Introduction
An estimated 12.8 million persons were admitted into local jails in the 12 month period ending June 30, 2009 and local county and city Jails on June 30, 2009 held 767,620 inmates (Minton, 2010). A national survey of local jails conducted by the Bureau of Justice Statistics in 2002 showed that 70% of jail inmates met the criteria for substance dependence or abuse and were more likely than other jail inmates to have a criminal record (Karberg and James, 2005). This is compared to 9% of the U.S. resident population age 12 or older who met the criteria for substance dependence or abuse. Among convicted jail inmates in 2002 an estimated 17.3% participated in treatment or programs after admission. This includes treatment in a self-help group or peer counseling, education, special facility, professional counseling, and detoxification. More than half of those who participated in treatment or a program participated in self-help group or peer group counseling or education (Karberg and James, 2005). Non-substance involved inmates represent only 15.2 percent of the U.S. inmate population. These inmates have not been convicted of an alcohol or drug law violation, were not under the influence of alcohol or other drugs at the time of their crime, did not commit their crime to get money for drugs, have not used drugs regularly, have no history of alcohol treatment and no substance use disorder. Non-substance involved offenders fall into two categories: those who report never using an illicit drug; and those who have used illicit drugs but never regularly (CASA, 2010).

Only 28% of U.S. jails surveyed reported having some form of substance abuse treatment program, with consistent funding provided by the jails to only 18% of the treatment programs (Peters et al., 1993). According to a recent report by the National Center on Addiction and Substance Abuse (CASA) (2010) despite a greater recognition of the problem and possible solutions the population of substance abusing inmates in U.S. jails and prisons continues to increase.

Drug Use and Crime
The link between crime and drug use is well documented and includes several dimensions. Drug users in the general population are more likely than non-users to commit crime and can be explained by three concepts (NIJ, 1994).

1. Offenses may be simple violations of laws prohibiting contact or use of illegal drugs.
2. Crimes may be linked to drugs because of motivation to get money to support drug use.
3. Crimes may be linked to a drug using lifestyle, i.e. exposure to situations that encourage a deviant lifestyle.

Arrestees frequently test positive for recent drug use (Zhang, 2004). In the past, incarcerated jail and prison inmates when asked often report they were under the influence of drugs and/or alcohol when they committed the offense that resulted in their sentence. In the MDC in 2003, 75% of male arrestees and 74% of female arrestees tested positive for drugs. Further, of those testing positive it was estimated that 41% of males and 44% of females were at risk for drug dependence. There is considerable uncertainty about the degree to which drug use causes crime or the degree to which criminal involvement causes drug use and so while drugs and crimes are linked the relationship should be interpreted cautiously. Most crimes result from a variety of factors (personal, situational, and/or economic) and so even when drugs are a cause, they are
likely to be only one factor among many (NIJ, 1994). According to a 2004 report by the ONDCP, the economic cost of drug abuse in 2002 was estimated at $180.9 billion. The cost of drug abuse has increased an average of 5.3% per year from 1992 to 2002. The most rapid increases in drug abuse costs have been in incarceration and increased spending on law enforcement and adjudication. Costs associated with health treatment and prevention has had a moderate increase.

Findings from a Justice Policy Institute (2008) study of substance abuse treatment and public safety, which compared state data on drug treatment admissions to incarceration rates found:

- Increases in admission to substance abuse treatment are associated with reductions in crime rates.
- Increased admissions to drug treatment are associated with reduced incarceration rates.
- Substance abuse treatment prior to contact with the justice system yields public safety benefits early on.
- Substance abuse treatment helps in the transition from the criminal justice system to the community.
- Substance abuse treatment is more cost-effective than prison or other punitive measures.

**Treatment Works**

According to a 2005 publication by the federal Center for Substance Abuse Treatment (CSAT) there is strong empirical evidence that substance abuse treatment reduces crime. Additionally, researchers from the Treatment Research Institute at the University of Pennsylvania (2005) found that substance abuse treatment, results in significant reductions in crime and alcohol/drug use as well as improved ability to function in health and social areas. For many who need alcohol and drug treatment, contact with the criminal justice system is their first opportunity for treatment and possibly their first occasion to be diagnosed with a substance abuse problem. Unfortunately, more intensive treatment is needed for offenders who are in a recurring cycle of crime and drug abuse. Research suggests that addicted offenders commit fewer crimes during periods of non-use. Studies of offender populations have shown that cessation of and continued abstinence from drug use is linked to reduced rates of reoffending and re-arrest. Rather than focusing on populations that are sporadic users of illegal drugs, it may be more effective for criminal justice programs to focus their resources on preventing continued drug abuse by high-use offenders or concentrating on serious juvenile offenders that are at risk of delinquency and future adult criminality (CSAT, 2005).

Increased use of drug treatment within the criminal justice system, whether it is mandated treatment through drug courts or optional treatment through transitional and aftercare programs, has been shown to reduce re-arrest and new arrest rates, as well as drug use. State prisoner participation in drug treatment programs increased from 34.3 percent in 1997 to 39.2 percent in 2004, coinciding with the continued decrease in crime rates. Although drug treatment in prison or jail can be a means of reducing the chances that a person will commit crime in the future, community-based treatment is more effective and helps people reintegrate themselves into the community. An in-depth study of a Delaware prison revealed that compared to in-prison drug treatment, a transitional program composed of a combination of work release, drug treatment, and aftercare services provided a more effective environment for successful prisoner reentry. Five years after the completion of this program, 59.6 percent of those who graduated from the
aftercare program had no new arrests, and 47.8 percent did not return to prison or jail (Justice Policy Institute, 2008).

**Principles of Effective Treatment**

In 2006 the National Institute on Drug Abuse (NIDA) published a research based guide outlining 13 principles of drug abuse treatment for criminal justice populations. The guide describes treatment principles and research findings that have particular relevance to the criminal justice community and treatment providers working with drug abusing offenders. Following are the 13 principles:

1. Drug addiction is a brain disease that affects behavior.
2. Recovery from drug addiction requires effective treatment, followed by management of the problem over time.
3. Treatment must last long enough to produce stable behavioral changes.
4. Assessment is the first step in treatment.
5. Tailoring services to fit the needs of the individual is an important part of effective drug abuse treatment for criminal justice populations.
6. Drug use during treatment should be carefully monitored.
7. Treatment should target factors that are associated with criminal behavior.
8. Criminal justice supervision should incorporate treatment planning for drug abusing offenders, and treatment providers should be aware of correctional supervision requirements.
9. Continuity of care is essential for drug abusers re-entering the community.
10. A balance of rewards and sanctions encourages pro-social behavior and treatment participation.
11. Offenders with co-occurring drug abuse and mental health problems often require an integrated treatment approach.
12. Medications are an important part of treatment for many drug abusing offenders.
13. Treatment planning for drug abusing offenders who are living in or re-entering the community should include strategies to prevent and treat serious, chronic medical conditions, such as HIV/AIDS, hepatitis B and C, and tuberculosis.

A more recent report by the National Center on Addiction and Substance Abuse (CASA) (2010) on substance abuse and the U.S. prison population echoes the NIDA report. According to CASA, offenders who receive a full course of evidence-based treatment and recovery services have the best outcomes, including reduced relapse and recidivism rates. Essential elements of treatment include:

- screening to determine the extent and nature of risky substance use or addiction;
- comprehensive assessment of the nature and extent of the criminal justice patient’s substance-related problem and treatment needs;
- individualized treatment plans that are tailored to the unique needs of the offender;
- aftercare including community supervision, case management and integrated services (medical and psychiatric, housing, childcare, social support, vocational and employment assistance); and
- monitoring of substance use and relapse episodes followed by prompt rewards and sanctions.
The report notes that for the above practices to be implemented appropriately, training of correctional staff is essential. Not only does substance abuse treatment benefit offenders but it benefits the correctional system as well. In correctional facilities where therapeutic community treatment occurs, correctional staff report a less stressful job environment, a higher level of job satisfaction, lower rates of staff sick leave, less inmate-on-inmate and inmate-on-staff assault and less disruptive behavior among inmates. Violent behavior is more than twice as likely to occur among inmates in the general population compared with those in treatment programs; occupational injuries related to assaults are almost 10 times less likely to occur in the treatment facilities (CASA, 2010).

**Jail Treatment**
While there has been an increased interest and emphasis on providing substance abuse treatment of criminal justice offenders most offenders in jails and community correctional facilities do not have access to adequate substance abuse treatment services (Taxman, Perdona, and Harrison, 2007). In addition to a lack of services there is often few choices and types of services. Treatment that is of insufficient quality and intensity or that is not well suited to the needs of offenders may not yield meaningful reductions in drug use and recidivism. Untreated substance abusing offenders are more likely than treated offenders to relapse to drug abuse and return to criminal behavior. This can bring about re-arrest and re-incarceration, jeopardizing public health and public safety and taxing criminal justice system resources. Treatment offers the best alternative for interrupting the drug abuse/criminal justice cycle for offenders with drug abuse problems. Drug abuse treatment can be incorporated into criminal justice settings in a variety of ways. These include treatment as a condition of probation, drug courts that blend judicial monitoring and sanctions with treatment, treatment in prison followed by community-based treatment after release, and treatment under parole or probation supervision. Drug abuse treatment can benefit from the cross agency coordination and collaboration of criminal justice professionals, substance abuse treatment providers, and other social service agencies. By working together, the criminal justice and treatment systems can optimize resources to benefit the health, safety, and well-being of the individuals and communities they serve.

While individuals progress through drug abuse treatment at different rates, one of the most reliable findings in treatment research is that lasting reductions in criminal activity and drug abuse are related to length of treatment. Generally, better outcomes are associated with treatment that lasts longer than 90 days, with the greatest reductions in drug abuse and criminal behavior accruing to those who complete treatment. Again, legal pressure can improve retention rates.

Providing substance abuse treatment in jails is challenging for a number of reasons. Jails unlike prisons hold detained individuals who are awaiting appearance in court, and un-sentenced people who were denied or unable to make bail, as well as people serving short sentences of less than a year (jails can hold people for longer periods of time when pre-sentence time is combined with sentenced time). Short jail episodes (often less than 72 hours) require rapid assessment and planning activity and while this challenge may be offset by the fact that jail inmates are less likely than prisoners to have lost contact with treatment providers in the community short stays and the frequently unpredictable nature of jail discharges can make transition planning form jails particularly challenging. The nature of jail populations and length of jail stay statistics suggest
there are limited treatment opportunities in jails and that it may be worthwhile to target jail treatment to particular jail populations.

In addition to treatment in prison or jail, research strongly indicates that continuing treatment in the community is needed to sustain any gains made in prison and jail treatment. Combining prison or jail based treatment with community-based treatment upon release reduces an offender’s risk of recidivism, decreases substance abuse, improves prospects for employment, and increases pro-social behavior. Efforts to ensure arrestees with short jail episodes who already are in treatment in the community maintain contact with treatment providers in the community may be useful. This is particularly true of arrestees whose jail admissions are a consequence of failure under community supervision (i.e. offenders on probation or parole). This suggests that efforts should be made to ensure the length of stay of probation violators, who are most likely to be released to the community with additional or similar conditions of release, are kept to a minimum.

**Effective Jail-Based Substance Abuse Programs**

This section describes effective jail based substance abuse treatment programs. This includes research based effective programs, types of programs using evidence based principles and best practices, as well as a review of what has been found to work and what should work based on best practices and for what subset of the population. While there are various outcome measures of interest (i.e. reduced substance use, improvement in social indicators) because jail based programs are intended for adult offenders who are already in the criminal justice system the specific outcome of interest is a reduction in recidivism rates.

There is limited research on effective evidence-based jail substance abuse treatment programs. A review of evidence-based corrections programs by the Washington State Institute for Public Policy published in 2006 (Aos, 2006) found nine studies of adult jail based programs that possibly reduce crime. Another study, funded by the National Institute of Justice (NIJ, 1997) found lower infraction rates and smaller reconviction percentages for participants who were housed in separate living units. NIJ also noted that aftercare programs preserve or extend the effects of treatment.

**Screening and Assessment**

The first step to providing effective jail-based substance abuse treatment is screening. Through the screening process inmates whose sentences give them no chance of completing the treatment program should be screened out (Peters et al., 1993). This includes inmates who have not yet been sentenced as they may bond out, be released on their own recognizance, be released to pre-trial services, or at their sentencing be sentenced to time already served and be released. Short stays in treatment programs by clients do not prove to be successful and can disrupt the overall group dynamic for the other participants. Potential group members should also have comprehensive drug and alcohol screening assessments (e.g. CAGE, MAST, etc.) administered before acceptance into any program (NIDA, 2006; Peters et al., 1993).

The goals of screening criminal justice offenders for alcohol and other drug (AOD) problems are to identify potential candidates for treatment intervention as early as possible in their criminal justice processing and to interrupt their cycles of addiction and crime. At an initial screening, a
few quick and simple questions are all that are needed. Basic, simple, and direct questions can yield useful answers. Not asking them will yield no information. The idea is to rule out people without problems, and raise the index of suspicion regarding others. A positive screening, at any point in the process, is a trigger for a more formal and thorough AOD use assessment. An assessment is designed to go beyond the surface and gather more detailed information. Screening is not a substitute for an assessment.

Typically, an assessment is conducted in a 2- to 3-hour procedure, although this can vary. In most cases, assessment involves a combination of clinical interview, personal history taking, biological testing, and paper-and-pencil testing. Depending on the methods used, the assessment may require more than one session. The Addiction Severity Index (ASI) is perhaps the most widely used assessment instrument. It can be administered in about 60 minutes by a trained counselor.

**Retention**

Multiple studies on evidenced based jail-based substance abuse treatment programs reveal that retention, not necessarily completion, brings with it success (NIDA, 2006; Krebs et al., 2003; Peters et al., 1993). The longer an inmate participates in the treatment program the higher the chances of success. Success is characterized by a reduction in the use of alcohol and other substances, and for the offender population an increased time to arrest and a reduction in arrest rates. Jailed-based program have been shown to reduce arrest rates, and lengthen the time period between arrests when inmates participate in jail-based treatment for a minimum of 6 weeks, and, due to the length limitation of a jail setting, a maximum of 1 year (Peters et al., 1993).

**Treatment Models**

Certain treatment models fair better than others in a jail-based setting. Although the literature on jail-based substance abuse treatment is limited, the findings are clear. Therapeutic communities are best when available (Aos et al., 2006). Cognitive-behavioral treatment with an emphasis on relapse prevention programs fair the best when a therapeutic community is not available (Aos et al., 2006; Krebs et al., 2003; Peters et al., 1993). Therapeutic communities (TC) require inmates to be segregated from the rest of the inmate population until completion of the program, which makes TC programs hard to implement when resources such as space and personnel are limited. Cognitive-behavioral treatment with an emphasis on relapse prevention can be run as an in-house outpatient substance abuse treatment program, thereby limiting the amount of resources utilized within the jail when resources are not abundant. Although within a jail setting there can only be a select number of treatment practices available for inmates, one should keep in mind that one size does not fit all when it comes to drug and alcohol treatment, and treatment should be as individualized as possible to help ensure success (NIDA, 2006). Kunitz et al. (2002) found that when jail-based substance abuse treatment was culturally and individually relevant success rates increased. Jails administrators also need to recognize that offenders with co-occurring drug abuse and mental health problems often require an integrated treatment approach and that medications are an important part of treatment for many drug abusing offenders.

**Substance Monitoring**

While the inmates are in treatment monitoring for alcohol and drug use (through urine samples, mouth swabs, breath analysis tests, etc.) should be conducted regularly (NIDA, 2006).
Monitoring should be conducted even in the jail setting. Contraband, including drugs and alcohol, exist behind jail walls and without a constant vigilance of searching and screening inmates and the jail itself contraband will continue to exist (Burke & Owen, 2010; Gearhart, 2006).

Follow-up Treatment in the Community
With the support of a judge’s ruling inmates who received treatment in jail, and those who are screened as needing treatment but received no treatment in jail should be mandated to attend treatment in the community they are released to with consequences for failure to comply (NIDA, 2006). Optimally offenders should have a case manager in the community to help place and assist the offender in treatment (NIDA, 2006). Research has shown that follow up treatment in the community further reduces the risk of recidivism and substance use diminishes more than if treatment is received while incarcerated (NIDA, 2006). Substance abuse treatment in jail has been shown to reduce recidivism rates by approximately 6% (Aos et al., 2006). Substance abuse treatment provided in the community where the offenders are released to has been shown to reduce recidivism by roughly 12.4% (Aos et al., 2006). Providing treatment to offenders in a setting other than where they use drugs proves to be moderately successful. However, providing substance abuse treatment to offenders in the same context as where they use substances proves to be twice as successful. This difference is most likely due to the offender having to practice skills they learned in treatment right away when being treated in the community and having a base for support if and when they encounter a possible using situation.

Conclusion
Jail-based substance abuse treatment models work to reduce recidivism and lower the number of offenders habitually using substances. Inmates must be screened and assessed before entering into a treatment group (Peters et al., 1993). Therapeutic communities are the best practice for treatment in a jail-based setting followed by cognitive-behavioral treatment with an emphasis on relapse prevention (Aos et al., 2006; Krebs et al., 2003; Peters et al., 1993). At a minimum, inmates should complete 6 weeks of treatment (Peters et al., 1993). Optimal outcomes occur when the offenders also enroll in treatment in the communities after they are released to (NIDA, 2006). At all stages of treatment substance abuse monitoring is a necessity (NIDA, 2006). Although there are many obstacles to overcome when trying to implement a jail-based substance abuse treatment program, such as resources available and the length of the inmate’s sentence, the methods listed in this report can be helpful in guiding a practice success.

Research has shown it is important to use appropriately trained professionals to assess and treat substance-involved offenders using comprehensive, evidence-based approaches tailored to the needs of offenders. It is also important to provide appropriate care for co-occurring physical and mental health problems; offer and encourage participation in literacy, education, job training and parenting programs; and, to increase the availability of religious, spiritual, and mutual support services.

For inmates with substance use disorders comprehensive pre-release planning to assure transition to a broad range of integrated reentry services is also important.
References


