

Executive Summary

May 2005

Over the last three years, Research Unit staff in the Arizona Department of Corrections have been involved in a broad-based study of recidivism among inmates released from the department. While the original purpose of the study was to evaluate inmate rehabilitation programs, the study eventually expanded to include the development of instruments designed to predict future recidivism and violence. In fact, general and violence risk assessments (recidivism predictions) are now available on all inmates in custody as well as offenders released to community supervision. These two assessments are now being used to help set supervision levels for offenders released to supervision, and will also be instrumental in the department's new plan for future inmate programming. The purpose of this executive summary is to provide an overview of study parameters and of the major results drawing from the study to-date.

Study Parameters

The study examined 54,660 inmates released from department facilities over the period 1990-1999. The study cohort (population) included all inmates released for the first time on a given sentence, with or without community supervision, but only releases to the streets of Arizona. These criteria excluded 1) inmates released to supervision or custody in other states and jurisdictions, 2) inmates released to detainers, 3) inmates released when the sentence imposed by the court was vacated, 4) inmates released to probation following participation in the Department's former Shock Incarceration Program, and 5) inmates released to probation following a mandatory flat term of 4-8 months in the Department imposed as a condition of probation. These groups of released inmates are judged to have a systematically reduced likelihood of return to custody with a new felony conviction. The remaining population of 54,660 releases is considered to be the "mainstream" of releases from the department over the period in question. The period of releases examined (1990-1999) was selected to provide a minimum 3-year follow-up period for each study participant. It was necessary to go as far back as 1990 in order to generate a large enough cohort (54,660) to allow an evaluation of program effectiveness for individual program categories being examined in the evaluation component of the study. Initially, the study tracked inmates only as far as December 31, 2002. This provided the minimum three-year follow-up period mentioned above. However, in the last few months that follow-up has been extended through December 31, 2004, so that the minimum follow-up period is now five years.

The follow-up portion of the study determined for each length of follow-up: 1) whether or not the offender returned to the custody of the department for any reason, either with a new criminal commitment or as a technical violator of release conditions, 2) whether or not the offender was recommitted to the department by the court, 3) whether or not the offender acquired a new felony conviction that would result in recommitment to the department by the court, 4) whether or not the offender acquired a new felony conviction for a violent crime that would result in recommitment to the department by the court, 5) whether or not the offender committed a new felony offense that would eventually result in recommitment to the department, 6) whether or not the offender committed a new violent felony offense that would eventually result in recommitment to the department, and 7) the length of time from release to return to custody.

Recidivism rates were developed for a wide range of inmate categories, e.g., by gender, age at admission and release, current offense category, extent of criminal history, etc. In addition, rates were generated for follow-up periods in increments of six months, i.e., for 6 months, 12 months, 18 months, etc., up to the maximum follow-up period available for any inmate. Since the maximum length of follow-up available for any inmate varied depending on when the inmate was released, i.e., inmates released more recently had a shorter maximum follow-up period, any particular inmate was represented in a recidivism rate only if the length of his or her follow-up was at least of the stated length. For instance, inmates released in the latter half of 1998 had a maximum follow-up period of six years, hence were not represented in recidivism rates based on a 7-year follow-up.

Some recidivism rates refer to the commission or conviction for a new “violent” felony offense. Such offenses include the following: homicide, kidnapping, sex offenses, robbery, aggravated assault, child abuse, first degree burglary, arson of an occupied structure, stalking, harassment, threatening, and weapons offenses.

Finally, it should be emphasized that the recidivism data generated for this study did not reflect criminal activity after release which may have occurred outside of the state of Arizona or which constituted a violation of federal statutes. Such activities could not have resulted in return to the department’s custody. Due to this fact, the recidivism rates generated for the study are incomplete to an extent. However, based on the results of a national study of recidivism, it is likely that at least 90% of actual recidivism by inmates in the study was picked up by the study methodology. Finally, it is the case that some inmates are represented more than once in the study population. This would occur if the inmate was released more than one time as a first release during the period 1990-1999.

Recidivism Rates for All Released Offenders

The following results are based on a 3-year follow-up and may be considered to provide a general summary of recidivism among released offenders. The 3-year follow-up was selected inasmuch as three years is the follow-up recommended and used by federal authorities for their recidivism studies.¹ The 3-year follow-up period provides a long enough time frame for most offenders to commit new crimes and be convicted of and sentenced for them, yet is not so long as to lose the logical link with activities (e.g., programming) occurring during the period of incarceration.

Among 54,660 inmates released over the period 1990-1999:

- ✓ **42.4%** returned to ADC custody for any reason
- ✓ **24.5%** returned to ADC custody with a new criminal commitment*
- ✓ **23.2%** acquired a new felony conviction resulting in recommitment
- ✓ **5.9%** acquired a new felony conviction for a violent crime resulting in recommitment
- ✓ **30.9%** committed a new felony offense resulting in recommitment
- ✓ **7.9%** committed a new violent felony offense resulting in recommitment

*Some offenders are recommitted for a crime committed in the past, before their release, hence, although recommitted, would not be counted as having a new felony conviction. Some offenses are not detected and tried until years after they are committed, e.g., sex crimes.

¹ Recidivism of Prisoners Released in 1994, Special Report, Bureau of Justice Statistics, U.S. Department of Justice, June 2002.

Recidivism Rates as a Function of Time

It is useful to consider how recidivism rates increase with time and how high recidivism rates can get when follow-up periods are extended well beyond three years.

Returned to ADC Custody for Any Reason

17.4% within 6 months
26.6% within 12 months
32.3% within 18 months
36.5% within 24 months
39.7% within 30 months
42.4% within 36 months
44.6% within 42 months
46.5% within 48 months
48.0% within 54 months
49.2% within 60 months
49.9% within 66 months
50.5% within 72 months
51.0% within 78 months
51.1% within 84 months
51.3% within 90 months
51.7% within 96 months
52.0% within 102 months
52.3% within 108 months
52.5% within 114 months
52.6% within 120 months

Return to ADC Custody with a New Criminal Commitment

1.6% within 6 months
5.9% within 12 months
11.1% within 18 months
16.1% within 24 months
20.5% within 30 months
24.5% within 36 months
28.0% within 42 months
30.8% within 48 months
33.1% within 54 months
34.8% within 60 months
36.3% within 66 months
37.5% within 72 months
38.4% within 78 months
39.1% within 84 months
39.8% within 90 months
40.4% within 96 months
40.9% within 102 months
41.5% within 108 months
42.0% within 114 months
42.2% within 120 months

Acquired a New Felony Conviction Resulting in Recommitment

1.2% within 6 months
5.2% within 12 months
10.3% within 18 months
15.2% within 24 months
19.4% within 30 months
23.2% within 36 months
26.6% within 42 months
29.5% within 48 months
32.0% within 54 months
34.1% within 60 months
35.9% within 66 months
37.4% within 72 months
38.6% within 78 months
39.7% within 84 months
40.8% within 90 months
41.8% within 96 months
42.6% within 102 months
43.5% within 108 months
44.4% within 114 months
44.9% within 120 months

Acquired a New Felony Conviction for a Violent Crime Resulting in Recommitment

1.6% within 6 months
3.4% within 12 months
4.8% within 18 months
6.0% within 24 months
7.1% within 30 months
7.9% within 36 months
8.7% within 42 months
9.5% within 48 months
10.1% within 54 months
10.6% within 60 months
11.0% within 66 months
11.5% within 72 months
11.9% within 78 months
12.2% within 84 months
12.7% within 90 months
13.0% within 96 months
13.3% within 102 months
13.6% within 108 months
13.9% within 114 months
14.0% within 120 months

Committed a New Felony Offense Resulting in Recommitment

7.3% within 6 months
14.2% within 12 months
19.8% within 18 months
24.4% within 24 months
28.1% within 30 months
30.9% within 36 months
33.4% within 42 months
35.4% within 48 months
37.0% within 54 months
38.3% within 60 months
39.4% within 66 months
40.5% within 72 months
41.3% within 78 months
42.1% within 84 months
43.0% within 90 months
43.8% within 96 months
44.3% within 102 months
45.1% within 108 months
45.8% within 114 months
46.1% within 120 months

Committed a New Violent Felony Offense Resulting in Recommitment

1.6% within 6 months
3.4% within 12 months
4.8% within 18 months
6.0% within 24 months
7.1% within 30 months
7.9% within 36 months
8.7% within 42 months
9.5% within 48 months
10.1% within 54 months
10.6% within 60 months
11.0% within 66 months
11.5% within 72 months
11.9% within 78 months
12.2% within 84 months
12.7% within 90 months
13.0% within 96 months
13.3% within 102 months
13.6% within 108 months
13.9% within 114 months
14.0% within 120 months

The results of the extended follow-up indicate that 33.4% of all offenders returning to ADC custody do so within six months, 51.0% within one year, 81.2% within three years, and 94.2% within five years. Additionally, of those acquiring a new felony conviction resulting in recommitment to ADC, 33.9% do so within two years, 51.8% within three years, and 75.9% within five years.

Recidivism Rates for Selected Offender Categories

The following breaks out across a variety of offender categories the particular recidivism rate defined as “new felony conviction resulting in recommitment to ADC within three years of release.”

Gender

24.3% Male
14.7% Female
23.2% All Inmates

Age at Release

42.5% 0-19
28.5% 20-24
26.4% 25-29
24.0% 30-34
20.8% 35-39
17.2% 40-44
12.8% 45-49
9.2% 50-54
8.5% 55-59
7.9% 60-64
3.0% 65+

Committing Offense Category

27.6% Property Offenses
27.3% Public Order Offenses
21.6% Violent Offenses
21.4% Drug Offenses
17.1% DUI
9.7% Sex Offenses*

*The individual offense with the lowest recidivism rate is child molestation at 4.6%.

Confinement History

17.3% No Prior Confinement
27.1% One Prior Confinement
34.5% Two or More Prior Confinements

Suspected or Validated Prison or Street Gang Membership

20.4% No Suspected or Validated Membership
51.9% Suspected or Validated Membership

Recidivism Rates by Offender Risk Assessment

Offender risk assessments are instruments developed by combining known good predictors of recidivism and violence. They are used to ensure that an offender's level of supervision in the community is commensurate with the risk he or she poses to the public. The risk assessment instruments developed as a result of this study are based on the following proven recidivism and violence predictors: gender, age at admission, age at release, adult criminal history, juvenile adjudication history, narcotics use history, gang affiliation status, nature of current and prior committing offenses, violent institutional misconduct, and custody level at release. The following shows how well these instruments work to predict recidivism in our study population:

New Felony Conviction Resulting in Recombitment within 3 Years of Release

8.0% G1 = Lowest General Recidivism Risk
15.1% G2
19.6% G3
29.6% G4
36.1% G5
48.1% G6
58.6% G7
70.0% G8 = Highest General Recidivism Risk

New Violent Felony Conviction Resulting in Recombitment within 10 Years of Release

3.3% V1 = Lowest Violence Risk
5.1% V2
8.9% V3
13.1% V4
19.6% V5
24.2% V6
33.7% V7
41.8% V8
57.6% V9 = Highest Violence Risk

The following shows the number and percent of cases in the study population of 54,660 who were categorized at each level of general and violence risk:

General Risk of Recidivism

G1: 14,927 (27.3%)
G2: 11,564 (21.2%)
G3: 8,467 (15.5%)
G4: 5,070 (9.3%)
G5: 7,138 (13.1%)
G6: 4,604 (8.4%)
G7: 1,892 (3.5%)
G8: 998 (1.8%)

All Levels: 54,660 (100.0%)

Risk of Violent Recidivism

V1: 9,822 (18.0%)
V2: 10,815 (19.8%)
V3: 9,669 (17.7%)
V4: 8,105 (14.8%)
V5: 6,620 (12.1%)
V6: 5,265 (9.6%)
V7: 1,946 (3.6%)
V8: 1,933 (3.5%)
V9: 485 (0.9%)

All Levels: 54,660 (100.0%)

Statistical analysis using the Mean Cost Rating (MCR) methodology shows that both of these instruments correlate about 0.50 with the criterion they were developed to predict. This level of predictive accuracy is well above the minimum standard of 0.25 for the validity of a risk assessment device, indicating that the instruments are suitable for use in screening released offenders into risk-based supervision levels.

For purposes of interpreting the results given above, two risk assessments may be collapsed into three broad categories of risk as follows:

G1, G2 = Low General Risk
G3, G4 = Medium General Risk
G5-G8 = High General Risk

V1, V2 = Low Violence Risk
V3, V4, V5 = Medium Violence Risk
V6-V9 = High Violence Risk

These levels correlate roughly with the three supervision levels for released offenders, with low risk offenders receiving minimum supervision, medium risk offenders medium supervision, and high risk offenders maximum or intensive supervision.

Inmate Program Evaluation Results

Analysis of patterns in recidivism rates shows that rehabilitation programs offered by the department reduce recidivism rates by an average of 25%. This means that, for inmates of comparable risk of recidivism, those who participate in inmate programs in the areas of work, academic education, vocational education, and substance abuse record 25% lower recidivism rates than do inmates who do not participate in these programs. Among all the programs examined, prison industry programs proved to be the most effective, reducing recidivism by approximately 34%. Substance abuse programs also tended to work better at reducing recidivism than did other programs.