

# **Criminal Justice Kentucky Treatment Outcome Study**



**FY2011 Follow-Up Report**

**November 21, 2011**

Criminal Justice  
Kentucky Treatment Outcome Study  
(CJKTOS)

FY 2011 Follow-up Report  
(n=350)

November 28, 2011

Report prepared for:

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## **ACKNOWLEDGEMENTS**

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This report was prepared with the support of the Kentucky Department of Corrections. The authors of this report would like to thank corrections-based substance abuse program administrators and treatment counselors, prison case workers, pre-release coordinators, wardens, jailers, and probation and parole officers across the state for their support of the Criminal Justice Kentucky Treatment Outcome Study (CJKTOS) and their collaboration to help make the study possible. In addition, we would like to thank the study participants for their time and willingness to complete the interviews.

## CJKTOS Executive Summary FY 2011

The Criminal Justice Kentucky Treatment Outcome Study (CJKTOS) focuses on substance abuse outcomes of offenders participating in corrections-based substance abuse treatment programs in Kentucky's prisons and jails. This report includes follow-up data collected during FY2011 for 350 participants who entered treatment in Kentucky's prisons or jails, participated in an intake interview by treatment counselors in the corrections-based substance abuse treatment programs using personal digital assistants (PDAs) at treatment intake, and were followed 12 months later in the community following their release. This report provides data collected from July 1, 2010 to August 30, 2011.

### This report includes the following highlights:

- ✚ Treatment participants are mostly male (62%) and about 34 years old. Over three-fourths (79%) are white and 40% are single, never married. Over two-thirds (69%) have a GED or 12 or more years of education.
- ✚ Eighty percent of treatment participants were *not* re-incarcerated in the 12 months after release (82% for those who received substance abuse treatment in jail and 77% who received prison treatment).
- ✚ Participants who were re-incarcerated during the 12 months following release were out in the community an average of 6.6 months before re-incarceration. Of those returned to custody, the majority were for parole violations. Only 23 individuals (6.6% of the total-released participants) were returned to custody due to new criminal offenses.
- ✚ Self-reported illegal drug use during the 12 month post-release period decreased by 60% for jail treatment and 54% for prison treatment from pre-incarceration reports of drug use.
- ✚ Most treatment participants (82% for jail and 85% for prison) reported attending AA/NA meetings in the 12 months after release and 19% of jail and prison treatment participants reported entering community treatment after release.
- ✚ Estimates indicate that the victim crime cost offset of jail and prison substance abuse treatment during FY2010 saves an average of \$11,254 per year per substance abuse treatment participant.

## Introduction

The Kentucky Department of Corrections (DOC) expanded its substance abuse treatment programs. Inmates with a substance abuse history have the option to enter corrections-based treatment programs if they have at least 6 months left to serve before parole or release from the prison. Kentucky correctional programs are grounded in key elements of therapeutic community (De Leon, 2000) approaches that include incentives for positive participation and disincentives for negative behavior, and peer-oriented approaches which use the Recovery Dynamics curriculum. Currently there are 29 corrections-based substance abuse treatment programs in Kentucky with a capacity of 2,289. Eight prisons offer substance abuse treatment programs serving a capacity of 1,032 clients (See Appendix A for sites). Other state programs include offender substance abuse treatment in KY Recovery Centers and community treatment programs.

The Criminal Justice Kentucky Treatment Outcome Study (CJKTOS) was developed and implemented in April 2005 to 1) describe substance abusers entering treatment in Kentucky's prison and jail-based programs, and 2) to examine treatment outcomes 12 months post-release. The data collection instrument was modified from the Kentucky Substance Abuse Treatment Outcome Study, which has been used since 1996. The CJKTOS study is a baseline and 12 month follow-up design which is grounded in established substance abuse outcome studies (i.e., Hubbard et al., 1989; Simpson, Joe, & Brown, 1997; Simpson, Joe, Fletcher, Hubbard, & Anglin, 1999). Kentucky prison and jail-based program staff collect assessment data within the first two weeks of a client's admission to substance abuse treatment using personal digital assistants (PDAs). Few states use a PDA to collect data which is integrated into traditional clinical assessment (Staton-Tindall, et al., 2009). Benefits of the PDA as a data collection program include: it can be used *anywhere*, it needs only a modem and phone line to send in data, it saves time when compared to paper forms, it corrects minor errors programmatically to keep data accurate, and it is unobtrusive when interviewing a client. Department of Corrections treatment providers also obtain informed consent and contact information which is used by the University of Kentucky to locate treatment participants for 12 month follow-up interviews post-release. All data are collected and stored in compliance with the University of Kentucky IRB and HIPAA regulations, including encrypted identification numbers, and abbreviated birthdays (month and year) to secure confidentiality of protected health information.

## Method

The 12-month follow-up study was conducted by the University of Kentucky Center on Drug and Alcohol Research. Treatment participants were eligible for inclusion in the follow-up sample if they 1) consented to participate in the follow-up, 2) were released from a jail or prison facility within the specified timeframe, and 3) provided locator information of at least one community telephone number and address. A group of eligible treatment participants were selected for follow-up after stratification by prison or jail. Due to the small number of females released during the specified time frame, all were included in the sample. Using the same proportion from each correctional setting (prison or jail) as those meeting eligibility criteria, a final sample of 350 was included in the follow-up. The proportionate stratification approach used in this study produces estimates that are as efficient as those of a simple random selection (Pedhazur & Schmelkin, 1991).



UK research staff began to locate treatment participants for follow-up at 10 months post-release with a target interview date at 12 months post-release. A participant was considered ineligible for follow-up if he or she was not located 14 months after release. Locator methods included mailing letters and flyers, phone calls, collaborating with parole officers, and internet searches. All 350 treatment participants completed interviews by phone, and all data provided is self-reported by the participants.

A total of 1,307 clients who completed a CJKTOS baseline were released from custody in FY 2010. Having a release date is considered the point of entry into the follow-up study sampling frame because the outcome data focuses on behaviors during the re-entry phase following custody. The CJKTOS follow-up rates are presented in Table 3. Of those 1,307 CJKTOS clients who were released from custody in FY2010, 166 did not consent to participate in the follow-up study. Of the 1,141 research treatment participants who were eligible for follow-up (released in FY10 and voluntarily consented for follow-up), follow-up interviews were completed with a stratified random sample of 350 treatment participants, which is 31% of those who consented and were released from the correctional facility. Of the number randomly sampled for follow-up (n=438), 15 were ineligible because at the time they were located for follow-up, staff learned that 11 participants moved out of state and 4 participants were deceased according to their family reports and verified by Kentucky vital statistics. Of the 423 eligible treatment participants, 350 treatment participants were successfully located and interviewed, for a follow-up rate of 83%. Of the possible participants who were not interviewed, 13 (3%) refused to participate in the follow-up interview and 60 (14%) were unable to be located (i.e. absconded or not under supervision) or would not return UK staff's phone calls.

**Table 3. FY 2011 Follow-up Rates for Clients Who Consented to Follow-up and Were Randomly Selected for Follow-up (n=350)**

|  | Eligible   | Completed  | Percentage |
|--|------------|------------|------------|
| Jail Sample  | 230        | 186        | 81%        |
| Males  | 165        | 137        | 83%        |
| Females  | 65         | 49         | 75%        |
| Prison Sample  | 208        | 164        | 79%        |
| Males  | 102        | 81         | 79%        |
| Females  | 106        | 83         | 78%        |
| <b>Total</b>   | <b>438</b> | <b>350</b> | <b>80%</b> |
| Ineligible for follow-up (11 participants who moved out of state and 4 deceased) | 15         |            |            |
| <b>Final Total</b>   | <b>423</b> | <b>350</b> | <b>83%</b> |
| Refusals   | 13         |            | 3%         |
| Unable to locate   | 60         |            | 14%        |



### Report Format

This CJKTOS follow-up report includes 12 month post-release follow-up data for a stratified random sample of 350 substance abuse treatment participants (186 jail treatment participants and 164 prison treatment participants) released during FY2010. This data collection focuses on client self-reported substance use and other behaviors. Comparisons used in this report are between treatment participants' self-reported substance use "on the street" in the 12 months *before they were incarcerated* (baseline) and treatment participants' self-reported use "on the street" *12 months after release* (follow-up). McNemar's test for correlated proportions is used to examine statistical differences in the proportion of clients who reported substance use at baseline compared to follow-up. In addition, substance abuse treatment utilization and criminal justice involvement during the 12 months post-release is also included, as well as indicators of costs associated with victim crime.

### Demographics

As shown in Table 4, the follow-up sample was very similar to CJKTOS treatment participants who were released but not randomly selected, which suggests that findings can be generalized to other treatment participants released from custody. The one exception is gender. Due to the small number of females released in FY2010, all the females who were released were included in the follow-up study. Participants are mostly male (62.0%) with an average age of about 34 years old. More than three-quarters (79.4%) are white and 40% are single and never married. Over two-thirds (69.4%) reported having a GED or 12 or more years of education, as shown in Table 4.

**Table 4. Demographic Characteristics of Follow-up Sample (n=350) Compared to All Consenting CJKTOS Treatment Participants Released in FY2010**

|                | Enrolled in Follow-up Study                | Consenting CJKTOS participants      |
|----------------|--|-------------------------------------|
| Average Age    | 33.9 (range 19 to 61)                      | 33.0 (range 18 to 61)               |
| Race/ethnicity | 79.4% white                                | 70.9% white                         |
| Gender         | 62.0% male                                 | 87.0% male                          |
| Education      | 69.4% GED or 12 or more years of education | 72.0% GED or 12+ years of education |
| Marital Status | 40.0% Single, never married                | 46.1% Single, never married         |
|                |  |                                     |

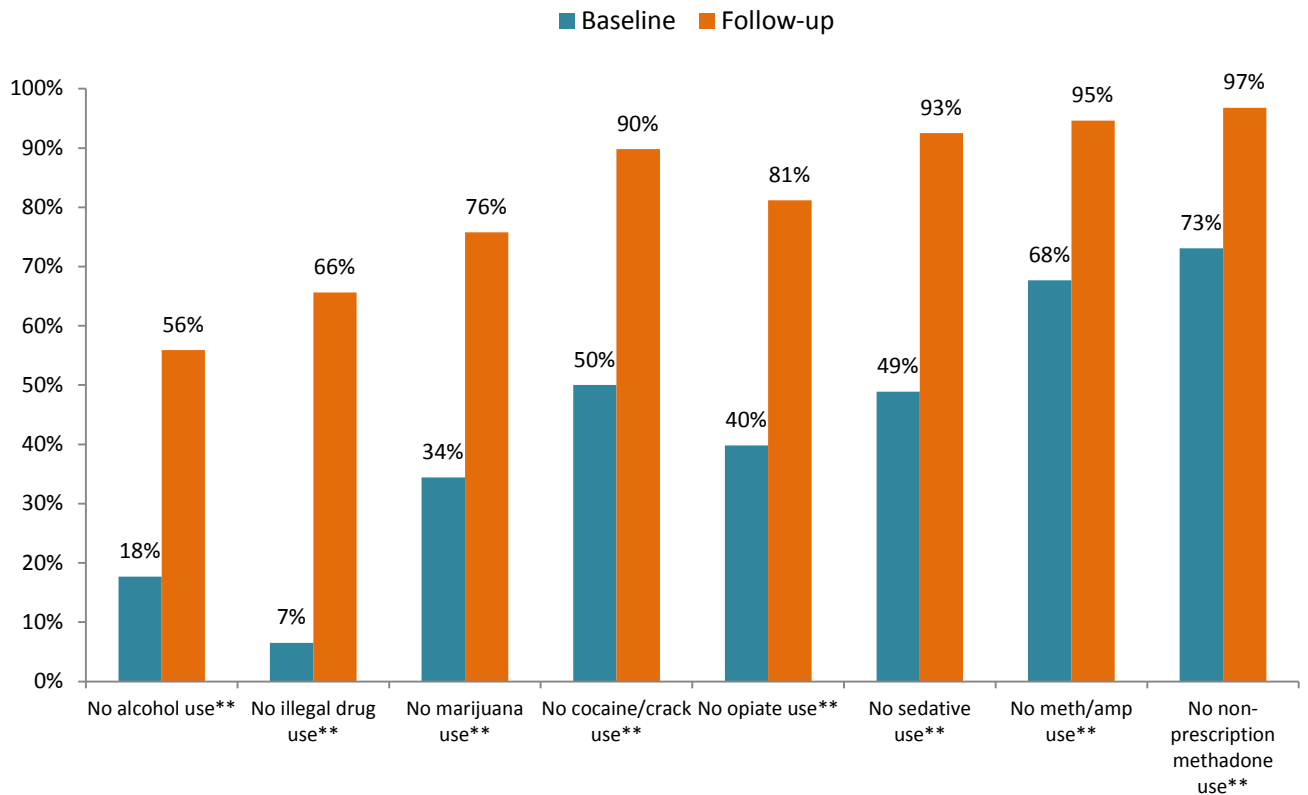


### Self-Reported Abstinence at 12-Months Post Release

#### Jail-based participants

The percent of jail-released treatment participants who reported past 12 month abstinence was 66% at follow-up compared to 6.5% at baseline. As noted in Figure 3, the increase in abstinence for all substances for jail released treatment participants was statistically significant at  $p < .001$ .

**Figure 3. Increase in Percent of Jail-released Treatment Participants Reporting Abstinence (No Use) from Baseline to Follow-up Previous 12 Months (n=186)**

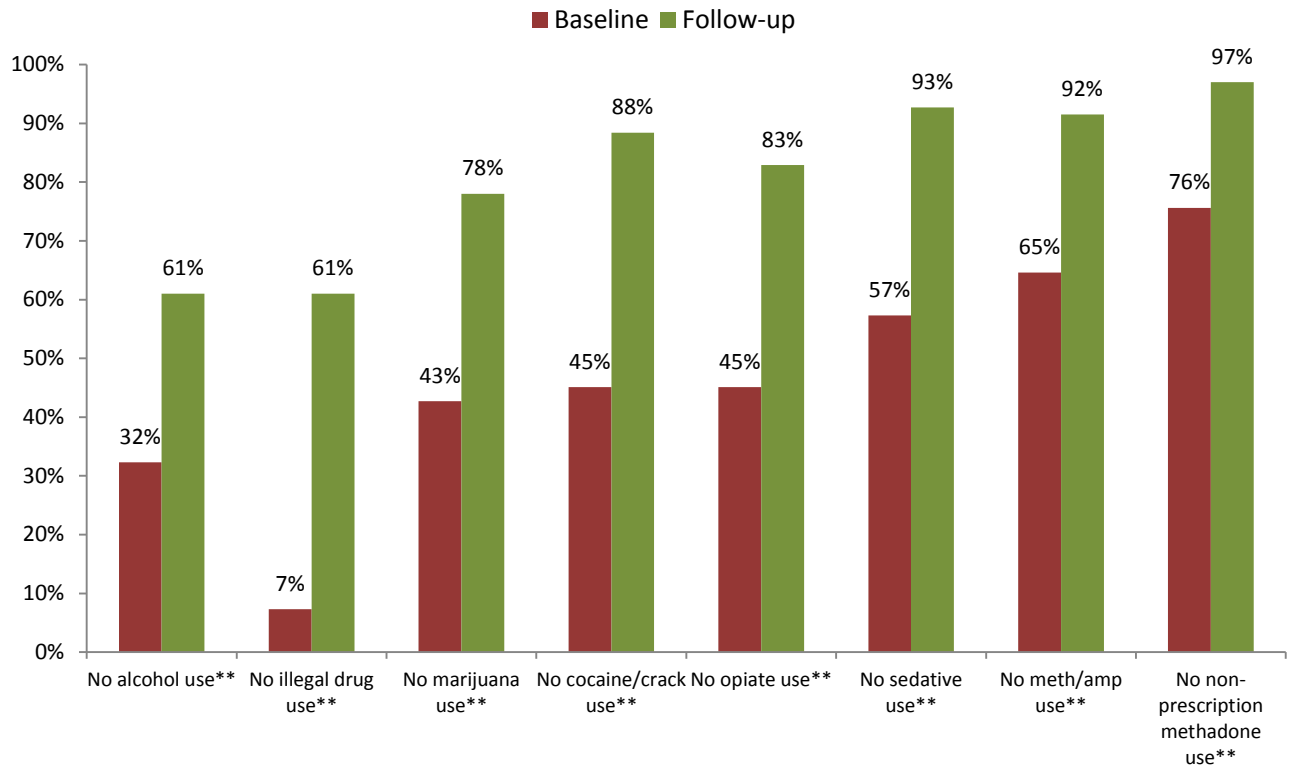


Note: Significance established using McNemar's test for correlated proportions, \*\* $p < .001$

*Prison-based participants*

The percent of participants who received substance abuse treatment in prison who reported past 12 month abstinence was 61% at follow-up compared to 7% at baseline. As shown in Figure 4, the increase in abstinence for all substances for prison-released treatment participants was statistically significant at  $p < .001$ .

**Figure 4. Increase in Percent of *Prison-released* Treatment Participants Reporting Abstinence (No Use) from Baseline to Follow-up Previous 12 Months (n=164)**



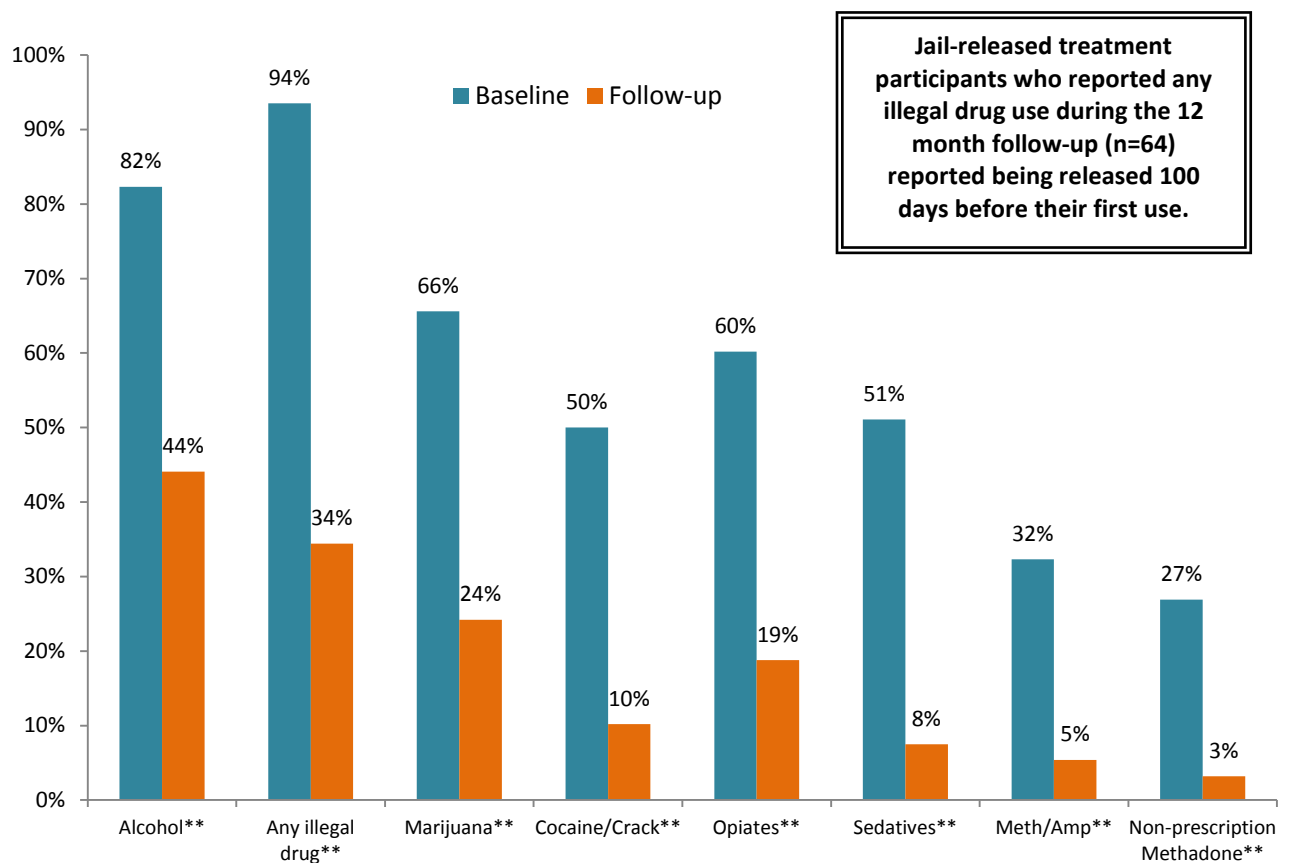
Note: Significance established using McNemar's test for correlated proportions, \*\* $p < .001$

## Substance use

### Jail-based participants

The percent of participants who received substance abuse treatment in jails who reported any past 12 month illegal drug use at follow-up decreased by 60% (from 94% at baseline to 34% at follow-up). As shown in Figure 5, there was a statistically significant decrease in self-reported substance use for jail-released treatment participants ( $p < .001$ ) for all substances. Also, a greater percent of participants reported opiate use at baseline (60%) compared to cocaine/crack use (50%). Another notable finding is that over a quarter of participants (27%) reported using non-prescription methadone at baseline. Jail-released treatment participants who reported any illegal drug use during the 12 month follow-up ( $n=64$ ) reported being released 100 days before their first use.

**Figure 5. Decrease in Percent of Jail-released Treatment Participants Reporting Any Drug Use from Baseline to Follow-up Previous 12 Months (n=186)**

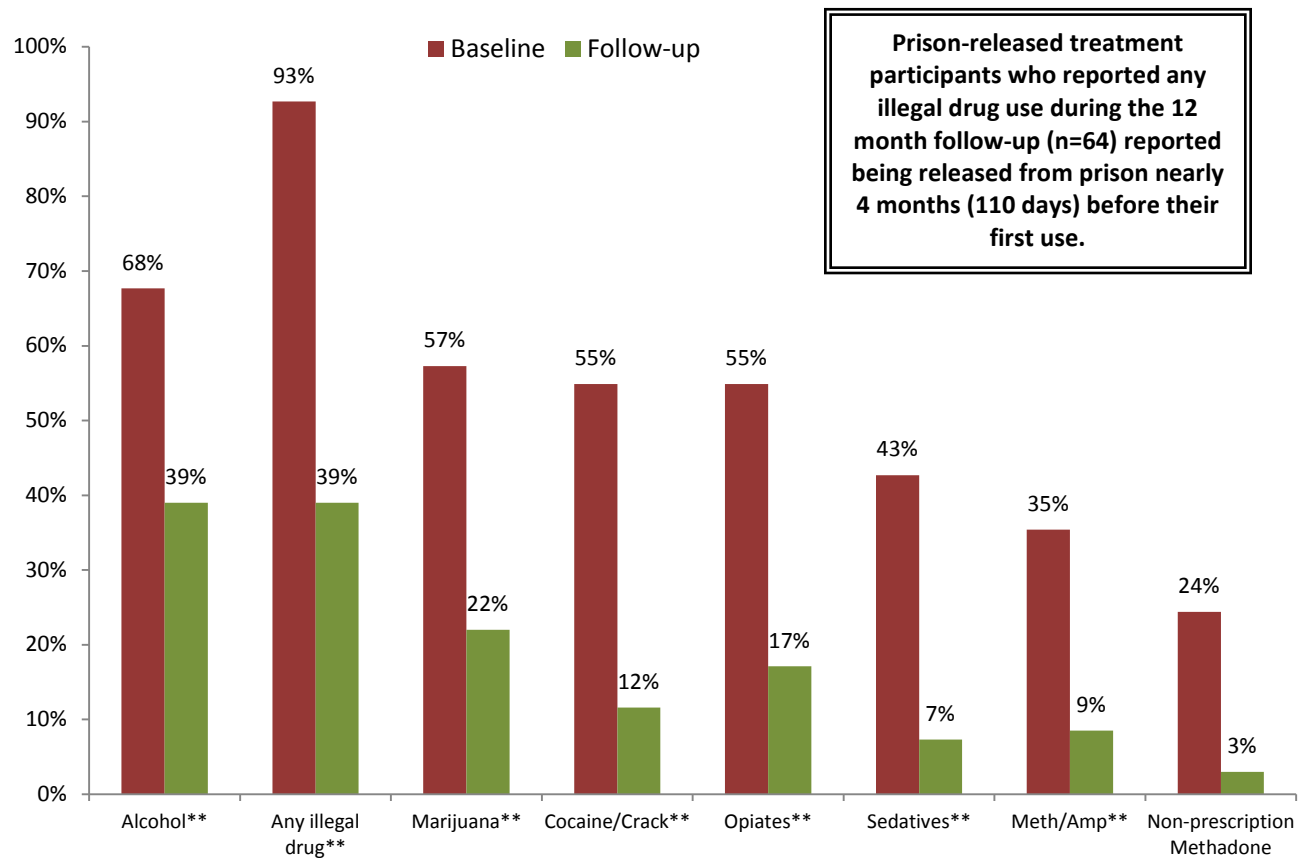


Note: Significance established using McNemar's test for correlated proportions, \*\* $p < .001$

### Prison-based participants

The percent of prison-released treatment participants who reported illegal drug use during the previous 12 months decreased by 54% from baseline to follow-up (93% at baseline to 39% at follow-up). As shown in Figure 6, there was a statistically significant decrease in substance use ( $p < .001$ ) for prison-released treatment participants for all substances. Prison-released treatment participants who reported any illegal drug use during the 12 month follow-up ( $n=64$ ) reported being released from prison nearly 4 months (110 days) before their first use.

**Figure 6. Decrease in Percent of Prison-released Treatment Participants Reporting Any Drug Use from Baseline to Follow-up Previous 12 Months (n=164)**

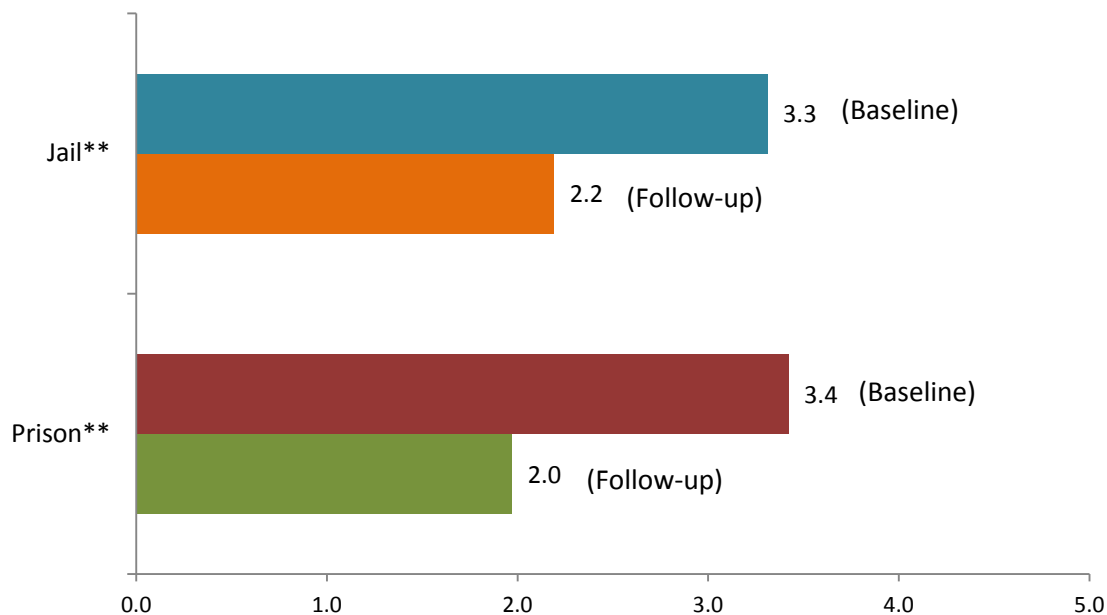


Note: Significance established using McNemar's test for correlated proportions, \*\* $p < .001$

### *Number of drugs used*

Over one-third (36.6%) of the follow-up sample reported any substance use in the past 12 months at follow-up. Among those who reported any illegal drug use at follow-up (n=64 jail-released treatment participants and 64 prison-released treatment participants), the number of different drugs used decreased by 38% from baseline to follow-up. Figure 7 shows the number of drugs used by treatment participants who reported any past 12 month illegal drug use at follow-up. The average number of drugs used by jail-released treatment participants decreased by 34% from 3.3 drugs at baseline to 2.2 drugs at follow-up. The average number of drugs used by prison-released treatment participants decreased by 42% from 3.4 drugs at baseline to 2.0 drugs at follow-up. The decrease in the average number of drugs used was statistically significant for both prison and jail treatment participants ( $p < .001$ ).

**Figure 7. Average number of drugs used in the previous 12 months at baseline and follow-up among those who reported any use**



*Note: This data is based on 64 participants released from jail and 64 participants released from prison. Significance established using paired sample t-test, \*\* $p < .001$ . Only treatment participants who reported drug use at follow-up are included in this analysis.*

### *Community AA/NA Meeting Attendance*

Most treatment participants reported attending at least one AA/NA meeting in the 12 months after their release. Specifically shown in Table 5, 82% of jail-released treatment participants reported attending AA/NA in the previous 12 months and 85% of those who received substance abuse treatment in prison reported attending one or more AA/NA meetings. Jail-treatment participants reported attending an average of 5.8 AA/NA meetings in the previous 30 days and prison-released treatment participants reported attending an average of 5.7.

**Table 5. AA/NA Attendance in the 12 Months Post-Release**

|                | Attended AA/NA Meetings in the 12 months after release | Average number of times attended AA/NA in previous 30 days |
|----------------|--|--|
| Jail (n=186)   | 82.3%  | 5.8 times  |
| Prison (n=164) | 84.8%  | 5.7 times  |
| Total (n=350)  | 83.4%  | 5.8 times  |

### *Community Substance Abuse Treatment after Release*

While the FY2010 sample reported more AA/NA attendance than in previous years, participants self-reported the lowest use of formal community substance abuse treatment in the past four years. Only 19% of treatment participants self-reported enrolling in a community treatment program after release. Fifteen percent of jail-released treatment participants self-reported any community treatment after release and 23.2% of prison-released treatment participants reported attending community treatment after release (see Table 6). Outpatient treatment was the most common community treatment. These rates of self-reported treatment were verified through the University of Kentucky Research and Data Management Center for all state-funded substance abuse services data with a source of pay coded as DMHMRS or Medicaid. As noted in the second column in Table 6, rates are slightly higher which might have been accounted for by general mental health services including substance abuse services, but still remained around 20% for both prison and jail treatment participants.

**Table 6. Percent of Treatment Participants Reporting Community Substance Abuse Treatment in the 12 Months Post-Release**

|                | Self-Reported Community Treatment | Service Utilization Data on Community Treatment <sup>1</sup> |
|----------------|-----------------------------------|--|
| Jail (n=186)   | 14.5% (n=27)                      | 21.5% (n=40)   |
| Prison (n=164) | 23.2% (n=38)                      | 23.8% (n=39)   |
| Total (n=350)  | 18.6% (n=65)                      | 22.6% (n=79)   |

<sup>1</sup>Data provided by the University of Kentucky Research and Data Management Center (RDMC) for 7/1/2009 to 6/30/2011

### ***Recidivism at 12 month Follow-up***

Recidivism is defined here as “being re-incarcerated on a felony charge within the 12 months following release.” The Kentucky Department of Corrections (DOC) state database, Kentucky Offender Management System (KOMS) was used to examine participants’ re-incarceration during the year following release. The DOC counting rules were used (see page 20 for counting rule definition used in this report). As shown in Table 7, 18.3% of jail and 22.6% of prison based follow-up cases were reincarcerated in the 12 months after release. Participants who were re-incarcerated during the 12 months following release were out in the community an average of 6.6 months before re-incarceration.

**Table 7. Recidivism 12 Months Post-Release (n=350)**

|                  | Jail<br>(n=186) | Prison (n=164) | Total (n=350) |
|------------------|-----------------|----------------|---------------|
| Not Incarcerated | 81.7%           | 77.4%          | 79.7%         |
| Incarcerated     | 18.3%           | 22.6%          | 20.3%         |

### ***Arrests Among Recidivists***

The majority of study participants (67.6%) who were reincarcerated at follow-up were incarcerated for only a parole or probation violation, as shown in Table 8. Just over a quarter (32.4%) of treatment participants who were re-incarcerated in the 12 months following release returned on new charge(s).

Looking at the entire sample (N=350), only 10 jail-released individuals (5.4% of all jail-released participants) and 13 prison-released (7.9% of all prison-released participants) were reincarcerated for new criminal charges. Overall, only 23 individuals or 6.6% of corrections-released participants were reincarcerated due to new criminal offenses.

**Table 8. Arrests Among Recidivates at 12 Months Post-Release (n=71)**

|                                 | Jail<br>(n=34) | Prison (n=37) | Total<br>(n=71) |
|---------------------------------|----------------|---------------|-----------------|
| Parole/Probation Violation Only | 70.6%          | 64.9%         | 67.6%           |
| New Charge(s)                   | 29.4%          | 35.1%         | 32.4%           |



### *Prison Victim Crime Cost Offset*

Victim crime costs were developed using changes from baseline to follow-up for prison treatment. A *cost offset in this analysis is the estimated costs of crime and arrests for 12 months post-release compared to pre-incarceration measures for the sample of prison inmates.* This analysis was conducted for prison participants since the length of incarceration was longer, as well as available state information on daily costs of incarceration and daily census in state prison facilities. “Victim crime costs” are defined in this report as projected costs attributed to an arrest for a particular type of crime (drug, property, violent, or DUI). Crime cost data were developed from Finigan’s (1999) approach for assessing cost offsets resulting from drug court services and Miller, Cohen, and Wiersema’s (1996) approach for assessing victim cost of crime. Victim crime cost estimates are based on losses of productivity/time away from work, medical care, police and fire services, social services, property loss and damage, and loss of quality of life. Costs of nights incarcerated or “bed costs” were not included in these figures. Cost per arrest figures were adjusted to 2011 dollars using the Federal Reserve Bank of Minneapolis Consumer Price Index Calculator <<http://www.minneapolisfed.org/index.cfm>>.

Specifically, the victim cost per crime, using the above estimates, was multiplied by the number of arrests at baseline (pre-incarceration) and follow-up (12 months post-release) for the type of crime to calculate the cost offset between the two time periods. As shown in Table 9, victim crime costs for the year before incarceration were compared to victim crime costs for the year after release from prison, which resulted in an aggregate cost offset of **\$1,845,652** for the 164 substance abuse prison participants. When the total cost is divided by the number of participants, estimates show an estimated **cost offset of \$11,254 per year per prison substance abuse treatment participant.** While this is a considerable cost offset, it is important to note that this cost under-represents the overall cost offset from prison-based treatment because it does not include the cost to incarcerate, employment, and community health service utilization costs. Thus, examining the reduction of nearly \$2 million in victim costs from crime during the year after release suggests an important gain to the system for the investment in treatment. Future analyses will compare recidivism costs for the prisoner treatment sample with a non-treatment sample.

**Table 9. Cost Offset in Victim Crime/Arrest for Prison Treatment Participants (N=164)**

| Arrests by crime type   | Estimated cost per arrest* | Self-reported number of arrests in the 12 months prior to the last incarceration | Cost of crimes at baseline | Self-reported number of arrests at follow-up (Past 12 months) | Estimated Cost of crimes at follow-up | Reduction in cost  |
|---|----------------------------|--|----------------------------|---|---------------------------------------|--------------------|
| Drug  | \$4,285                    | 89   | \$381,365                  | 11  | \$47,135                              | \$334,230          |
| Property  | \$18,453                   | 32   | \$590,496                  | 8   | \$147,624                             | \$442,872          |
| Violence  | \$42,785                   | 26   | \$1,112,410                | 3   | \$128,355                             | \$984,055          |
| DUI   | \$28,165                   | 8  | \$225,320                  | 5   | \$140,825                             | \$84,495           |
| <b>Total</b>  |                            |  |                            |   |                                       | <b>\$1,845,652</b> |
| <b>Estimated projection of victim crime cost offset per participant</b> |                            |  |                            |   |                                       | <b>\$11,254</b>    |

\*Cost per arrest figures were adjusted to 2011 dollars using the Federal Reserve Bank of Minneapolis Consumer Price Index Calculator. Accessed 10/11/2011. <http://www.minneapolisfed.org/index.cfm>

## *Conclusions*

The growth of prison and jail based treatment in Kentucky is indicative of the state's commitment to provide treatment for substance users. Not only has the Department of Corrections made a commitment to provide substance abuse treatment, but the Department has prioritized research and evaluation. This priority has been supported by a partnership between the Kentucky Department of Corrections (DOC) and the University of Kentucky Center on Drug and Alcohol Research (CDAR), which was established nearly 10 years ago through a shared vision to evaluate treatment for incarcerated substance abusers in Kentucky (see Staton-Tindall et al., 2007).

This FY2011 CJKTOS follow-up report presents 12-month post-release data on the characteristics of individuals who participate in the Kentucky Department of Corrections substance abuse treatment programs during their incarceration in prison or jail. This follow-up report includes data from a stratified random sample of participants who received substance abuse treatment and were released during fiscal year 2010. Specifically, this 12-month follow-up study examined a randomly selected representative sample of 350 males and females who participated in jail or prison-based treatment and consented to follow-up.

### *Reduced substance use*

FY2011 findings indicate that there were statistically significant increases in the number of individuals who participated in corrections-based substance abuse treatment who reported abstinence at follow-up. The percentage of participants receiving jail-based substance abuse treatment who self-reported using any illegal drug during the 12-months after release decreased by 60% from before incarceration (94% at baseline compared to 34% at follow-up). The percentage of participants receiving prison-based substance abuse treatment who reported using any illegal drug during the 12-months after release decreased by 54% from before incarceration (93% at baseline to 39% at follow-up).

This reduced substance abuse reported by treatment participants is comparable to other follow-up prison studies. Although findings vary based on follow-up time frames, the literature presents reductions in drug use following prison-based treatment. For example, Prendergast, Greenwell, and Lin (2007) reported that about one-third of participants leaving prison-based treatment reported any illicit drug use 3 months post-release. While the self-reported use is slightly higher in this sample (any illicit use reported at 37%), data in this report is based on a one-year follow-up versus the 3 month follow-up. In addition, Butzin, Martin, and Inciardi (2005) found that approximately 60% of participants who completed prison-based treatment alone (not followed by community aftercare) reported being abstinent one year after release. This is consistent with Kentucky findings of 63% of participants remaining drug-free at follow-up.

### *Decreased recidivism*

The majority of study participants were not re-incarcerated on a felony charge during the 12 months following their release. Over three-quarters (82%) of participants who received substance abuse treatment in jail and 77% of participants who received substance abuse treatment in prison were not re-incarcerated one-year post-release. Of the treatment participants who returned to custody, they were in the community an average of 6.6 months before re-incarceration. In addition, most offenders who were re-incarcerated (68%) reported being charged with a parole or probation violation rather than a new charge. About one-third (32.4%) were reincarcerated on a new felony offense. Consequently, the majority of reincarcerations were for parole or probation violation and revocation.

This finding suggests a need to more closely examine the factors leading to revocation. For example, given the chronicity of substance abuse, if revocations are primarily related to by evidence of illegal drug use, there might be greater discretion on graduated sanctions to place greater restraint on parolees without using revocation.

Other national studies report similar recidivism rates. For example, Burdon, Dang, Prendergast, Messina & Farabee (2007) reported 59.5% of participants who received prison-based therapeutic community substance abuse treatment in California prisons and who subsequently participated in community outpatient and residential treatment did not return to prison in the 12 months following release. Burdon et al. (2007) defined recidivism as returning to prison at any time during the 12 months after release, similar to the way recidivism is defined in this study. However, it is unclear if Burdon et al. (2007) used the same approach which this study used to define recidivism. Even though there may be a limitation in comparison based on different recidivism definitions, more Kentucky prison participants (80%) were not incarcerated during the 12 months following release. It is also important to note that only 19% of Kentucky participants entered community treatment while all the participants in Burdon et al. (2007) study received outpatient or residential treatment after release.

A recent report from the California Department of Corrections found that recidivism rates were significantly reduced for offenders who completed in-prison and community-based substance abuse treatment programs (State of California, 2009). Overall, male offenders who completed both in-prison and community-based substance abuse treatment had a 25.4% returned to prison rate. This is higher than the 20% recidivism rate reported in this study. However, it is important to note again that only 19% of Kentucky participants received community treatment following release, whereas California participants received community substance abuse treatment following release (State of California, 2009).

Although the different time frame, a Kentucky Department of Corrections report on recidivism from 1999-2000 indicated that the rate of returning to custody for drug offenders was 29% <[www.corrections.ky.gov](http://www.corrections.ky.gov)>. This is higher than the 20% reported in this study. It is important to note that the community supervision expectations for substance abuse treatment program parolees are different. The closer the parole or probation supervision, the greater the likelihood of detecting behaviors that can lead to revocation. Perhaps with increased supervision and regular urine screens, substance abuse treatment participants who relapse to drugs and/or alcohol following community release have a greater chance of returning to custody than offenders who are not substance abusers. Again, as stated above, there is a possibility for re-examining rationales for revocation – particularly in regard to substance use alone in the absence of other criminal offenses.

### *Community treatment*

Although there is no mandatory aftercare following Kentucky prison and jail based substance abuse treatment, findings from this study indicate that most prison and jail treatment participants participated in self-help groups after release. Specifically, 82% of those who received substance abuse treatment in jail and 85% of those who received substance abuse treatment in prison reported attending at least one AA/NA meeting in the 12-months after release.

Nineteen percent of treatment participants enrolled in community treatment following release. Outpatient treatment was the most common treatment. This is lower than community treatment participation in another study of offenders which reported that 63% of treatment participants engaged in community treatment within the first 3 months after release (Prendergast, Greenwell, & Lin, 2007). However, this study focused on predominantly urban areas, which may limit comparability to

Kentucky given the number of treatment participants paroled to rural areas where service opportunities are limited.

### *Study limitations*

There are study limitations. First, findings must be interpreted with the understanding that baseline data are self-reported at treatment intake and follow-up data are self-reported approximately 12 months post-release. In order to examine the reliability of self-reported follow-up drug use, CJKTOS staff examined data from the Department of Correction's information system, the Kentucky Offender Management System (KOMS), for positive drug tests. Of the 148 substance abuse treatment participants on supervision at the time of their follow-up interview reporting no drug use, 133 had no positive drug tests in KOMS. This provides a self-report accuracy rate of 90%. In this study, a higher rate of substance use is self-reported than from urine test results. Furthermore, urine tests only identify substances used recently. Thus, for past 12 month substance use, self-report remains an important part of research data collection. However, while self-report data has been shown to be valid (Del Boca & Noll, 2000; Rutherford, et al., 2000), it is a limitation. In addition, since baseline measures target behaviors prior to the current incarceration, reporting of substance use and other sensitive information may be affected by participant's memory recall and could be a study limitation. Victim crime costs and their reductions before prison compared to their 12 months after prison do not take in account all costs associated with re-incarceration.

### *Implications*

This study supports the policy of corrections-based recovery interventions in the Kentucky Department of Corrections. Kentucky corrections based treatment programming has evolved to provide services in both prisons and jails which incorporates therapeutic community concepts. This approach has demonstrated success in the research literature (De Leon, 2000). The findings from this study indicate behavioral changes following substance abuse treatment in Kentucky's prisons and jails which include reductions in substance use, three-quarters not being incarcerated at the 12 month follow-up, and participation in community treatment and self-help groups after release. This report also raises questions about the role of discretion in reincarcerating parolees and probationers, given the small percent of recidivists who are reincarcerated due to new criminal offenses. Graduated responses to relapses should be considered to avoid the high cost of reincarceration.

Findings in this report support the treatment of substance abusers in the criminal justice system with increased efforts to strengthen the transition from institution to community to maintain successes achieved in corrections-based treatment. This analysis of reductions in victim costs of crime from the year prior to incarceration to the year after release from jail or prison suggest important gains for public safety. Future reports will examine these cost offsets and gains in more detail and with comparisons to other populations.

## KEY TERMS

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**Baseline** – Baseline refers to data collected at treatment intake by correctional treatment counselors. Baseline measures examine substance use *prior to the current incarceration*.

### **DOC Counting Rules–**

1. Include only those inmates who have completed their sentences, were released on parole, have received a conditional release, or were released on a split prison-probation sentence. Do not include temporary releases (e.g. inmates furloughed). To be counted the inmate must no longer be considered an inmate or in a total confinement status, except for those released from prison on a split prison-probation sentence.
2. Include only those inmates released to the community. Exclude from the count inmates who died, were transferred to another jurisdiction, escaped, absconded, or AWOL. Exclude all administrative (including inmates with a detainer(s)) and pre-trial release status releases.
3. Count number of inmates released, not number of releases. An inmate may have been released multiple times in that same year but is only counted once per calendar year. Thus, subsequent releases in the same calendar year should not be counted.
4. All releases (inmates who have completed their sentences, were released on parole, have received a conditional release, or were released on a split prison-probation sentence) by an agency per year constitute a release cohort. An inmate is only counted once per release cohort and thus can only fail once per cohort.
5. Do not include inmates incarcerated for a crime that occurred while in prison.
6. Inmates returned on a technical violation, but have a new conviction should be counted as a returned for a new conviction.

**Follow-up** – Follow-up refers to data collected 12-months post-release by the University of Kentucky Center on Drug and Alcohol Research. Follow-up measures examine substance use, community treatment, and criminal offenses *12-months post-release from a prison or jail*.

**Jail Treatment Participants** – Clients who participated in a jail-based substance abuse treatment program and who met the eligibility to participate in the follow-up study and provided consent.

**McNemar’s Test for Correlated Proportions** – assesses the significance of the difference between two correlated proportions, such as might be found in the case where the two proportions are based on the same sample of subjects or on matched-pair samples  
<<http://faculty.vassar.edu/lowry/propcorr.html>>

**Paired Samples T Test**- compares the means of two variables by computing the difference between the two variables for each case, and tests to see if the average difference is significantly different from zero <<http://www.wellesley.edu/Psychology/Psych205/pairttest.html>>

**Prison Treatment Participants** – Clients who participated in a prison-based substance abuse treatment program and who met the eligibility to participate in the follow-up study and provided consent.

**Recidivism**– re-incarcerated on a felony charge within the 12 months following release.

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**Appendix A.****CJKTOS PRISON DATA COLLECTION SITES**

Western Kentucky Correctional Complex  
374 New Bethel Church Road  
Fredonia, KY 42411  
(270) 388-9781

Green River Correctional Complex  
1200 River Road  
P.O. Box 9300  
Central City, Kentucky 42330  
(270) 754-5415

Kentucky Correctional Institution for Women  
3000 Ash Avenue  
Pewee Valley, Kentucky 40056  
(502) 241-8454

Kentucky State Reformatory  
3001 W Highway 146  
LaGrange, KY 40031  
(502) 222-9441

Luther Luckett Correctional Complex  
Dawkins Road, Box 6  
LaGrange, Kentucky 40031  
(502) 222-0363/222-0365

Marion Adjustment Center  
95 Raywick Road  
St. Mary, Kentucky 40063-0010  
(270) 692-9622

Northpoint Training Center  
P.O. Box 479, Hwy 33  
710 Walter Reed Road  
Burgin, KY 40310  
(859) 239-7012

Otter Creek Correctional Center  
Highway 306, P.O. Box 500  
Wheelwright, Kentucky 41669-0500  
(606) 452-9700

Roederer Correctional Complex  
P. O. Box 69  
LaGrange, Kentucky 40031  
(502) 222-0170

## CKTOS JAIL DATA COLLECTION SITES

Boyle County Detention Center  
1860 S Danville Bypass  
Danville, KY 40422  
(606) 739-4224

Breckinridge County Detention Center  
500 Glen Nash Road  
Hardinsburg, Kentucky 40143  
(270)756-6244

Christian County Detention Center  
410 West Seventh St.  
Hopkinsville, Kentucky 42240-2116  
(270) 887-4152

Daviess County Detention Center  
3337 Highway 60 East  
Owensboro, Kentucky 42303-0220  
(270) 685-8466 or 8362

Floyd County Detention Center  
36 South Central Avenue  
Prestonsburg, KY 41653  
(606) 886-8021

Fulton County Detention Center  
210 South 7<sup>th</sup> Street  
Hickman, KY 42050  
(270) 236-2405

Grant County Detention Center  
212 Barnes Road  
Williamstown, KY 41097  
(859) 824-0796

Grayson County Detention Center  
320 Shaw Station Road  
Leitchfield, Kentucky 42754-8112  
(270) 259-3636

Hardin County Detention Center  
100 Laurel Street, P.O. Box 1390  
Elizabethtown, Kentucky 42702-1390  
(270) 735-1794

Hopkins County Detention Center  
2250 Laffoon Trail  
Madisonville, Kentucky 42431  
(270) 821-6704

Kenton County Detention Center  
303 Court Street  
Covington, Kentucky 41011  
(859) 392-1701

Marion County Detention Center  
201 Warehouse Road  
Lebanon, Kentucky 40033-1844  
(270) 692-5802

Mason County Detention Center  
702 US 68  
Maysville, Kentucky 41056  
(606) 564-3621

Pike County Detention Center  
172 Division Street, Suite 103  
Pikeville, Kentucky 41501  
(606) 432-6232

Powell County Detention Center  
755 Breckenridge Street  
Stanton, KY 40380  
(606) 663-6400

Shelby County Detention Center  
100 Detention Road  
Shelbyville, KY 40065  
(502) 633-2343

Three Forks Regional Jail (Lee County)  
2475 Center Street  
Beattyville, Kentucky 41311  
(606) 464-2598

**CJKTOS COMMUNITY CORRECTIONS DATA COLLECTION SITES**

Dismas Charities-Owensboro  
615 Carlton Drive  
Owensboro, KY 42303  
(270) 685-6054

DismasCharities- St. Ann's  
1515 Algonquin Parkway  
Louisville, KY 40210  
(502) 637-9150

Hope Center Detention Program  
Fayette County Detention Center  
600 Old Frankfort Circle  
Lexington, KY 40510  
(859) 425-2700

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