

CRIMINAL
JUSTICE
KENTUCKY
TREATMENT
OUTCOME
STUDY

CJKTOS

FY 2015
REPORT

Report prepared for:

LaDonna H. Thompson, Commissioner
Kentucky Department of Corrections

Kevin Pangburn, Director
Division of Substance Abuse
Kentucky Department of Corrections

By:

Michele Staton-Tindall, Principal Investigator
Erin McNees Winston, Study Director

Acknowledgements

The CJKTOS project is funded by the Kentucky Department of Corrections. The authors of this report would like to thank DOC treatment program administrators and counselors, prison case workers, pre-release coordinators, wardens, jailers, and probation and parole officers across the state for their support of this evaluation 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.

We also want to acknowledge the CJKTOS project team:

Michele Staton-Tindall, Ph.D., M.S.W., Principal Investigator
Robert Walker, M.S.W., L.C.S.W., Co-investigator
Carl Leukefeld, D.S.W., Co-investigator
Erin McNees Winston, M.P.A., Project Director
Jeb Messer, Software Developer
Christopher Emmick, Data Management Specialist
Sara Shalash, Data Coordinator
Elyse Litton, Data Coordinator, Sr.
Kirsten Smith, Data Coordinator, Sr.

Report Summary

The Criminal Justice Kentucky Treatment Outcome Study (CJTOS) examines substance abuse outcomes of state offenders participating in substance abuse treatment programs in Kentucky's prisons, jails, and in the community. This report includes data collected during FY2015 for 339 randomly selected participants who entered Department of Corrections (DOC) treatment programs, participated in an intake interview by treatment counselors, and were followed-up 12 months later in the community following their release.

This report includes data collected from July 1, 2014 to June 30, 2015. Findings from the FY2015 data indicate that among DOC SAP participants who were interviewed 12-months following release:

- **49.3 % of jail, prison, and community-based participants reported decreased illicit drug use.**
- **70% were not incarcerated.**
- **85.8% were housed.**
- **68.1% were employed at least part-time.**
- **76% reported having attended AA/NA meetings.**
- **There were across the board decreases in frequencies of serious depression and anxiety.**
- **Reported instances of suicidal ideation decreased from 10.9% to 3.8 %.**
- **72.6% reported having a close relationship with their children.**
- **76.4% reported spending most of their time with family.**
- **Nearly 83% of participants agreed they feel better about themselves as a result of treatment and consider the program to be successful.**

For every \$1 spent on Kentucky corrections-based substance abuse treatment there is a \$4.29 cost offset.

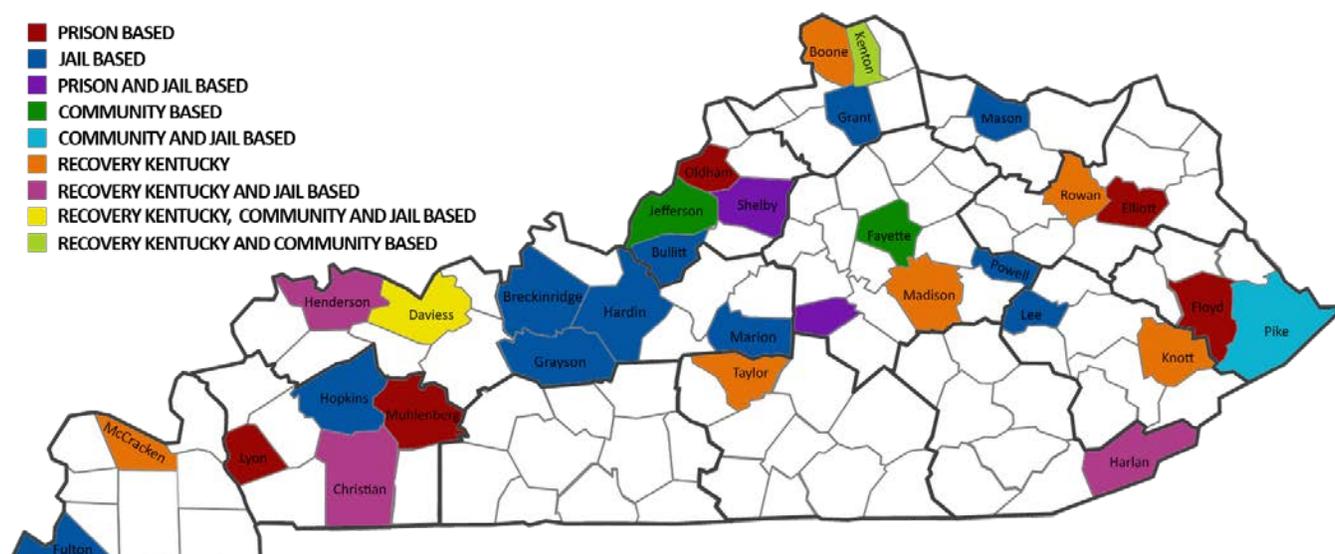
Introduction

The Kentucky Department of Corrections Substance Abuse Treatment Programs

The DOC Division of Substance Abuse provides programming throughout the state.

The Kentucky Department of Corrections (DOC) Division of Substance Abuse provides substance abuse treatment programs throughout the state (See Figure 1). The treatment approach has been described in earlier reports and is grounded in the key components of therapeutic community modalities (De Leon, 2000).

Figure 1. Location of Kentucky's Corrections-based Substance Abuse Treatment Programs (2015)



In FY2015, there were an average number of 3,563 corrections-based substance abuse treatment slots in jails, prisons, Recovery Kentucky Centers and community custody programs (See Figure 2). There are 7 prisons with substance abuse programs and 18 jails with programs (See Appendix C for sites). These increases in treatment are noteworthy given the overall decrease in the state inmate population following implementation of HB 463 in 2011. Specifically, the statewide inmate population decreased 7% from 23,026 offenders on December 15, 2011 to 21,411 offenders on August 15, 2015 (Kentucky Department of Corrections, 2015).

Due to the DOC's commitment to providing substance abuse treatment, slots for offenders have increased, even as the overall inmate population has decreased as a result of HB 463.

Figure 2. Increasing trends in number of corrections-based substance abuse treatment slots



SAP Participants

Pre-incarceration measures are collected by treatment providers at intake into the DOC treatment programs (jail, prison, or community custody) (See methodology, Appendix A). Follow-up data collection is conducted by the UK research team 12 months after the individual is released to the community. Therefore, data in this report will be categorized as “*pre-incarceration*” (risk behaviors in the 12 months and 30 days prior to incarceration) and as “*follow-up*” (risk behaviors during the 12 months and 30 days post-release from incarceration in which they participated in DOC treatment).

Three populations are examined for this follow-up report: (1) individuals receiving substance abuse program services in state prisons; (2) individuals receiving substance abuse program services in county or regional jails; and (3) individuals receiving residential substance abuse services in the community but still under state custody. As shown in Table 1, the follow-up sample of SAP participants were not significantly different from the other SAP participants who were not in the follow-up sample.

There were no significant differences between the treatment sample and overall treatment population, making the results of the study generalizable.

Table 1. Demographic Characteristics of Follow-up SAP Sample Compared to .Non-Follow-up SAP Participants Released in FY2014

	Follow-up SAP Participants (n=339)	Non-Follow-up SAP Participants (n=2,591)
Average Age	33.9 (range 18 to 66)	34.3 (range 18 to 71)
Race/ethnicity	81.1% white	75.7% white
Gender	75.5% male	76.5% male
Education	71.4% GED or high school diploma	72.3% GED or high school diploma
Marital Status	46.0% Single, never married	46.0% Single, never married

Most of the DOC follow-up participants (68.2%), who completed treatment during FY2014-2015, were referred to SAP as “parole upon completion”. SAP participants were also compared with the entire population of KY DOC offenders who have completed the Level of Service/Case Management Inventory (LSCMI) data as part of the state’s initiative to enhance assessment processes through HB 463.

As shown in Table 2, SAP participants were assessed as higher across ratings of overall risk, criminal history, education and employment, family and marital, companions, and substance abuse. SAP participants were assessed the same or lower in the other LSCMI categories.

Table 2. DOC Treatment and KY DOC LSCMI Comparison of High/Very High Rankings

	DOC follow-up participants (n=315)	Entire KY DOC inmate population (n=40,695)
Overall Risk	38.4%	31.2%
Criminal History	41.6%	25.9%
Education/Employment	33.7%	31.3%
Family/Marital	10.5%	9.4%
Leisure/Recreation	41.6%	41.5%
Companions	34.9%	29.8%
Substance Abuse	47.6%	33.8%
Procriminal Attitude	6.3%	6.3%
Antisocial Personality	3.8%	4.1%

*LSCMI data supplied by KY Department of Corrections, 9/11/2015.

Corrections-Based Treatment Program Satisfaction

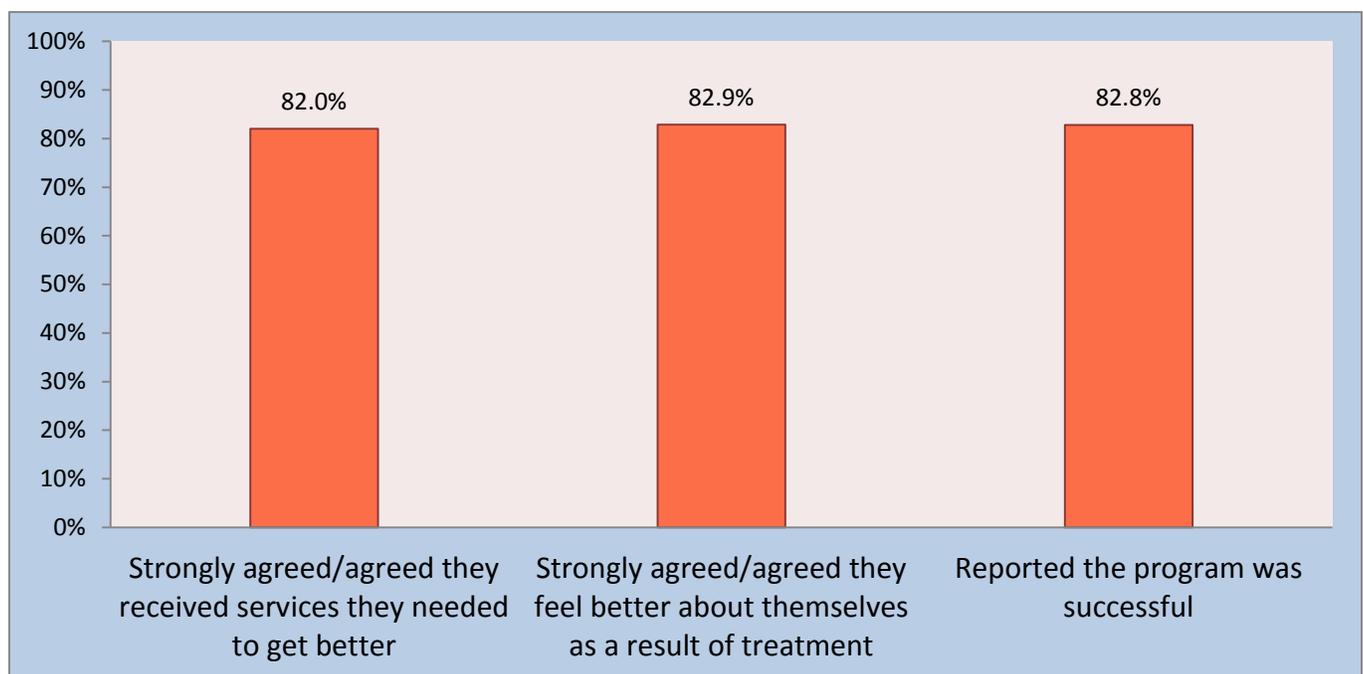
During FY15, participants were asked about their overall satisfaction with SAP as well as specific questions related to subcomponents of the program. As shown in Figure 3, the majority of DOC follow-up participants (82%) agreed or strongly agreed that they received the services they needed to help themselves get better. Roughly the same number of participants agreed or strongly agreed that that they felt better about themselves as a result of treatment.

“If I hadn’t done SAP, I wouldn’t have had a chance when I got out.”

Also reported in Figure 3, 82.8% of participants considered the SAP program to be an overall success and cited a wide range of supporting reasons.

Participants were also asked to describe what they liked best about the SAP program. Though there was variation between individuals, some of the most frequent responses included: *the staff and counselors; practicing self-and other-accountability; parenting and criminal thinking classes; sharing and listening to others during group; learning more about themselves; one-on-one time with their counselors; 12-step meetings; learning about the disease of addiction; writing and sharing their life stories; and the overall structure of the program.*

Figure 3. Treatment Program Satisfaction (n=339)

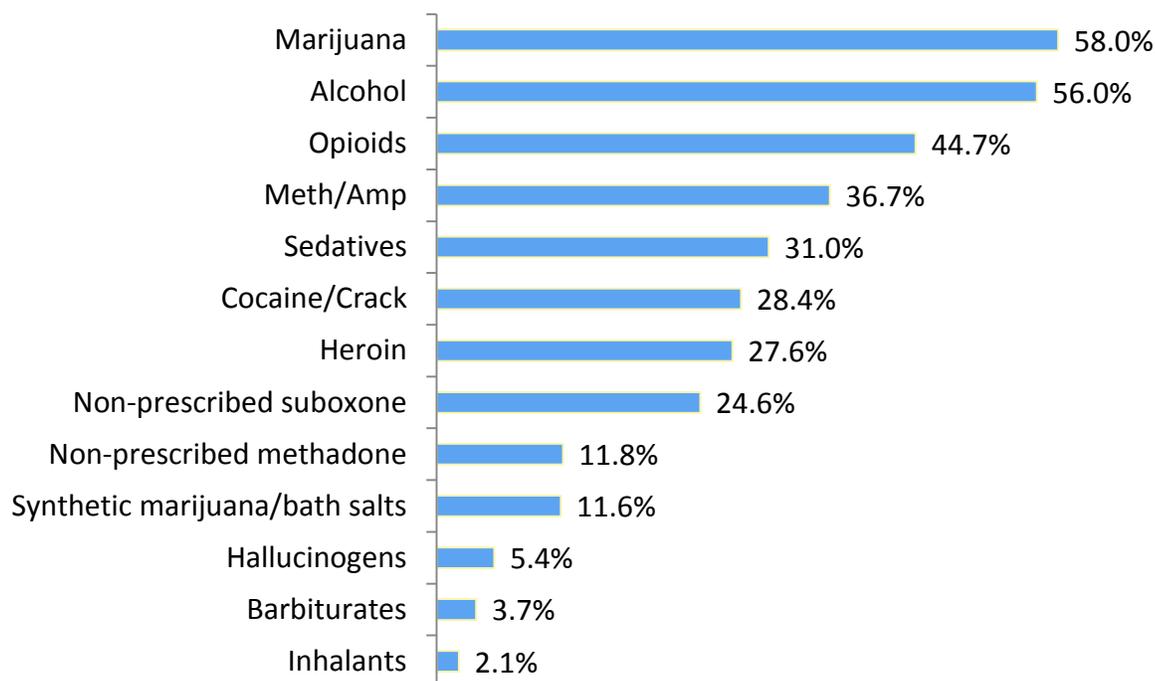


Substance Use

Figure 4 shows substance use during the pre-incarceration period for SAP participants who completed a baseline assessment during FY15. The greatest percent of participants reported marijuana use (58%) and alcohol use (56%) in the 12 months before incarceration.

Marijuana, alcohol, and opioids were the most commonly reported substances used in the 12 months prior to incarceration.

Figure 4. Profile of pre-incarceration substance use among SAP participants (n=5,480)

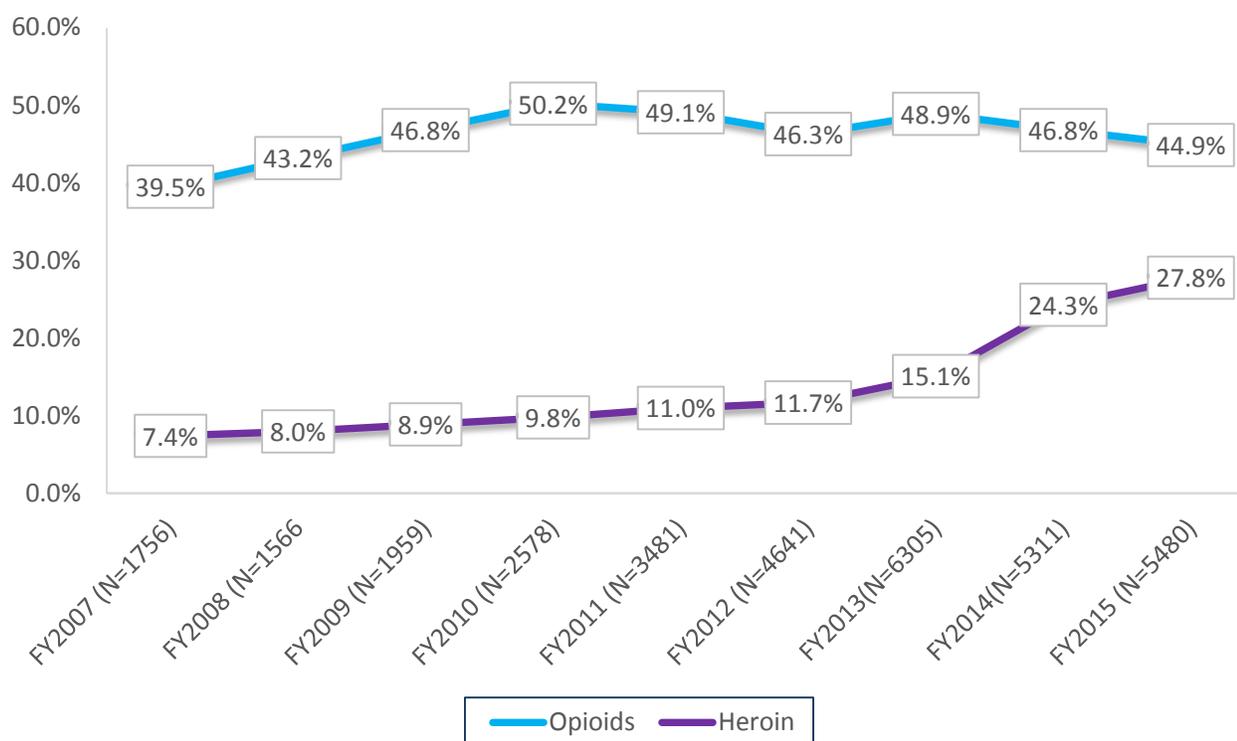


Self-reported heroin use has more than tripled in the past 9 years, from 7.4% in FY 2007 to 27.8% in FY 2015.

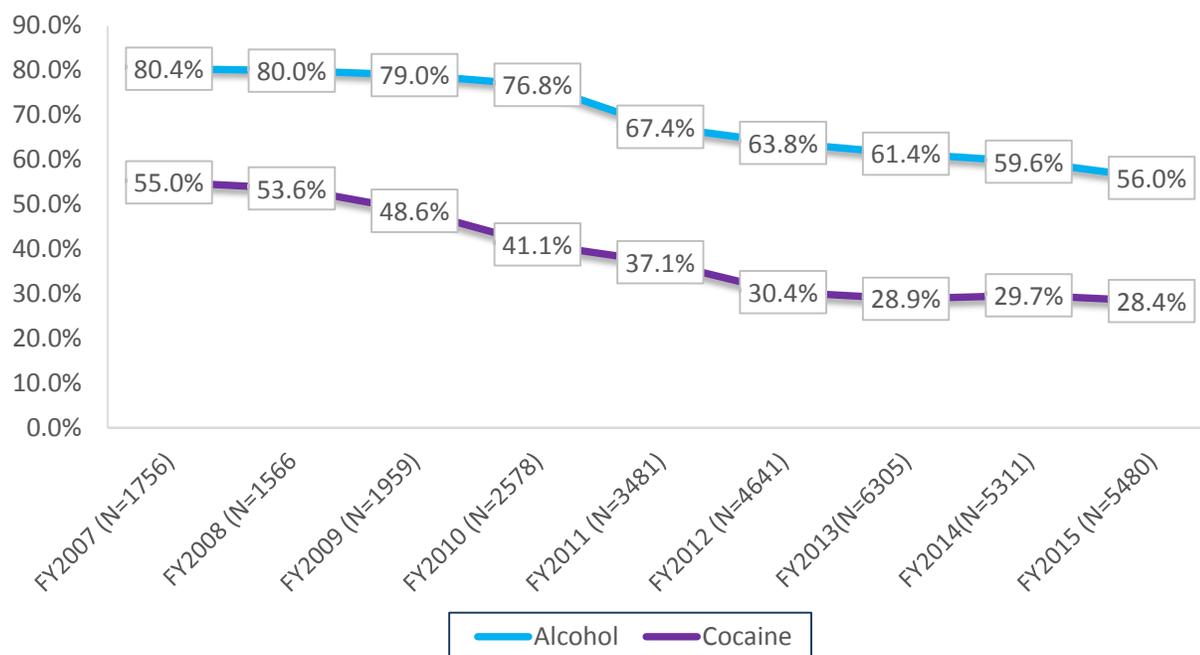
For nearly a decade there has been a significant increase in self-reported heroin use prior to incarceration. As shown in Figure 5, the percentage of offenders entering corrections-based substance abuse reporting any heroin use in the 12 months prior to incarceration more than tripled from 7.4% in FY2007 to 27.8% in FY2015. Also illustrated in Figure 5, self-report illicit opioid use (not including heroin, methadone or buprenorphine) peaked at 50.2% in FY2010 and has since decreased to 44.9% in FY2015.

In response to the increase in heroin use in Kentucky, the state legislature was swift in passing Senate Bill 192 which is progressive and proactive in its attempt to mitigate the commonwealth's heroin crisis. SB 192 is comprehensive in scope and includes provisions such as the availability of naloxone to emergency medical workers to curb rates of overdose, a needle-exchange program, millions of dollars in increased state and Medicaid funding for addiction treatment, and tougher sanctions for traffickers without a paired mandatory minimum sentencing for users caught in possession of the drug. These advances in both the use and treatment of opioid and heroin make the SAP program more salient than ever.

Figure 5. Reporting Illicit Opioid and Heroin Use in the 12 Months Prior to Incarceration



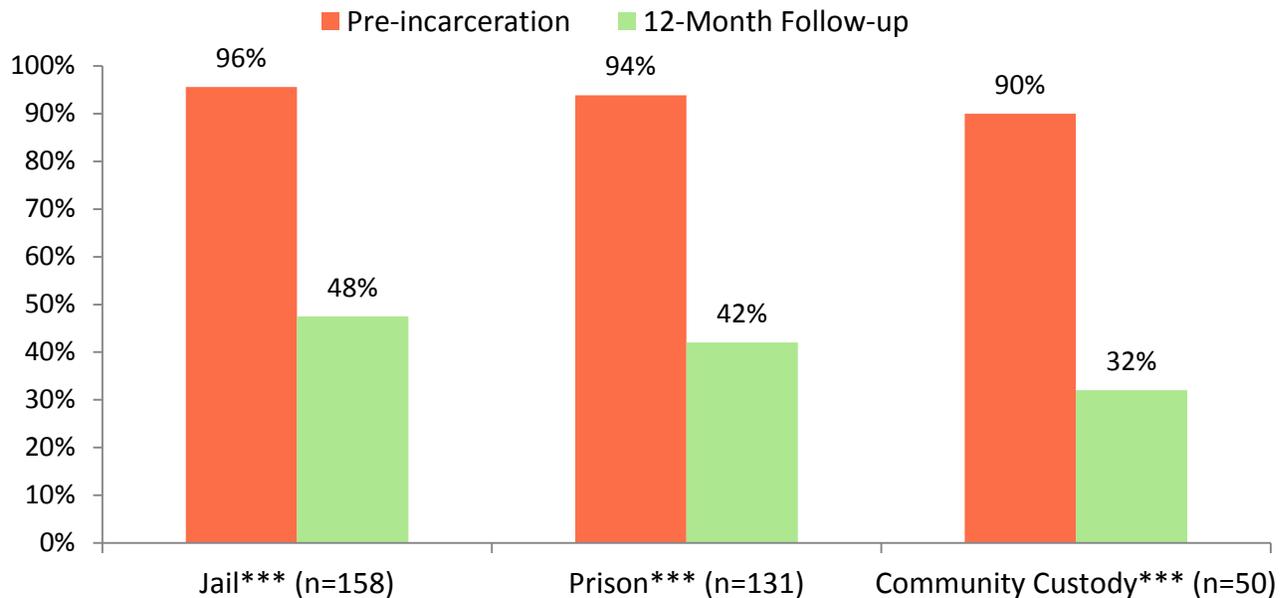
Other noteworthy substance use trends include the steady decrease in alcohol consumption and the decline of reported cocaine/crack usage. As highlighted in Figure 6, the percentage of offenders who report alcohol use at baseline has fallen from 80.4% to 56%, resulting in an overall 24.4% decrease from FY2007 to FY2015. For this same period, reported cocaine or crack use declined 26.6%, from 55% down to 28.4%, making it the illicit substance with the largest reverse trend.

Figure 6. Reporting Illicit Cocaine and Alcohol Use in 12 Months Prior to Incarceration

The majority of SAP participants reported being abstinent in the 12 months following release. As shown in Figure 7, those who received DOC treatment in prison, jail, or community custody programs reported a significant decrease use of any illegal drug following treatment.

The majority of SAP participants report being abstinent in the 12 months following release.

Figure 7. Drug Use from Pre-incarceration to One-Year Post-Release



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

Recovery Supports

76% of participants reported attending AA/NA meetings in the 12 months following release

Regular attendance of 12-step meetings has been recognized as an effective form of support following substance abuse treatment (Fiorentine, 1999; Kaskutas 2009; Kownacki & Shadish, 1999; Tonigan, Toscova, & Miller, 1996). Most SAP participants reported attending at least one AA/NA meeting in the 12 months after their release. Specifically shown in Table 3, approximately three-fourths (75.5%) of participants reported attending AA/NA, and they reported attending an average of 4.5 meetings in the past 30 days.

Table 3. AA/NA Attendance in the 12 Months Following Release

	Attended AA/NA Meetings	Average number of times attended AA/NA in past 30 days
Jail (n=158)	76.6%	4.3 times
Prison (n=131)	75.6%	4.5 times
Community Custody (n=50)	72.0%	5.0 times
Total (n=339)	75.5%	4.5 times

*Note: community treatment utilization is not reported this year is not reported due to the inability to access state records

Recidivism

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. As shown in Table 4, 32% of jail, 29% of prison and 28% of community custody-released follow-up cases were re-incarcerated within the 12 months post release from prison or jail. Participants who were re-incarcerated were in the community an average of 6.2 months before being re-incarcerated.

Table 4. Recidivism* 12 Months Post-Release (n=339)

	Jail (n=158)	Prison (n=131)	Community Custody (n=50)	Total (n=339)
Not Incarcerated	68%	71%	72%	70%
Incarcerated	32%	29%	28%	30%

*Recidivism is defined here as "being re-incarcerated on a felony charge within the 12 months following release." The DOC counting rules were used (see page22 for counting rule definition used in this report).

70% of SAP participants were not reincarcerated in the one-year post release period.

The majority of SAP participants (79.4%) who were re-incarcerated returned solely on a parole or probation violation leaving the minority (20.6%) of participants re-incarcerated on new charge(s), See Table 5.

Table 5. Arrests Among Recidivates at 12 Months Post-Release (n=102)

	Jail (n=50)	Prison (n=38)	Community Custody (n=14)	Total (n=102)
Parole/Probation Violation Only	78.0%	78.9%	85.7%	79.4%
New Charge(s)	22.0%	21.1%	14.3%	20.6%

Housing and Employment

The majority of SAP participants reported living in a stable environment and working one-year post-release. As shown in Table 6, 85.8% reported being housed in an apartment, room, house or residential treatment facility. Over two-thirds (68.1%) reported their usual employment pattern as working full or part-time. Those reporting full or part-time employment increased 9.8% from 58.3% in FY2014 to 68.1% in FY2015.

Part- and full-time employment increased by 9.8% from FY2014.

Table 6. Employment and Housing in the 12 Months Post-Release

	Jail (n=158)	Prison (n=131)	Community Custody (n=50)	Total (n=339)
Housed in apartment, room, house or residential treatment facility	84.8%	84.7%	92.0%	85.8%
Employed full or part-time	67.1%	69.5%	68.0%	68.1%

Mental Health

While not a direct focus of DOC substance abuse treatment, data also indicate improvements in mental health status during the one-year period post-release. Significantly fewer participants reported experiencing serious depression at follow-up (36.6%) when compared to pre-incarceration (47.2%), as illustrated in Table 7. Also, fewer participants reported anxiety at follow-up (43.4%) when compared to before incarceration (47.2%).

Study participants reported fewer instances of serious depression, anxiety, and thoughts of suicide one-year post-release.

Table 7. Mental Health Pre-incarceration and Post-Release

	Pre-incarceration	12-Month Follow-up
Experienced serious depression in previous 12 months*	47.2%	36.6%
Experienced serious anxiety in previous 12 months	47.2%	43.4%
Experienced serious thoughts of suicide in previous 12 months*	10.9%	3.8%

Note: Significance established using McNemar's test for correlated proportions, * $p < .05$, see Appendix B.

Family and Relationships

Participants in DOC treatment reported improved family relationships one-year post-release. Significantly more participants reported spending most of their free time with family at follow-up (76.4%) than before incarceration (60.5%), as shown in Table 8. When asked about how SAP participation impacted their relationships with their family many study participants described that the program helped them with their family relationships in the following ways:

“I learned how to open up to people, whereas I never would before.”

- **Honesty & Self-Accountability**
- **Improved Ability to Communicate both by listening and in “opening up”**
- **Increased Patience**
- **Sense of Responsibility**
- **Better Understanding in Parenting**
- **Anger Management**

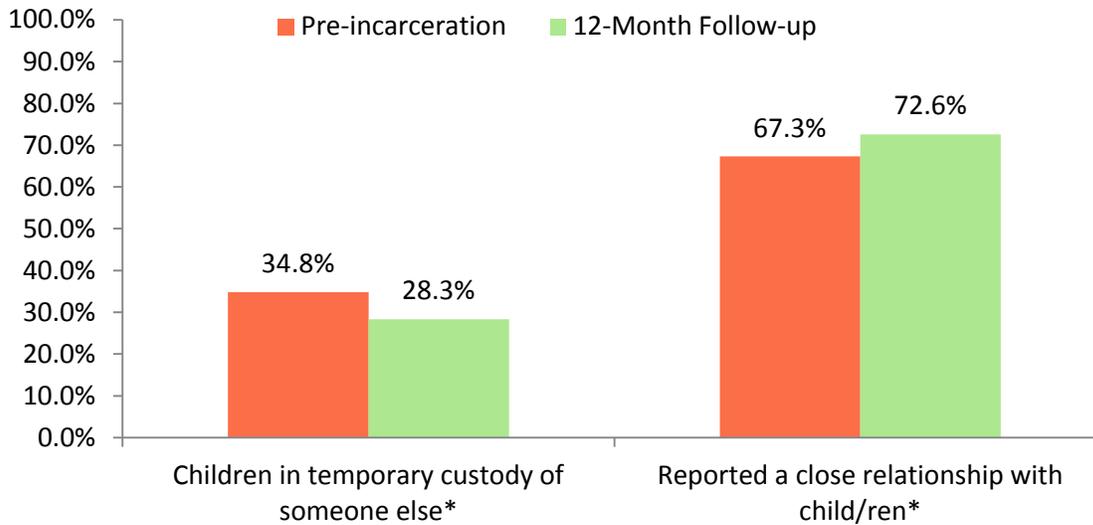
Table 8. Relationships Pre-incarceration and Post-Release

	Pre-Incarceration	12-Month Follow-up
Reported spending most of their free time with family***	60.5%	76.4%
Reported a close relationship with friends*	55.8%	64.3%
Other close relationships** (includes AA sponsors, church members, and extended family members)	14.5%	23.0%

Note: Significance established using McNemar’s test for correlated proportions, *** $p < .001$, ** $p < .01$, * $p < .05$, see Appendix B.

“[SAP helped me] see that the things I was doing was not just hurting me, but everyone around me.”

In addition, significantly fewer participants reported having children in someone else’s temporary legal custody at follow-up (28.3%) when compared to baseline (34.8%), as illustrated in Figure 8. Also, significantly more participants reported a close relationship with their children at follow-up (72.6%) when compared to baseline (67.3%).

Figure 8. Parenting during the Pre-incarceration and Post-Release periods

Note: Significance established using McNemar's test for correlated proportions, * $p < .05$, see Appendix B.

Treatment Cost-offset

The public funding of substance abuse treatment and recovery services typically must justify its costs by showing reductions in social and financial costs to society. For CJKTOS, an *active* substance user is defined in this report as abusing drugs and/or alcohol in the 30 days prior to incarceration (both at baseline/intake and at follow-up 12 months post-release).

For every \$1 spent on Kentucky's corrections-based substance abuse treatment, there is a \$4.29 cost offset.

Table 9 shows the cost of active substance use to society for the year prior to incarceration and for the 12 months post incarceration. Abstinent individuals represent the goal of the interventions and abstinence at follow-up is a robust indicator of positive treatment outcome and reduced cost to society. Thus, the cost of this sample for the year prior to incarceration is estimated at \$2,831,338 while the cost for a comparison 12 month period after treatment is estimated at \$622,173. This analysis shows a net reduction in cost for the sample of \$1,791,698.

Table 9. Costs associated with drug and alcohol use (pre-treatment to post-treatment)

	Baseline N	Per person cost of substance abuse	Cost of substance abuse (pre- treatment)	Follow-up N	Per person cost of substance abuse	Cost of substance abuse (post- treatment)
Study participants who were <i>active</i> substance users in past 30 days	314	\$9,017	\$2,831,338	69	\$9,017	\$622,173

However, to obtain a more defensible net reduction in cost we estimated the cost of the interventions for substance use disorders for this entire sample. The costs of DOC substance abuse treatment is illustrated in Table 10. The total number of treatment days for study participants were calculated for each category of treatment (prison, jail, or community custody) and multiplied by the cost per day of treatment to arrive at a total treatment cost of \$417,467 for the sample.

Table 10. Cost of Corrections-based Treatment*

	Number of treatment days	Cost per day of treatment*	Total Treatment Cost
Jail (n=158)	25,183	\$9.00	\$226,647
Prison (n=131)	20,950	\$5.04	\$105,588
Community Custody (n=50)	8,389	\$10.16	\$85,232
Total cost			\$417,467

*Treatment costs supplied by KY Department of Corrections, 9/22/2015.

As shown in Table 11, the initial cost to the state for drug and alcohol abuse/dependence for this sample of offenders would have been \$2,831,338 without intervention. After corrections-based treatment, there was a significant decrease in the number of participants reporting drug and alcohol use, reducing the cost to \$622,173. The gross difference in the cost to society was \$2,209,165. After subtracting the direct costs of the treatment programs, there was a net avoided cost of \$1,791,698. **Therefore, for every dollar spent on corrections-based treatment there was a return of \$4.29 in cost offsets.**

Table 11. Cost Offset for the Follow-up Sample (N=339)

Cost Item	Dollars
Annual cost to Kentucky <i>before</i> participation in corrections-based substance abuse treatment	\$2,831,338
Annual cost to Kentucky <i>after</i> participation in corrections-based substance abuse treatment	\$622,173
Gross difference in post versus pre-treatment participation	\$2,209,165
The direct cost of corrections-based substance abuse treatment	\$417,467
Net avoided cost after corrections-based substance abuse treatment	\$1,791,698
Ratio showing cost of treatment to savings	1:4.29
Expressed as return on investment	\$4.29 return for every \$1.00 of cost

Factors Participants Associated With Post-treatment Success

While the fiscal savings associated with substance abuse treatment are evident from the figures outlined in this and previous CJKTOS reports, there is a human savings associated with SAP that can be seen in the drug-free lives of participants. While the human suffering of untreated addiction is incalculable so too is the newfound sense of hope, understanding, and determination found in SAP participants' stories of redemption.

Although what it means to be successful is different for each person, and though different participants had a wide range of factors they believed are associated with being successful after treatment, several factors were heavily cited:

- **WILLINGNESS**: The desire to do things differently and stay sober.
- **CHANGE**: People, places, things, old habits, and ways of thinking.
- **SUPPORT SYSTEM**: Family, 12-step meetings, fellowship, clean friends and family, sense of community or church.
- **STAYING BUSY**: Good employment, spending time with family, and being active.
- **DETERMINATION**: Staying focused and remembering what you don't want to lose and what you don't ever want to go back to.

Limitations

There are limitations of this evaluation. 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 and the Kentucky Offender Management System (KOMS), for positive drug tests. Of the 149 SAP participants on supervision at the time of their follow-up interview reporting no drug use, 124 had no positive drug tests in KOMS. This provides a self-report accuracy rate of 83.2%. 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.

Conclusions

This FY2015 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, as well as community custody programs. This follow-up report includes data from a stratified random sample of participants who received substance abuse treatment and were released during fiscal year 2014. Specifically, this 12-month follow-up study examined a randomly selected representative sample of 339 males and females who participated in jail, prison, or community custody-based treatment and consented to follow-up.

Findings from the FY2015 CJKTOS indicate the following for DOC Substance Abuse Program recipients:

- **Reduced substance use**
- **Program satisfaction**
- **Decreased recidivism**
- **Increased recovery supports**
- **Housing stability**
- **Increased employment**
- **Improved family relations**
- **Improved mental health**
- **Reduced cost to society**

Implications

This evaluation indicates that the Kentucky Department of Corrections has successfully evolved to provide services in prisons, jails, and community custody programs, which are effective in reducing drug use, reducing recidivism, and promoting reintegration into society.

The growth of prison and jail based treatment in Kentucky is indicative of the state's commitment to provide treatment for substance users. With the implementation of HB463 in 2011 and SB192 in 2015, the Department's commitment to treatment has been enhanced by the provision of additional services and an emphasis on evidence-based interventions. 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 evaluation indicates that the Kentucky Department of Corrections has successfully evolved to provide services in prisons, jails, and community custody programs, which are effective in reducing drug use, reducing recidivism, and promoting reintegration into society. 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 costs of substance abuse from the year prior to incarceration to the year after release suggests important gains for society. Future reports will examine these cost offsets and gains in more detail and with comparisons to other populations.

Key Terms

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

Community Custody Treatment Participants – Clients who participated in a community custody-based substance abuse treatment program and who met the eligibility to participate in the follow-up study and provided consent.

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 released.
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.

References

- Bureau of Labor Statistics. (2015). CPI inflation calculator. *Databases, Tables & Calculators by Subject*. Retrieved on September 22, 2015 from http://www.bls.gov/data/inflation_calculator.htm.
- Del Boca, F.K, & Noll, J.A. (2000). Truth or consequences: The validity of self-report data in health services research on addictions. *Addiction, 95*, 347-360.
- De Leon, G. (2000). *The therapeutic community: Theory, model, and method*. New York: Springer Publishing Company.
- Fiorentine, R. (1999). After drug treatment: Are 12-step programs effective in maintaining abstinence?. *The American Journal of Drug and Alcohol Abuse, 25*(1), 93-116.
- Hubbard, R.L., Marsden, M.E., Rachal, J.V., Harwood, H.J., Cavanaugh, E.R., & Ginzburg, H.M. (1989). *Drug abuse treatment: A national study of effectiveness*. Chapel Hill, NC: University of North Carolina Press.
- Kaskutas, L. A. (2009). Alcoholics Anonymous effectiveness: Faith meets science. *Journal of addictive diseases, 28*(2), 145-157.
- Kentucky Department of Corrections. (2015). *Monthly Reports*. Retrieved on September 29, 2015 from <http://corrections.ky.gov/about/Pages/ResearchandStatistics.aspx>
- Kentucky Legislature. (2015, March 25). 15RS SB192. Retrieved from <http://www.lrc.ky.gov/record/15rs/SB192.htm>
- Kownacki, R. J., & Shadish, W. R. (1999). Does Alcoholics Anonymous work? The results from a meta-analysis of controlled experiments. *Substance use & misuse, 34*(13), 1897-1916.
- Legislative News Releases (2015, March 11). Retrieved from <http://www.lrc.ky.gov/pubinfo/release.htm#1>
- Lexington Herald Leader (October 1, 2009). Prescriptions for controlled drugs up in 118 of 120 counties. Beth Musgrave, Reporter.
- Lexington Herald Leader (March 25, 2015). Kentucky lawmakers send Beshear a torrent of legislation before adjourning at 3:20 a.m. John Cheves & Jack Brammer, reporters.
- National Institute on Drug Abuse. (2015, February). Overdose Death Rates | National Institute on Drug Abuse (NIDA). Retrieved from <http://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>.
- Pedhazur, E.J., & Schmelkin, L.P. (1991). *Measurement, design, and analysis: An integrated approach*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Rutherford, M.J., Cacciola, J.S., Alterman, A.I., McKay, J.R., & Cook, T.G. (2000). Contrasts between admitters and deniers of drug use. *Journal of Substance Abuse Treatment, 18*, 343-348.
- Simpson, D.D., Joe, G.J., & Brown, B.S. (1997). Treatment retention and follow-up outcomes in the drug abuse treatment outcome study (DATOS). *Psychology of Addictive Behaviors, 11*, 294-307.
- Simpson, D.D., Joe, G.J., Fletcher, B.W., Hubbard, R.L., & Anglin, M. D. (1999). A national evaluation of treatment outcomes for cocaine dependence. *Archives of General Psychiatry, 56*, 507-514.

State of California Department of Corrections. *California Department of Corrections and Rehabilitation Adult Programs Annual Report*. June 2009.

Staton-Tindall, M., Rees, J.D., Oser, C.B., McNees, E., Palmer, J., & Leukefeld, C. (2007). Establishing partnerships between correctional agencies and university researchers to enhance substance abuse treatment initiatives. *Corrections Today* (Dec), 42-45.

Staton-Tindall, M., McNees, E., Leukefeld, C., Walker, R., Thompson, L., Pangburn, K., & Oser, C. Systematic outcomes research for corrections-based treatment: Implications from the Criminal Justice Kentucky Treatment Outcome Study. *Journal of Offender Rehabilitation*, 48(8), 710-724.

Tonigan, J. S., Toscova, R., & Miller, W. R. (1996). Meta-analysis of the literature on Alcoholics Anonymous: Sample and study characteristics moderate findings. *Journal of Studies on Alcohol*, 57(1), 65-72.

Appendix A.

Evaluation methodology

The Criminal Justice Kentucky Treatment Outcome Study (CJTOS) 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 CJTOS 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 corrections-based program staff collect assessment data within the first two weeks of a client's admission to substance abuse treatment.

In FY2011 CJTOS transitioned from collecting baseline data using personal digital assistants (PDAs) to a web-based data collection system. Department of Corrections treatment providers obtain informed consent and contact information which is forwarded to the University of Kentucky to locate SAP 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.

For this report, the 12-month follow-up study was conducted by research staff at the University of Kentucky Center on Drug and Alcohol Research. SAP 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, prison, or community custody facility within the specified timeframe, and 3) provided locator information of at least one community telephone number and address. A group of eligible SAP participants were randomly selected for follow-up after proportionate stratification by prison, jail, and community custody. Using the same proportion from each correctional setting as those meeting eligibility criteria, a final sample of 339 was included in the follow-up. This proportionate stratification approach produces estimates that are as efficient as those of a simple random selection (Pedhazur & Schmelkin, 1991).

UK research staff began to locate SAP 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, and internet searches. All follow-up interviews were completed interviews by phone, and all data provided is self-reported by the participants.

Sampling approach

A total of 4,833 clients who completed a CJTOS baseline were released from custody in FY 2013. Having a release date is the point of entry into the follow-up study sampling frame. The CJTOS follow-up rates are presented in Table 1. Of those 3,849 CJTOS clients who were released from custody in FY2014, 1,529 did not consent to participate in the follow-up study. Of the 2,320 research SAP participants who were eligible for follow-up (released in FY14 and voluntarily consented for follow-up), 18.9% were randomly selected to participate in the follow-up interview (n=438). The sample of 438 was proportionate to the number of males and females released from jails, prisons, and community custody treatment programs.

Of the 438 DOC SAP participants randomly selected for follow-up in the community 12-months post-release, 339 were successfully located and interviewed (158 jail treatment participants, 131 prison treatment participants and 50 community custody treatment participants), for a follow-up rate of 80% (See Table 1).

Table 1. FY 2015 Follow-up Rates

	Eligible	Completed	Percentage
Jail Sample	199	158	79%
Males	155	123	79%
Females	44	35	80%
Prison Sample	168	131	78%
Males	121	95	79%
Females	47	36	77%
Community Custody Sample	71	50	70%
Males	57	40	70%
Females	14	10	71%
Total	438	339	77%
Ineligible for follow-up*	12		
Final Total	426	339	80%
Refusals	29		7%
Unable to locate	58		13%

*Note: ineligible for follow-up was defined as participants moving out of state (n=11) or deceased (n=1).

Appendix B.

Statistical Analysis

Changes in this report between participants' self-reported substance use "on the street" in the 12 months before incarceration (baseline) and SAP participants' self-reported use "on the street" 12 months after release (follow-up) from jail, prison, and community custody programs. McNemar's test for correlated proportions examines statistical differences for the proportion of participants who reported substance use at baseline compared to follow-up. Substance abuse treatment utilization and criminal justice involvement during the 12 months post-release is also included, as are indicators of costs associated with victim crime.

Appendix C.

CIKTOS PRISON DATA COLLECTION SITES

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, Kentucky 40031
(502) 222-9441

Little Sandy Correctional Complex
505 Prison Connector
Sandy Hook, Kentucky 41171
(606) 738-6133

Northpoint Training Center
P.O. Box 479, Hwy 33
710 Walter Reed Road
Burgin, Kentucky 40310

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

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

CIKTOS 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

Bullitt County Detention Center
1671 Preston Highway
Shepherdsville, Kentucky 40165
(502) 543-7263

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

Fulton County Detention Center
210 South 7th 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 Lawson Blvd
Elizabethtown, Kentucky 42701
(270) 765-4159

Harlan County Detention Center
6000 Highway 38
Evarts, Kentucky 40828
(606) 837-0096

Henderson County Detention
Center
380 Borax Drive
Henderson, Kentucky 42420
(270) 827-5560

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

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) 464-259

CIKTOS COMMUNITY CORRECTIONS DATA COLLECTION SITES

CTS-Russell
1407 West Jefferson Street
Louisville, KY 40203
(502) 855-6500

Dismas Charities-Diersen
1219 West Oak Street
Louisville, Kentucky 40210
(502) 636-1572

Dismas Charities-Owensboro
615 Carlton Drive

Owensboro, KY 42303
(270) 685-6054

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

CJKTOS STATE LIAISONS AND PROJECT STAFF

Department of Corrections

LaDonna H. Thompson
Commissioner
275 E. Main Street
Frankfort, KY 40601
502-564-4726

Kevin Pangburn
Director, Division of Substance
Abuse
2439 Lawrenceburg Rd.
Frankfort, KY 40601
502-564-6490

University of Kentucky

Michele Staton-Tindall, Ph.D.,
M.S.W.
Principal Investigator
UK College of Social Work & Center
on Drug & Alcohol Research
672 Patterson Office Tower
Lexington, KY 40506-0027

Erin McNees Winston, M.P.A.
Study Director
UK Center on Drug & Alcohol
Research
845 Angliana Ave
Lexington, KY 40508

Robert Walker, M.S.W., L.C.S.W.
Co-Investigator
UK Department of Behavioral
Science & Center on Drug & Alcohol
Research
333 Waller Avenue, Suite 480
Lexington, KY 40504

Carl Leukefeld, D.S.W.
Co-Investigator
UK Department of Behavioral
Science & Center on Drug & Alcohol
Research
111 Medical Behavioral Science
Building
Lexington, KY 40536

