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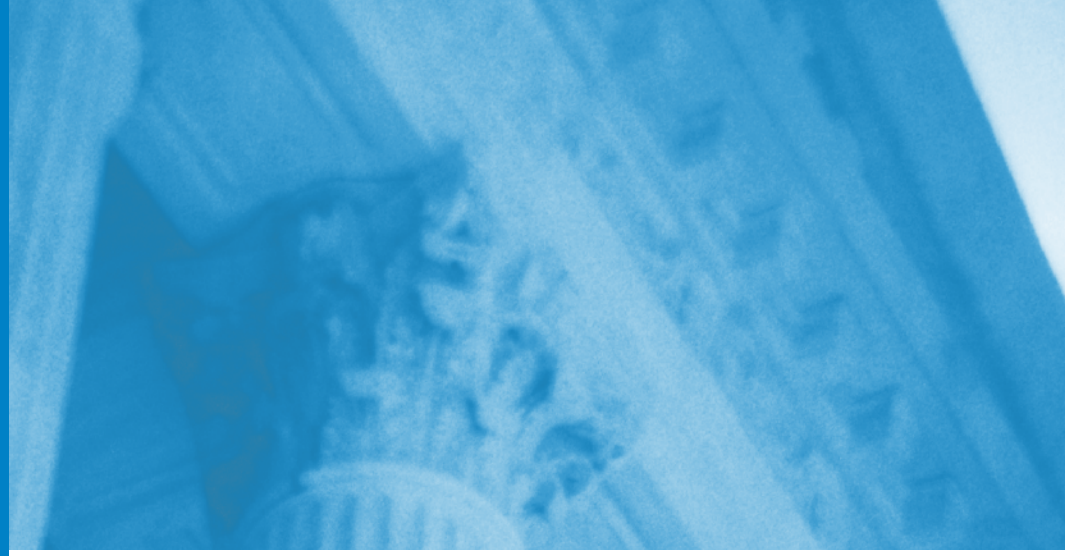

National Institute on Drug Abuse

Principles of Drug Abuse Treatment for Criminal Justice Populations | A Research-Based Guide

National Institutes of Health
U.S. Department of Health
and Human Services

PRINCIPLES OF DRUG ABUSE TREATMENT FOR CRIMINAL JUSTICE POPULATIONS

1. Drug addiction is a brain disease that affects behavior. Drug addiction has well-recognized cognitive, behavioral, and physiological characteristics that contribute to continued use of drugs, despite the harmful consequences. Scientists have also found that chronic drug abuse alters the brain's anatomy and chemistry and that these changes can last for months or years after the individual has stopped using drugs. This transformation may help explain why addicts are at a high risk of relapse to drug abuse even after long periods of abstinence, and why they persist in seeking drugs despite deleterious consequences.

2. Recovery from drug addiction requires effective treatment, followed by management of the problem over time. Drug addiction is a serious problem that can be treated and managed throughout its course. Effective drug abuse treatment engages participants in a therapeutic process, retains them in treatment for an appropriate length of time, and helps them learn to maintain abstinence over time. Multiple episodes of treatment may be required. Outcomes for drug abusing offenders in the community can be improved by monitoring drug use and by encouraging continued participation in treatment.

3. Treatment must last long enough to produce stable behavioral changes. In treatment, the drug abuser is taught to break old patterns of thinking and behaving and to learn new skills for avoiding drug use and criminal behavior. Individuals with

severe drug problems and co-occurring disorders typically need longer treatment (e.g., a minimum of 3 months) and more comprehensive services. Early in treatment, the drug abuser begins a therapeutic process of change. In later stages, he or she addresses other problems related to drug abuse and learns how to manage the problem.

4. Assessment is the first step in treatment. A history of drug or alcohol use may suggest the need to conduct a comprehensive assessment to determine the nature and extent of an individual's drug problems; establish whether problems exist in other areas that may affect recovery; and enable the formulation of an appropriate treatment plan. Personality disorders and other mental health problems are prevalent in offender populations; therefore, comprehensive assessments should include mental health evaluations with treatment planning for these problems.

5. Tailoring services to fit the needs of the individual is an important part of effective drug abuse treatment for criminal justice populations. Individuals differ in terms of age, gender, ethnicity and culture, problem severity, recovery stage, and level of supervision needed. Individuals also respond differently to different treatment approaches and treatment providers. In general, drug treatment should address issues of motivation, problemsolving, skill-building for resisting drug use and criminal behavior, the replacement of drug using and criminal activities with constructive nondrug using activities, improved problemsolving, and lessons for understanding the consequences of one's behavior. Treatment interventions can facilitate the development of healthy interpersonal relationships and improve the participant's ability to interact with family, peers, and others in the community.

6. Drug use during treatment should be carefully monitored. Individuals trying to recover from drug addiction may experience a relapse, or return, to drug use. Triggers for drug relapse are varied; common ones include mental stress and associations with peers and social situations linked to drug use. An undetected relapse can progress to serious drug abuse, but detected use can present opportunities for therapeutic intervention. Monitoring drug use through urinalysis or other objective methods, as part of treatment or criminal justice supervision, provides a basis for assessing and providing feedback on the participant's treatment progress. It also provides opportunities to intervene to change unconstructive behavior—determining rewards and sanctions to facilitate change, and modifying treatment plans according to progress.

7. Treatment should target factors that are associated with criminal behavior. "Criminal thinking" is a combination of attitudes and beliefs that support a criminal lifestyle and criminal behavior. These can include feeling entitled to have things one's own way; feeling that one's criminal behavior is justified; failing to be responsible for one's actions; and consistently failing to anticipate or appreciate the consequences of one's behavior. This pattern of thinking often contributes to drug use and criminal behavior. Treatment that provides specific cognitive skills training to help individuals recognize errors in judgment that lead to drug abuse and criminal behavior may improve outcomes.

8. Criminal justice supervision should incorporate treatment planning for drug abusing offenders, and treatment providers should be aware of correctional supervision requirements. The coordination of drug abuse treatment with correctional planning can encourage participation in drug abuse treatment and can help treatment providers incorporate correctional requirements as treatment goals. Treatment providers should collaborate with criminal justice staff to evaluate each individual's treatment plan and ensure that it meets correctional supervision requirements as well as that person's changing needs, which may include housing and childcare; medical, psychiatric, and social support services; and vocational and employment assistance. For offenders with drug abuse problems, planning should incorporate the transition to community-based treatment and links to appropriate postrelease services to improve the success of drug treatment

and re-entry. Abstinence requirements may necessitate a rapid clinical response, such as more counseling, targeted intervention, or increased medication, to prevent relapse. Ongoing coordination between treatment providers and courts or parole and probation officers is important in addressing the complex needs of these re-entering individuals.

9. Continuity of care is essential for drug abusers re-entering the community. Those who complete prison-based treatment and continue with treatment in the community have the best outcomes. Continuing drug abuse treatment helps the recently released offender deal with problems that become relevant only at re-entry, such as learning to handle situations that could lead to relapse; learning how to live drug-free in the community; and developing a drug-free peer support network. Treatment in prison or jail can begin a process of therapeutic change, resulting in reduced drug use and criminal behavior postincarceration. Continuing drug treatment in the community is essential to sustaining these gains.

10. A balance of rewards and sanctions encourages prosocial behavior and treatment participation. When providing correctional supervision of individuals participating in drug abuse treatment, it is important to reinforce positive behavior. Nonmonetary "social reinforcers" such as recognition for progress or sincere effort can be effective, as can graduated sanctions that are consistent, predictable, and clear responses to noncompliant behavior. Generally, less punitive responses are used for early and less serious noncompliance, with increasingly severe sanctions issuing from continued problem behavior. Rewards and sanctions are most likely to have the desired effect when they are perceived as fair and when they swiftly follow the targeted behavior.

11. Offenders with co-occurring drug abuse and mental health problems often require an integrated treatment approach. High rates of mental health problems are found both in offender populations and in those with substance abuse problems. Drug abuse treatment can sometimes address depression, anxiety, and other mental health problems. Personality, cognitive, and other serious mental disorders can be difficult to treat and may disrupt drug treatment. The presence of co-occurring disorders may require an integrated approach that combines drug abuse treatment with psychiatric treatment, including the use of medication. Individuals with either a substance abuse or mental health problem should be assessed for the presence of the other.

12. Medications are an important part of treatment for many drug abusing offenders. Medicines such as methadone and buprenorphine for heroin addiction have been shown to help normalize brain function, and should be made available to individuals who could benefit from them. Effective use of medications can also be instrumental in enabling people with co-occurring mental health problems to function successfully in society. Behavioral strategies can increase adherence to medication regimens.

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. The rates of infectious diseases, such as hepatitis, tuberculosis, and HIV/AIDS, are higher in drug abusers, incarcerated offenders, and offenders under community supervision than in the general population. Infectious diseases affect not just the offender, but also the criminal justice system and the wider community. Consistent with Federal and State laws, drug-involved offenders should be offered testing for infectious diseases and receive counseling on their health status and on how to modify risk behaviors. Probation and parole officers who monitor offenders with serious medical conditions should link them with appropriate healthcare services, encourage compliance with medical treatment, and re-establish their eligibility for public health services (e.g., Medicaid, county health departments) before release from prison or jail.

CONTENTS

PREFACE

Since it was established in 1974, the National Institute on Drug Abuse (NIDA) has supported research on drug abuse treatment for individuals who are involved with the criminal justice system.

This guide is intended to describe the treatment principles and research findings that are of particular relevance to the criminal justice community and to treatment professionals working with drug abusing offenders. The guide is divided into three main sections: (1) the first distills research findings on the addicted offender into 13 essential principles; (2) the second contains a series of frequently asked questions (FAQs) about drug abuse treatment for those involved with the criminal justice system; and (3) the third is a resource section that provides Web sites for additional information. A summary of the research underlying both the principles and the FAQs is available on NIDA's Web site at www.drugabuse.gov.

PREFACE

Research on drug abuse and addiction runs the gamut from basic science to applied studies. We now understand the basic neurobiology of many addictions, along with what constitutes more effective treatment processes and interventions to help individuals progress through the stages of recovery. Increased understanding of the neurological, physiological, psychological, and social change processes involved will help us develop interventions to improve therapeutic engagement, stabilization of recovery, motivation for change, prevention of relapse, and long-term monitoring of the substance use problem over its course.

Scientific investigations spanning nearly four decades show that drug abuse treatment is an effective intervention for many substance abusing offenders. Because the goals of drug abuse treatment—to help people change their attitudes, beliefs, and behaviors—also apply to reforming criminal behavior, successful treatment can help reduce crime as well. Legal pressure can be important in getting a person into treatment and in improving retention. Once in a program, even those who are not initially motivated to change can eventually become engaged in a continuing therapeutic process. Through this process of change, the individual learns how to avoid relapse and to successfully disengage from a life of substance abuse and crime.

This booklet will provide a complement to NIDA's *Principles of Drug Addiction Treatment, A Research-Based Guide*, which was prepared to assist those dealing with drug addiction both in and out of the criminal justice system. It relies primarily on drug abuse treatment research supported by NIDA, and focuses largely on individuals for whom drug addiction is a debilitating disease.

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INTRODUCTION

The connection between drug abuse and crime is well known.

Drug abuse is implicated in at least three types of drug-related offenses: (1) offenses defined by drug possession or sales, (2) offenses directly related to drug abuse (e.g., stealing to get money for drugs), and (3) offenses related to a lifestyle that predisposes the drug abuser to engage in illegal activity, for example, through association with other offenders or with illicit markets. Individuals who use illicit drugs are more likely to commit crimes, and it is common for many offenses, including violent crimes, to be committed by individuals who had used drugs or alcohol prior to committing the crime, or who were using at the time of the offense.

In 2003, nearly 6.9 million adults were involved with the criminal justice system, including 4.8 million who were under probation or parole supervision (Glaze & Palla, 2004). In its 1997 survey, the Bureau of Justice Statistics (BJS) estimated that about 70 percent of State and 57 percent of Federal prisoners used drugs regularly prior to incarceration (Mumola, 1999). A 2002 survey of jails found that 52 percent of incarcerated women and 44 percent of men met the criteria for alcohol or drug dependence (Karberg & James, 2005). Juvenile justice systems also report high levels of drug abuse. A survey of juvenile detainees in 2000 found that about 56 percent of the boys and 40 percent of the girls tested positive for drug use at the time of their arrest (National Institute of Justice, 2003).

The substance abusing offender may be encouraged or legally pressured to participate in drug abuse treatment. Even so, few drug abusing offenders actually receive treatment. The 1997 BJS survey showed that fewer than 15 percent of incarcerated offenders with drug problems had received treatment[1] in prison. Nearly 36 percent of adult probationers who regularly abused drugs prior to incarceration said they had received treatment during their current sentences; only 17 percent said they were currently in a drug treatment program. Untreated substance abusing offenders are more likely 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.

Treatment offers the best alternative for interrupting the drug abuse/criminal justice cycle.

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 discharge, 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 individuals and the communities they serve.

1. Excludes participation in self-help (e.g., Alcoholics Anonymous) or drug education, alternatives that are often provided in addition to or in lieu of treatment.

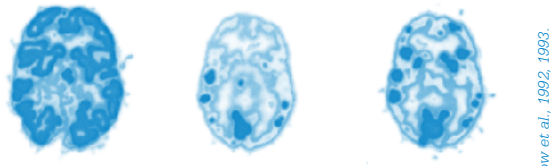
FREQUENTLY ASKED QUESTIONS (FAQS)

1. Why do people involved in the criminal justice system continue abusing drugs?

The answer to this perplexing question spans basic neurobiological, psychological, social, and environmental factors.

The repeated use of addictive drugs eventually changes how the brain functions. Resulting brain changes, which accompany the transition from voluntary to compulsive drug use, affect the brain's natural inhibition and reward centers, causing the addict to use drugs in spite of the adverse health, social, and legal consequences. Craving for drugs may be triggered by contact with the people, places, and things associated with prior drug use, as well as by stress. Forced abstinence without treatment does not cure addiction. Abstinent individuals must still learn how to avoid relapse, including those who have been incarcerated and may have been abstinent for a long period of time.

Addictive Drugs Cause Long-lasting Changes in the Brain[2]



Normal

Cocaine Abuser (10 days of abstinence)

Cocaine Abuser (100 days of abstinence)

Source: Volkow et al., 1992, 1993.

Potential risk factors for released offenders include pressures from peers and even family members to return to drug use and a criminal lifestyle. Tensions of daily life—violent associates, few opportunities for legitimate employment, lack of safe housing, even the need

2. PET scans showing glucose metabolism in healthy brain and cocaine-addicted brains. Even after 100 days of abstinence, glucose metabolism has not returned to normal levels.

to comply with correctional supervision conditions—can also create stressful situations that can precipitate a relapse to drug use.

Research on how the brain is affected by drug abuse promises to help us learn much more about the mechanics of drug-induced brain changes and their relationship to addiction. Research also reveals that with effective drug abuse treatment, individuals can overcome persistent drug effects and lead healthy, productive lives.

2. Why should drug abuse treatment be provided to offenders?

The case for treating drug abusing offenders is compelling. Drug abuse treatment improves outcomes for drug abusing offenders and has beneficial effects for public health and safety. Effective treatment decreases future drug use and drug-related criminal behavior, can improve the individual's relationships with his or her family, and may improve prospects for employment.

Outcomes for substance abusing individuals can be improved when criminal justice personnel work in tandem with treatment providers on drug abuse treatment needs and supervision requirements. Treatment needs that can be assessed after arrest include substance abuse severity, mental health problems, and physical health. Defense attorneys, prosecutors, and judges need to work together during the prosecution and sentencing phases of the criminal justice process to determine suitable treatment programs that meet the offender's needs. Through drug courts, diversion programs, pretrial release programs conditional on treatment, and conditional probation with sanctions, the offender can participate in community-based drug abuse treatment while under criminal justice supervision. In some instances, the judge may recommend that the offender participate in treatment while serving jail or prison time or require it as part of continuing correctional supervision postrelease.

3. How effective is drug abuse treatment for criminal justice-involved individuals?

Treatment is an effective intervention for drug abusers, including those who are involved with the criminal justice system. However, the effectiveness of drug treatment depends on both the individual and the program, and on whether interventions and treatment services are available and appropriate for the individual's needs. To amend attitudes, beliefs, and behaviors that support drug use, the drug abuser must engage in a therapeutic change process. Longitudinal outcome studies find that those who participate in community-based drug abuse treatment programs commit fewer crimes than those who do not participate.

4. Are all drug abusers in the criminal justice system good candidates for treatment?

A history of drug use does not in itself indicate the need for drug abuse treatment. Offenders who meet drug dependence criteria should be given higher priority for treatment than those who do not. Less intensive interventions, such as drug abuse education or self-help participation, may be appropriate for those not meeting criteria for drug dependence. Services such as family-based interventions for juveniles, psychiatric treatment, or cognitive-behavioral "criminal thinking" interventions may be a higher priority for some offenders, and individuals with mental health problems may require specialized services (see FAQ Nos. 6 and 12).

Outcomes can be improved when criminal justice personnel work in tandem with treatment providers.

Low motivation to participate in treatment or to end drug abuse should not preclude access to treatment if other criteria are met. Motivational enhancement interventions may be useful in these cases. Examples include motivational interviewing and contingency management techniques, which often provide tangible rewards in exchange for meeting program goals. Legal pressure that encourages abstinence and treatment participation may also help these individuals by improving retention and catalyzing longer treatment stays.

Drug abuse treatment is also effective for offenders who have a history of serious and violent crime, particularly if they receive intensive, targeted services. The economic benefits in avoided crime and costs

to crime victims (e.g., medical costs, lost earnings, and loss in quality of life) may be substantial for these high-risk offenders. Treating them requires a high degree of coordination between drug abuse treatment providers and criminal justice personnel to ensure that treatment and criminogenic needs are appropriately addressed.

5. Is legally mandated treatment effective?

Often the criminal justice system can apply legal pressure to encourage offenders to participate in drug abuse treatment; or treatment can be mandated, for example, through a drug court or as a condition of pretrial release, probation, or parole. A large percentage of those admitted to drug abuse treatment cite legal pressure as an important reason for seeking treatment. Most studies suggest that outcomes for those who are legally pressured to enter treatment are as good as or better than outcomes for those who entered treatment without legal pressure. Those under legal pressure also tend to have higher attendance rates and to remain in treatment for longer periods, which can also have a positive impact on treatment outcomes.

Legal pressure can increase treatment attendance and improve retention.

6. Are relapse risk factors different in offender populations? How should drug abuse treatment deal with these risk factors?

Often, drug abusing offenders have problems in other areas. Examples include family difficulties, limited social skills, educational and employment problems, mental health disorders, infectious diseases, and other medical problems. Treatment should take these problems into account, because they can increase the risk of drug relapse and criminal recidivism if left unaddressed.

Stress is often a contributing factor to relapse, and offenders who are re-entering society face many challenges and stressors, including reuniting with family members, securing housing, and complying with criminal justice supervision requirements. Even the many daily decisions that most people face can be stressful for those recently released from a highly controlled prison environment.

Other threats to recovery include a loss of support from family or friends, which incarcerated people may experience. Drug abusers returning to the community may also encounter family, friends, or associates still involved in drugs or crime and be enticed to resume a criminal and drug using lifestyle. Returning to environments or activities associated with prior drug use may trigger strong cravings and cause a relapse. A coordinated approach by treatment and criminal justice staff provides the best way to detect and intervene with these and other threats to recovery. In any case, treatment is needed to provide the skills necessary to avoid or cope with situations that could lead to relapse.

Returning to environments associated with drug use may trigger cravings and cause a relapse.

Treatment staff should identify the offender's unique relapse risk factors and periodically re-assess and modify the treatment plan as needed. Generally, continuing or re-emerging drug use during treatment requires a clinical response—either increasing the "dosage" or level of treatment, or changing the treatment intervention.

7. What treatment and other health services should be provided to drug abusers involved with the criminal justice system?

One of the goals of treatment planning is to match evidence-based interventions to individual needs at each stage of drug treatment. Over time, various combinations of treatment services may be required. Evidence-based interventions include cognitive-behavioral therapy to help participants learn positive social and coping skills, contingency management approaches to reinforce positive behavioral change, and motivational enhancement to increase treatment engagement and retention. In those addicted to opioid drugs, agonist medications can also help normalize brain function, and antagonist medications can facilitate abstinence. For juvenile offenders, treatments that involve

the family and other aspects of the drug abuser's environment have established efficacy.

Drug abuse treatment plans for incarcerated offenders can anticipate their eventual re-entry into the community by incorporating relevant transition plans and services. Drug abusers often have mental and physical health, family counseling, parenting, educational, and vocational needs, so medical, psychological, and social services are often crucial components of successful treatment. Case management approaches can be used to provide assistance in obtaining drug abuse treatment and community services.

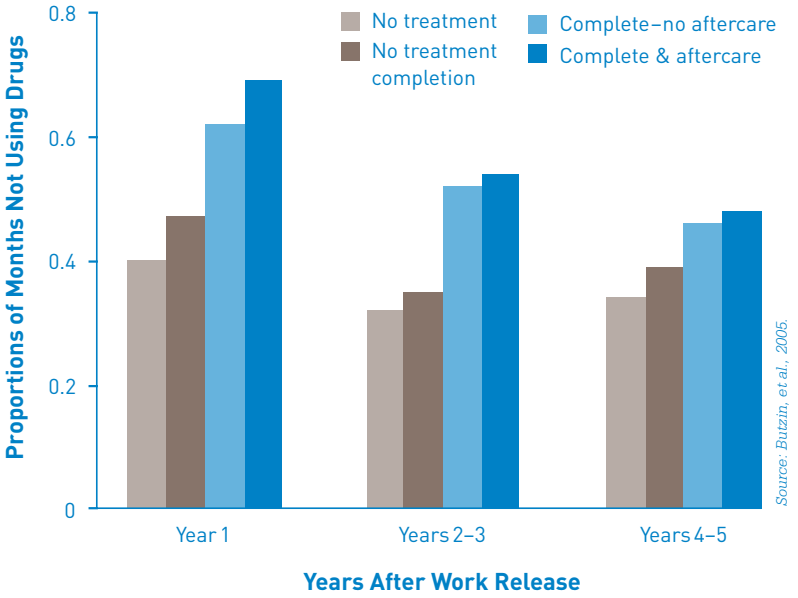
8. How long should drug abuse treatment last for individuals involved in the criminal justice system?

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.

A longer continuum of treatment may be indicated for individuals with severe or multiple problems. Research has shown that participation in a prison-based therapeutic community followed by community-based treatment after release can reduce the risk of recidivism to criminal behavior as well as relapse to drug use.

Early phases of treatment help the participant stop using drugs and begin a therapeutic process of change. Later stages address other problems related to drug abuse and, importantly, help the individual learn how to self-manage the drug problem.

Because addiction is a chronic disease, drug relapse and return to treatment are common features of an individual's path to recovery, so treatment may need to extend over a long period of time and across multiple episodes of care. It is also the case that those with the most severe problems can participate in treatment and achieve positive outcomes.



9. How can rewards and sanctions be used effectively with drug-involved offenders in treatment?

The systematic application of behavioral management principles underlying reward and punishment can help individuals reduce their drug use and criminal behavior. Rewards and sanctions are most likely to change behavior when they are certain to follow the targeted behavior, when they follow swiftly, and when they are perceived as fair.

It is important to recognize and reinforce progress toward responsible, abstinent behavior. Rewarding positive behavior is more effective in producing long-term positive change than punishing negative behavior. Nonmonetary rewards such as social recognition can be as effective as monetary rewards. A graduated range of rewards given for meeting predetermined goals can be an effective strategy when used in conjunction with behavioral management approaches such as contingency management. In community-based treatment, contingency management strategies may use voucher-based incentives or rewards, such as bus tokens, to reinforce abstinence (measured

by negative drug tests) or to shape progress toward other treatment goals, such as program session attendance or compliance with medication regimens. Contingency management is most effective when the contingent reward closely follows the behavior being monitored.

It is important to recognize and reinforce progress toward responsible, abstinent behavior.

Graduated sanctions, which invoke less punitive responses for early and less serious noncompliance and increasingly severe sanctions for more serious or continuing problems, can be an effective tool in conjunction with drug testing. The effective use of graduated sanctions involves consistent, predictable, and clear responses to noncompliant behavior.

Drug testing can determine when an individual is having difficulties with recovery. The first response to drug use detected through urinalysis should be clinical—for example, an increase in treatment intensity or a change to an alternative treatment. This often requires coordination between the criminal justice staff and the treatment provider. (Note that more intensive treatment should not be considered a sanction, but rather a routine progression in healthcare practice when a treatment appears less effective than expected.)

Behavioral contracting can employ both rewards and sanctions. A behavioral contract is an explicit agreement between the participant and the treatment provider or criminal justice monitor (or all three) that specifies proscribed behaviors and associated sanctions, as well as positive goals and rewards for success. Behavioral contracting can instill a sense of procedural justice because both the necessary steps toward progress and the sanctions for violating the contract are specified and understood in advance.

10. What is the role of medications in treating substance abusing offenders?

Medications can be an important component of effective drug abuse treatment for offenders. By allowing the body to function normally, they enable the addict to leave behind a life of crime and drug abuse. Opiate agonist medications, which work by replacing neurotransmitters in brain cells that have become altered or desensitized as a result of drug abuse, tend to be well tolerated and can help an individual remain in treatment. Antagonist medications, which work by blocking the effects of a drug, are effective but often are not taken as prescribed. Despite evidence of their effectiveness, addiction medications are underutilized in the treatment of drug abusers within the criminal justice system. Still, some jurisdictions have found ways to successfully implement medication therapy for drug abusing offenders.

Effective medications have been developed for opiates/heroin and alcohol:

- **Opiates/Heroin**. Long-term opiate abuse results in a desensitization of the brain's opiate receptors to endorphins, the body's natural opioids. *Methadone* replaces these natural endorphins, stabilizing the craving that otherwise results in compulsive use of heroin or other illicit opiates. Methadone is effective in reducing opiate use, drug-related criminal behavior, and HIV risk behavior. *Buprenorphine* is a partial agonist and acts on the same receptors as morphine (a full agonist), but without producing the same high, level of dependence, or withdrawal symptoms. Suboxone is a unique formulation of buprenorphine that contains *naloxone*, an opioid antagonist, which limits diversion by causing severe withdrawal symptoms in those who inject it to get "high," but has no adverse effects when taken orally. *Naltrexone*, an opiate antagonist, blocks the effects of opiates.

Medications can be an important component of effective addiction treatment for offenders.

- **Alcohol**. *Disulfiram* (also known as Antabuse) is an aversion therapy that induces nausea if alcohol is consumed. *Acamprosate* works by restoring normal balance to the brain's glutamate neurotransmitter system, helping to reduce alcohol craving. *Naltrexone*, which blocks some of alcohol's pleasurable effects, is also FDA-approved for treatment of alcohol abuse.

11. How can the criminal justice and drug abuse treatment systems reduce the spread of HIV/AIDS, hepatitis, and other infectious diseases among drug abusing offenders?

It is critical for the criminal justice and drug abuse treatment systems to be involved in efforts to reduce the spread of HIV/AIDS and other infectious diseases, which occur at higher rates among drug abusers in the criminal justice system than among the general population. The prevalence of AIDS has been estimated to be approximately five times higher among incarcerated offenders than the general population, and rates of HIV are also higher than in the general population. In addition, individuals in the criminal justice system represent a significant portion of hepatitis B, hepatitis C, and tuberculosis cases in the United States. Although most infectious diseases are contracted in the community and not in correctional settings, they must be treated in the correctional setting once diagnosed.

Infectious diseases among offenders who are re-entering or living within the community present a serious public health challenge. While incarcerated, offenders often have access to adequate healthcare, which offers opportunities for integrating strategies to address medical, mental health, and drug abuse problems. Offenders with infectious diseases who are returning to their communities should be linked with community-based medical care prior to release. Community health, drug treatment, and criminal justice agencies should work together to offer education, screening, counseling, prevention, and treatment programs for HIV/AIDS, hepatitis, and other infectious diseases to offenders in or returning to the community. Drug abuse treatment can decrease the spread of infectious disease by reducing high-risk behaviors such as needle sharing and unprotected sex.

The prevalence of AIDS is five times higher among incarcerated offenders than the general population.

The need to negotiate access to health services and adhere to complex treatment protocols places a large burden on the addicted offender, and many offenders fall through the cracks. Untreated or deteriorating medical or mental health problems increase the risk of relapse to drug abuse and to possible re-arrest and re-incarceration.

12. What works for offenders with co-occurring substance abuse and mental disorders?

It is important to adequately assess mental disorders and to address them as part of effective drug abuse treatment. Many types of co-occurring mental health problems can be successfully addressed in standard drug abuse treatment programs. However, individuals with serious mental disorders may require an integrated treatment approach designed for treating patients with co-occurring mental health problems and substance use disorders. Although not readily available, specialized therapeutic community "MICA" (for "mentally ill chemical abuser") programs are promising for patients with co-occurring mental and addictive problems.

Much progress has been made in developing effective medications for treating mental disorders, including a number of antidepressants, mood stabilizers, and antipsychotics. These medications may be critical for treatment success with offenders who have co-occurring mental disorders such as depression, anxiety disorder, bipolar disorder, or psychosis. Cognitive-behavioral therapy can be effective for treating mental health problems, particularly when combined with medications. Contingency management can improve adherence to prescribed medications, and intensive case management may be useful for linking severely mentally ill individuals with drug abuse treatment, mental health care, and community services.

13. Is providing drug abuse treatment to offenders worth the financial investment?

In 2002, it was estimated that the cost to society of drug abuse was $180.9 billion (Office of National Drug Control Policy, 2004), a substantial portion of which—$107.8 billion—is associated with drug-related crime, including criminal justice system costs and costs borne by victims of crime. The cost of treating drug abuse (including research,

training, and prevention efforts) was estimated to be $15.8 billion, a fraction of these overall societal costs.

Drug abuse treatment is cost effective in reducing drug use and bringing about associated healthcare, crime, and incarceration cost savings. Positive net economic benefits are consistently found for drug abuse treatment across various settings and populations. The largest economic benefit of treatment is seen in avoided costs of crime (incarceration and victimization costs), with greater economic benefits resulting from treating offenders with co-occurring mental health problems and substance use disorders. Residential prison treatment is more cost effective if offenders attend treatment postrelease, according to research. Drug courts also convey positive economic benefits, including participant-earned wages and avoided incarceration and future crime costs.

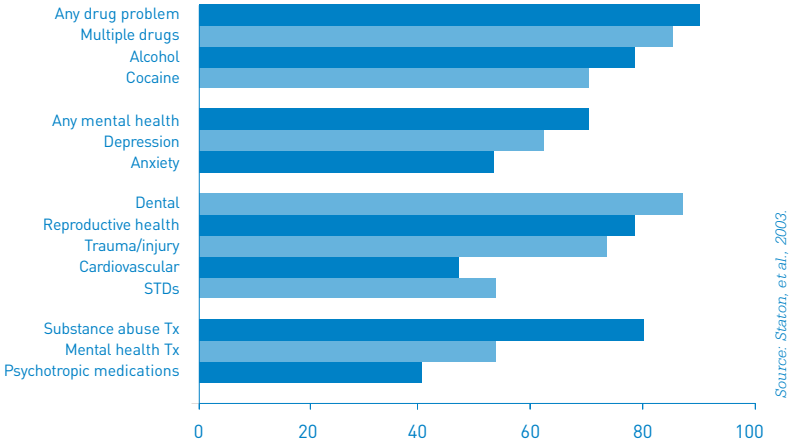
The largest economic benefit of treatment is seen in avoided costs of crime.

14. What are unique treatment needs for women in the criminal justice system?

Although women are incarcerated at far lower rates than men, the number and percentage of incarcerated women have grown substantially in recent years. Between 1985 and 1995, the number of men in prisons and jails doubled, while the number of incarcerated women tripled. Women in prison are likely to have a different set of problems and needs than men. Surveys indicate that female offenders used more drugs more frequently prior to incarceration than males, and a higher percentage of females (54 percent compared to 50 percent) had used drugs in the month before committing their offense. In addition to being more likely to have a substance abuse problem, approximately 50 percent of female offenders are likely to have histories of physical or sexual abuse. Women are also more likely than men to be victims of domestic violence. Past or current victimization can contribute to drug or alcohol abuse, depression, post-traumatic stress disorder, and criminal activity. Female offenders are also more likely to have mental illnesses, employment problems, and childrearing responsibilities.

Substance abuse, mental health, and health problems and treatment in a sample of incarcerated women (N=60)

Note: Graph shows lifetime percentages except for multiple drugs, alcohol, and cocaine, which are the percent reporting use in the 30 days prior to incarceration.



Treatment programs serving both men and women can provide effective treatment for their female clients. However, gender-specific programs may be more effective for female offenders, particularly those with histories of trauma and abuse. Female offenders are more likely to need medical and mental health services, childcare services, and assistance in finding housing and employment. Following a comprehensive assessment, women with mental health disorders should receive appropriate treatment and case management, including victim services as needed. For female offenders with children, parental responsibilities can conflict with their ability to participate in drug treatment. Regaining or retaining custody of their children can also motivate mothers to participate in treatment. Treatment programs may improve retention by offering childcare services and parenting classes.

15. What are the unique treatment needs of juveniles in the criminal justice system?

In recent years, there has been a dramatic increase in the number of juveniles with substance abuse problems involved in the criminal and juvenile justice systems. From 1986 to 1996, drug-related juvenile

incarcerations increased nearly threefold. In 2002, about 60 percent of detained boys and nearly half of the girls tested positive for drug use. The number of juvenile court cases involving drug offenses more than doubled between 1993 and 1998, and 116,781 adolescents under the age of 18 were arrested for drug violations in 2002. One study found that about one-half of both male and female juvenile detainees met criteria for a substance use disorder (Teplin et al., 2002).

Juveniles entering the criminal justice system can bring a number of serious issues with them—substance abuse, academic failure, emotional disturbances, physical health issues, family problems, and a history of physical or sexual abuse. Girls comprise nearly one-third of juvenile arrests, a high percentage reporting some form of emotional, physical, or sexual abuse. Effectively addressing these issues requires their gaining access to comprehensive assessment, treatment, case management, and support services appropriate for the age and developmental stage. Assessment is particularly important, because not all adolescents who have used drugs need treatment. For those who do, there are several points in the juvenile justice continuum where treatment has been integrated, including juvenile drug courts, community-based supervision, juvenile detention, and community re-entry.

Effective treatment of juvenile substance abusers often requires a family-based treatment model.

Families play an important role in the recovery of substance-abusing juveniles, but this influence can be either positive or negative. Parental substance abuse or criminal involvement, physical or sexual abuse by family members, and lack of parental involvement or supervision are all risk factors for adolescent substance abuse and delinquent behavior. Thus, the effective treatment of juvenile substance abusers often requires a family-based treatment model that targets family functioning and the increased involvement of family members. Effective adolescent treatment approaches include Multisystemic Therapy, Multidimensional Family Therapy, and Functional Family Therapy. These interventions show promise in strengthening families and decreasing juvenile substance abuse and delinquent behavior.

RESOURCES

Many resources are available on the Internet. The following are useful links:

General Information

NIDA Web site: www.drugabuse.gov

Inquiries about NIDA's research on drug abuse treatment and the criminal justice system: Division of Epidemiology, Services and Prevention Research (301) 443-6504

General Inquires: NIDA Public Information Office (301) 443–1124

Federal Resources

National Institute of Mental Health (NIMH)	www.nimh.nih.gov
National Institute on Alcohol Abuse and Alcoholism (NIAAA)	www.niaaa.nih.gov
National Institute of Justice (NIJ)	www.ojp.usdoj.gov/nij
The Office of Juvenile Justice and Delinquency Prevention (OJJDP)	www.ojjdp.ncjrs.org
National Institute of Corrections (NIC)	www.nicic.org
Federal Bureau of Prisons Substance Abuse Treatment	www.bop.gov/inmate_programs/substance.jsp
National Criminal Justice Reference Service	www.ncjrs.gov
Bureau of Justice Assistance Residential Substance Abuse Treatment (RSAT)	www.ojp.usdoj.gov/BJA/evaluation/psi_rsat

Other Resources

Drug Strategies	www.drugstrategies.org
Re-Entry Policy Council	www.reentrypolicy.org
University of Washington Alcohol and Drug Abuse Institute	www.adai.washington.edu/instruments
American Society of Addiction Medicine	www.asam.org
TASC (Treatment Accountability for Safer Communities)	www.nationaltasc.org
National Drug Court Institute	www.ndci.org

Statistics

Bureau of Justice Statistics (BJS) Statistics on Drugs and Crime	www.ojp.usdoj.gov/bjs/drugs.htm
Office of Applied Studies, Substance Abuse and Mental Health Services Administration (SAMHSA)	www.oas.samhsa.gov

Research Centers and Programs

NIDA Criminal Justice Drug Abuse Treatment Studies (CJ-DATS)	www.cjdats.org
Institute of Behavioral Research at Texas Christian University (IBR-TCU)	www.ibr.tcu.edu
UCLA Integrated Substance Abuse Programs (ISAP)	www.uclaisap.org
University of Delaware Center for Drug and Alcohol Studies (CDAS)	www.udel.edu/cdas
University of Maryland Bureau of Governmental Research	www.bgr.umd.edu
University of New Mexico Center on Alcoholism, Substance Abuse, and Addictions	http://casaa.unm.edu
Rutgers University Center for Mental Health Services & Criminal Justice Research	www.cmhs-cjr.rutgers.edu
Urban Institute	www.urban.org
The National Center on Addiction and Substance Abuse at Columbia University	www.casacolumbia.org

Screening and Assessment—Adults

Institute of Behavioral Research, Texas Christian University (TCU) Assessment Instruments

Researchers in the Institute of Behavioral Research at TCU have developed a number of useful instruments to screen individuals for drug use, to identify problem areas and determine client service needs, and to track progress through treatment.

There are also tools to measure the program's need for training and to help program directors and staff improve the quality of treatment. These measurement tools, which are listed below, can be found through the Web site listed below, at right.

TCU Drug Screen II (TCUDS) (Available in English and Spanish)	www.ibr.tcu.edu/resources/rc-correvaltrt.html
TCU Survey of Program Training Needs (PTN-S and PTN-D for Criminal Justice)	
TCU Survey of Organizational Functioning	
TCU-CJ-CESI (Client Evaluation of Self at Intake) Pretreatment Survey of Correctional Populations (Available in English and Spanish)	
CJ-CEST Survey of Correctional Populations (Client Evaluation of Self and Treatment) (Available in English and Spanish)	
Criminal Thinking Scales (CTS)	
Chestnut Health Systems Global Appraisal of Individual Needs (GAIN)	www.chestnut.org/LI/gain
Treatment Research Institute - The Addiction Severity Index (ASI)	www.tresearch.org/asi.htm

Screening and Assessment—Adolescents

Overview of screening and assessment tools	www.drugstrategies.org/teens/screening.html

Economic Resources

Drug Abuse Treatment Cost Analysis Program (DATCAP)	www.datcap.com

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Volkow, N.D.; Fowler, J.S.; Wang, G.J.; Hitzemann, R.; Logan, J.; Schlyer, D.; Dewey, S.; and Wolf, A.P. Decreased dopamine D2 receptor availability is associated with reduced frontal metabolism in cocaine abusers. *Synapse* 14:169–177, 1993.

For More Information

For more information about other research-based publications on drug abuse and addiction, visit NIDA's Web site at **www.drugabuse.gov**, or call the National Clearinghouse for Alcohol and Drug Information at 1-800–729–6686.