

# EFFECTIVE STRATEGIES FOR COURT-INVOLVED YOUTH: SUBSTANCE USE TREATMENT

May 2012

#### **EXECUTIVE SUMMARY**

There is a strong relationship between substance use and criminal offending among adolescents.<sup>1</sup> Not only is adolescent drug and alcohol use a crime in itself, but consuming these substances can impair a youth's judgment, exacerbate existing behavioral problems, increase youths' exposure to anti-social influences, and contribute to a host of other risk factors for criminal behavior.<sup>2</sup> One way to break this "drug-crime cycle" is to provide substance use treatment for youth in the juvenile justice system who use, abuse, or are dependent on drugs or alcohol.<sup>3</sup>

When delivered properly, substance use treatment that targets adolescents can significantly reduce drug and alcohol use, lessen the likelihood of criminal offending, and reduce behavioral problems.<sup>4</sup> Substance use treatment comes in many forms, and common interventions include individual and group counseling, medication therapy, and intensive inpatient care.<sup>5</sup> Several kinds of interventions, such as family-based therapy and behavioral therapy, have produced promising outcomes for court-involved youth who are struggling with substance use issues.<sup>6</sup>

No single form of treatment, however, is successful in all circumstances.<sup>7</sup> The choice of which approach to use must take into account the youth's individual risks and needs, including the severity of the youth's substance problem, the presence of co-existing medical and psychological conditions, the youth's stage of development, and social influences such as family, peers, education, employment, and living conditions.<sup>8</sup> For many court-involved youth, particularly those whose levels of substance use fall short of dependency, community-based treatment is an appropriate alternative to residential, inpatient care.<sup>9</sup> Not only have outpatient interventions been found effective in reducing substance use and criminal offending,<sup>10</sup> but they also allow youth to receive long-term, continuous care while maintaining ties to family, work, school, and the community.<sup>11</sup>

Regardless of whether it is delivered in an inpatient or outpatient setting, all substance use treatment should incorporate certain components that experts agree maximize the chance for success.<sup>12</sup> The best practices for interventions targeting adolescents include proper assessment and diagnosis, treatment that is tailored to fit the individual's risks and needs, an integrated approach that incorporates family involvement, rigorous evaluation of outcomes, and treatment that is consistent, carefully monitored, and appropriate to the unique developmental needs of adolescents.<sup>13</sup> Treatment programs specific to court-involved youth should also take into account public safety considerations.<sup>14</sup>

## OJJDP Conclusions on Substance Use

"Whether treatment occurs in detention, prison, jail or community settings, evidence shows that effective treatment programming can empower addicted young people to overcome their substance abuse, lead crime-free lives, and become productive citizens."

Office of Juvenile Justice and Delinquency Prevention. *OJJDP Model Programs Guide: Drug, Alcohol Therapy/Education.* Retrieved from http://www.ojjdp.gov/mpg. This report summarizes the research surrounding substance use treatment targeting adolescents. Best practices suggest four primary conclusions:

- I. *The impact of substance use treatment:* Substance use treatment can significantly reduce substance use, criminal offending, and behavioral problems among court-involved youth.
- II. *Choosing the appropriate treatment course:* No single treatment model is effective in all circumstances. To be successful, the intervention must be tailored to the severity of the youth's substance use problem and to his or her individual risks and needs.
- III. *Community-based substance use treatment:* Substance use treatment can produce positive outcomes in both inpatient and outpatient settings. For many court-involved youth, community-based treatment can provide an effective alternative to residential, inpatient care.
- IV. *Best practices for substance use treatment:* All substance use treatment programs should adhere to best practices for interventions targeting adolescents with substance-related problems.

### I. THE IMPACT OF SUBSTANCE USE TREATMENT

Substance use treatment can significantly reduce substance use, criminal offending, and behavioral problems among court-involved youth.

Substance use treatment has been found to significantly reduce drug and alcohol use, lessen the likelihood of criminal offending, and reduce behavioral problems among adolescents.<sup>15</sup> These positive effects are often long term; for example, studies have shown that adolescents who receive some form of treatment exhibit significant reductions in substance use, even a year after the treatment had ended.<sup>16</sup> Substance use interventions have also been successful in treating youth who are involved with the juvenile justice system. A recent study of 429 male juvenile offenders found that those who received some type of substance use treatment had levels of post-treatment substance use that were significantly reduced from predicted levels, both at six and 12 months after treatment ended.<sup>17</sup> For these court-involved youth, interventions that included family involvement were also associated with significant reductions in criminal offending.<sup>18</sup> Another study examining the effects of substance use treatment on 1167 adolescents, the majority of whom were

## Pathways to **Desistence**

In 2011, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) released the findings of the Pathways to Desistence Study, which is a longitudinal study of serious adolescent offenders. One component of this study examined the effects of substance abuse treatment on 429 serious male adolescent offenders.

#### Key Findings:

- Substance abuse treatment has significant effects in reducing substance use and criminal behavior.
- Treatment that lasted three months or more led to significant reductions in marijuana and alcohol use, both six and 12 months following the termination of treatment.
- Treatment programs incorporating family involvement were associated with significant reductions in criminal offending and alcohol use.

Chassin, L., Knight, G., Vargas-Chanes, D, Losoya, S.H., & Naranjo, D. (2009). Substance use treatment outcomes in a sample of male serious juvenile offenders. *Journal of Substance Abuse Treatment*, *36*(2), 183-194.

involved with the legal system, found that, as compared to pre-treatment levels, in the year following treatment participants reported lower levels of criminal involvement (75.6% to 52.8%), marijuana use (80.4% to 33.8%), heavy drinking (33.8% to 20.3%), and use of other illicit drugs (48.0% to 42.2%).<sup>19</sup>

# What type of substance use treatment is most effective?

Programs designed to treat adolescent substance use can take many forms, ranging from brief outpatient counseling to long-term inpatient care in a residential facility.<sup>20</sup> The success of a substance use intervention is highly dependent on the specific characteristics of the individual being treated; no single treatment model is universally superior.<sup>21</sup> Several commonly-used interventions, however, have produced promising results for treating adolescents with substance issues.

• *Family-based therapy:* There has been a trend in recent years towards using family-based therapeutic models, such as Functional Family Therapy (FFT), Multi-systemic Therapy (MST), and Multi-dimensional Family Therapy (MDFT), to treat adolescents with substance issues.<sup>22</sup> This approach is grounded in the belief that integrating the youth's family into the treatment process will help address the systemic family dysfunctions that can contribute to substance use.<sup>23</sup>

Though many family-based therapy interventions were not designed specifically to address substance use issues, evaluations have demonstrated "solid empirical support" for their effectiveness in reducing adolescent drug use,<sup>24</sup> even among youth diagnosed with substance abuse or dependency.<sup>25</sup> There is also evidence that family-based therapy can sustain treatment gains for a longer period than other forms of treatment.<sup>26</sup> For example, one study found that youth receiving MDFT reported a 77% decrease in drug use frequency between intake and 12 months after treatment began, whereas

### **Family Therapy Models**

"A program that applies one of the documented family therapy models can implement family therapy with some certainty that successful treatment of adolescents will result."

Center for Substance Abuse Treatment. (1999). *Treatment of Adolescents with Substance Use Disorders* (Treatment Improvement Protocol Series, No. 32). Rockville, MD:Substance Abuse and Mental Health Services Administration

> those receiving individual therapy reported an increased frequency of use during that period.<sup>27</sup> When compared to adolescent group therapy, youth receiving MDFT showed greater improvements in the reduction of drug use, and these differences were sustained at six and 12 months following treatment.<sup>28</sup> A study comparing MST to individual counseling found that MST led to significantly fewer youth with substance-related arrests during the four years following treatment.<sup>29</sup>

**Behavioral therapy:** Interventions such as cognitive-behavioral therapy (CBT) focus on addressing the underlying cognitive processes, beliefs, coping skills, and environmental cues that are associated with substance use.<sup>30</sup> When compared to other types of interventions, CBT has emerged as a "well-established" treatment model, regardless of the youth's level of substance use.<sup>31</sup>

For example, a study found that, in six out of seven randomized trials, youth receiving CBT demonstrated significant posttreatment reductions in substance abuse.<sup>32</sup> Another study examined 224 youth, 75% of whom met the criteria for cannabis dependency and 48% of whom were referred from the juvenile justice system, and found that youth receiving CBT showed significant post-treatment decreases in substance abuse severity and frequency.<sup>33</sup> When compared to traditional supportive counseling programs, behavioral therapy demonstrated a larger reduction in post-treatment drug use (73% of youth in behavioral therapy versus 9% in supportive therapy) and alcohol use (50% decrease for youth in behavioral therapy versus 50% increase for youth in supportive therapy).<sup>34</sup>

- 12-step model: One of the most commonlyused approaches for treating substance use, the 12-step model incorporates group meetings and individualized counseling.35 Although there is not a great deal of rigorous research on the efficacy of the 12step model, preliminary data indicate that this method yields outcomes that are superior to no treatment at all.<sup>36</sup> For example, one study found that 45% of youth who completed a 12-step program were abstinent immediately following treatment, compared to 25% of youth who did not complete the program.<sup>37</sup> These results, however, diminished at two years following treatment, when only 27% of completers and 23% of non-completers reported abstinence.38
- *Therapeutic communities (TCs):* TCs are . long-term, residential programs typically used for youth with the most severe substance use and delinquency problems.39 These intensive programs are highlystructured and usually last between six and 18 months.<sup>40</sup> Studies generally have found that adolescents who have been in TCs show reductions in criminal activity and the use of cocaine, opiates, hallucinogens, and methamphetamines.<sup>41</sup> Although evidence suggests that a longer length of stay is associated with more positive outcomes, 42 some studies have found that criminal activity can be reduced even if a youth does not complete his or her stay in the TC.<sup>43</sup> For example, one study examined 485 youth and found that, one year following release from a TC, there were reductions in criminal activity among both completers and non-completers.<sup>44</sup>

## **Behavior Therapy**

"The fact that improvement in substance use was found in two treatments, fairly modest in duration and dose, is an important indicator of the promise of CBT and especially MDFT in adolescent drug abuse treatment."

Liddle, H.A., Dakof, G., Turner, R.M., Henderson, C.E., & Greenbaum, P.E. (2008). *Treating adolescent drug abuse: a randomized trial comparing multidimensional family therapy and cognitive behavioral therapy. Addiction, 103, 1660-1670*.MD:Substance Abuse and Mental Health Services Administration

### II. CHOOSING THE APPROPRIATE TREATMENT COURSE

No single treatment model is effective in all circumstances. To be successful, the intervention must be tailored to the severity of the youth's substance use problem and to his or her individual risks and needs.

Although many types of treatment have produced positive results, the success of any given intervention is largely dependent on whether it addresses the youth's specific risks and needs.<sup>45</sup> No single approach is effective in every circumstance.<sup>46</sup> Proper assessment and diagnosis is thus critical when choosing the appropriate course of treatment for substance-involved adolescents.<sup>47</sup> This section addresses two core questions:

- What factors should be considered when determining a youth's course of treatment?
- How do these factors influence the recommended course of treatment?

# Factors to be considered when determining a youth's course of treatment.

The Center for Substance Abuse Treatment (CSAT) of the Substance Abuse and Mental Health Services Administration (SAMHSA) recommends that every court-involved youth should undergo screening and assessment for substance use disorders, co-existing medical and

## **Continuum of Substance Use Severity**

- •Abstinence: No use at all
- •Use: minimal recreational or experimental use with minimal consequences
- •Abuse: regular use with several and more severe consequences
- •Dependence: regular use over extended period with continued severe consequences
- •Recovery: return to abstinence, with phases of relapse
- •Secondary abstinence: no use

Center for Substance Abuse Treatment. (1999). *Treatment of Adolescents with Substance Use Disorders* (Treatment Improvement Protocol Series, No. 32). Rockville, MD: Substance Abuse and Mental Health Services Administration.

psychiatric conditions, and other psycho-social risk factors that might affect the youth's treatment.<sup>48</sup> These assessments can reveal a number of factors that should be considered when determining a youth's course of treatment.

- Substance use patterns and severity: This takes into account how recently the youth has used alcohol or drugs, the impact that substance use has had on the youth's level of functioning, and the severity of the youth's substance use problem.<sup>49</sup> CSAT cautions that not all youth who use alcohol or drugs are or will become dependent, and that prematurely labeling these youth as having a substance use disorder could do more harm than good in the long term.<sup>50</sup>
- Medical concerns: Some youth with severe substance problems will exhibit toxicity levels and/or withdrawal symptoms that require intensive medical management, often in a hospital setting.<sup>51</sup> Additionally, some youth may have medical issues unrelated to substance use, such as pregnancy, HIV/AIDS, and domestic abuse, which require specialized medical treatment.<sup>52</sup>
- *Intrapersonal factors:* The youth's cognitive skills, emotional functioning, coping skills, motivation for treatment, and the impact that substance use has had on these abilities.<sup>53</sup>

- *Interpersonal-social factors:* The youth's relationships with family and peers, stage of social development, and social concerns such as employment, education, sexual history, hobbies and interests, and involvement in the juvenile justice system.<sup>54</sup>
- *Environmental factors:* The external influences in a youth's life, such as living conditions, socioeconomic status, neighborhood characteristics, gang involvement, and risks associated with family and peers.<sup>55</sup>

In addition to these factors, treatment decisions should take into account the youth's age, gender, family history of substance use, cultural/ethnic background, and the existence of behavioral or psychiatric disorders such as depression or AD/HD.<sup>56</sup> For treatment targeting court-involved youth, potential public safety concerns should also be considered.<sup>57</sup>

# How these factors influence the recommended course of treatment.

Decisions about a youth's treatment should take into account all risk and need factors, and there is no one-size-fits-all solution. CSAT recommends that practitioners choose the most intensive level of care required by any single assessment factor.<sup>58</sup> For example, outpatient treatment may be appropriate for a youth diagnosed with substance abuse but who has functional coping skills and a fairly stable home life, whereas inpatient treatment may be required for a youth demonstrating similar levels of substance abuse but who also exhibits impaired cognitive skills, has a co-existing psychiatric disorder, or is a victim of parental abuse.<sup>59</sup>

Although treatment decisions should not solely rely on the DSM-IV substance abuse/dependency diagnosis, experts have found that this classification can provide a good baseline for the appropriate level of care.<sup>60</sup> Generally, there is a preference for outpatient services for youth without a drug dependency diagnosis.<sup>61</sup>

### III. COMMUNITY-BASED SUBSTANCE USE TREATMENT

Substance use treatment can produce positive outcomes in both inpatient and outpatient settings. For many court-involved youth, community-based treatment can provide an effective alternative to residential, inpatient care.

## **DSM-IV** Classifications for Diagnosing Substance Use Disorders

**Substance abuse** is a maladaptive pattern of substance use leading to clinically significant impairment or distress as manifested by one or more of the following, occurring within a 12-month period:

- 1. Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home
- 2. Recurrent substance use in situations in which it is physically hazardous
- 3. Recurrent substance-related legal problems
- 4. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance

**Substance dependence** is defined as a maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by three or more of the following, occurring any time in the same 12-month period:

- Tolerance, as defined by either of the following: (a) A need for markedly increased amounts of the substance to achieve intoxication or the desired effect or (b) Markedly diminished effect with continued use of the same amount of the substance.
- Withdrawal, as manifested by either of the following: (a) The characteristic withdrawal syndrome for the substance or (b) The same (or closely related) substance is taken to relieve or avoid withdrawal symptoms.
- 3. The substance is often taken in larger amounts or over a longer period than intended.
- 4. There is a persistent desire or unsuccessful efforts to cut down or control substance use.
- 5. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
- 6. Important social, occupational, or recreational activities are given up or reduced because of substance use.
- 7. The substance use is continued despite knowledge of having a persistent physical or psychological problem that is likely to have been caused or exacerbated by the substance

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.). Washington, DC: Author.

Properly delivered substance use interventions, particularly those that incorporate family-based therapy and behavioral therapy, can produce positive outcomes regardless of whether the treatment is delivered in an inpatient or outpatient setting.<sup>62</sup> Evidence suggests that for many court-involved youth, community-based treatment can provide an effective alternative to residential, inpatient care.<sup>63</sup>

Why is community-based treatment an effective alternative for some youth?

- *Many youth with substance issues do not need intensive inpatient treatment.* A youth's recommended course of treatment depends largely on his or her severity of substance use problem and individual risks and needs.<sup>64</sup> Experts suggest that for youth who exhibit levels of substance use short of dependency, less intensive outpatient treatment may be more effective than inpatient care.<sup>65</sup> CSAT recommends that the most intensive inpatient treatment be reserved for youth who show signs of substance dependency and the presence of multiple other risk factors.<sup>66</sup>
- Community-based interventions are conducive to family involvement in the treatment process. Research has consistently shown that family involvement, whether through family-based therapy or other forms of engagement, is a critical component of effective substance use treatment for adolescents.<sup>67</sup> Although some inpatient programs encourage family involvement,<sup>68</sup> the physical location of many residential facilities might make family participation difficult or impossible. Community-based treatment allows youth to remain in closer physical proximity to their families, which can facilitate family involvement and engagement.<sup>69</sup>
- *Community -based interventions can provide youth with long-term, continuous care.* Experts recommend that, to be successful, substance use treatment should last long enough to produce stable

behavioral changes.<sup>70</sup> Although there is no treatment time frame that is widely-accepted as being the most effective, at least one study has found that, among male adolescent offenders, treatment lasting three months or more yielded the most significant reductions in marijuana and alcohol use.<sup>71</sup> Communitybased interventions may be appropriate for youth requiring longer-term treatment, as outpatient programs are typically less costly and are not dependent on the availability of open bed spaces.<sup>72</sup> Community-based interventions can also help facilitate continuity of care by minimizing the disruptions to progress that can occur when individuals transition from inpatient facilities back into the community.<sup>73</sup>

• Outpatient treatment allows youth to remain in the community. Community-based interventions allow youth to receive substance use treatment while maintaining important connections to family, school, work, and other support systems.<sup>74</sup> Though not specific to youth with substance abuse issues, research has also shown that low-risk youth placed within the community are less likely to reoffend than those placed in secure facilities.<sup>75</sup>

### **Community-based Care**

"Community-based [substance] abuse treatment has the advantage of allowing the family access to treatment and providing continuity of care, as the same people work with the juvenile throughout the treatment process and establish a support system for the juvenile. This approach facilitates community responsibility to the juvenile and empowers the community. Furthermore, placement in the community can help make the juvenile more socially conscious and encourage him or her to make decisions appropriately and independently."

Center for Substance Abuse Treatment (1995). *Treatment With Diversion for Juveniles in the Justice System (Treatment Improvement Protocol Series, No. 21).* Rockville, MD: Substance Abuse and Mental Health Services Administration.

#### IV. BEST PRACTICES FOR SUBSTANCE USE TREATMENT

All substance use treatment programs should adhere to best practices for interventions targeting adolescents with substance-related problems.

Recognizing that no single treatment approach is effective in every situation, experts have developed an informal set of guidelines for maximizing the effectiveness of substance use interventions targeting adolescents.<sup>76</sup> These best practices should be incorporated into any treatment program, regardless of its model or delivery setting.

What are the best practices for treating youth with substance use problems?

• Assessment and diagnosis that facilitate treatment tailored to fit specific individual

needs.<sup>77</sup> Treatment should take into account factors such as a youth's level of substance use severity, family and peer relationships, history of abuse, co-existing medical and psychiatric conditions, school performance, living conditions, and community risk factors.<sup>78</sup>

- A comprehensive, integrated approach that incorporates *family involvement* in the youth's treatment process.<sup>79</sup>
- Treatment that is consistent, carefully monitored, administered by a qualified staff, lasts long enough to produce stable behavioral changes, and incorporates a balance of sanctions and rewards.<sup>80</sup>
- *Treatment that is appropriate to the unique developmental needs of adolescents* and sensitive to gender and cultural needs.<sup>81</sup>
- *Rigorous evaluation* of treatment outcomes.<sup>82</sup>

# **Effective Community-Based Treatment**

The Center for Substance Abuse Treatment (CSAT) has developed the following guidelines for creating community-based substance use interventions for court-involved youth:

- Collaboration between the juvenile justice system, substance use treatment providers, and community health and social services.
- Careful selection and monitoring of candidates for diversion.
- Holding youth accountable through a system of rewards and sanctions.
- Using proper screening and assessment to identify all youth eligible for diversion and their proper course of treatment.
- Providing each youth with a single, individualized treatment plan based on his or her needs rather than on the availability of substance use treatment slots.
- Providing continuing care and relapse prevention.
- Evaluating and revising the treatment diversion program.

Center for Substance Abuse Treatment. (1995). Combining Alcohol and Other Drug Abuse Treatment With Diversion for Juveniles in the Justice System (Treatment Improvement Protocol Series, No. 21). Rockville, MD: Substance Abuse and Mental Health Services Administration.

### **SUMMING UP**

Substance use treatment can successfully reduce drug and alcohol use, behavioral problems, and criminal offending among court-involved youth. Several treatment approaches, particularly family-based therapy and behavioral therapy, have yielded positive outcomes that are often sustained even after treatment ends. No single intervention is effective in every situation, thus proper assessment and diagnosis is required to ensure that treatment is tailored to each youth's individual risks and needs. Several factors must be considered when determining the appropriate course of treatment, including the level of the youth's substance problem, medical concerns, cognitive and emotional skills, and social and environmental influences. Substance use treatment can be successful regardless of whether it is delivered in an inpatient or outpatient setting, and for many youth, community-based interventions can provide an effective alternative to inpatient care. Any substance use intervention should incorporate the best practices for treating adolescents, which can maximize the treatment's chance for success. For court-involved youth who are struggling with drug and alcohol use, substance use treatment is an important step toward a healthy, crime-free life.

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<sup>5</sup> CSAT (1999), TIP No. 32; Muck, R., Zempolich, K.A., Titus, J.C., Fishman, M., Godley, M.D., & Schwebel, R. (2001). An overview of the effectiveness of adolescent substance abuse treatment models. *Youth & Society*, *33*(2), 143-168.

<sup>6</sup> National Institute on Drug Abuse (NIDA). (2012). *Principles of Drug Abuse Treatment for Criminal Justice Populations – A Research-Based Guide* (National Institute of Health Publication No. 11-5316); CSAT (1999), TIP No. 32; Muck, et al. (2001); Williams, et al. (2000).

<sup>7</sup> Chassin, et al. (2009); Brannigan, R., Schackman, B.R., Falco, M., & Millman, R.B. (2004). The quality of highly regarded adolescent substance abuse treatment programs: Results of an in-depth national survey. *Archives of Pediatric Adolescent Medicine, 138*, 904-909; U.S. Department of Health and Human Services (HHS). (1999).

Blending Perspectives and Building Common Ground (Report to Congress on Substance Abuse and Child Protection). Retrieved from http://aspe.hhs.gov/hsp/subabuse99/chap2.htm

<sup>8</sup> CSAT (1999), TIP No. 32; Center for Substance Abuse Treatment. (1999). *Screening and Assessing Adolescents for Substance Use Disorders*. (Treatment Improvement Protocol Series, No. 31). Rockville, MD: Substance Abuse and Mental Health Services Administration.

- <sup>9</sup> CSAT (1999), TIP No. 32; NIDA (2012).
- <sup>10</sup> Waldron & Turner (2008); Hser, et al. (2001); Williams, et al. (2000).
- <sup>11</sup> CSAT (1995), TIP No. 21.

<sup>12</sup> NIDA (20120); Brannigan, et al. (2004); CSAT (1999), Tip. No. 32.

- <sup>13</sup> NIDA (20120); Brannigan, et al. (2004); CSAT (1999), Tip. No. 32.
- <sup>14</sup> CSAT (1995), TIP No. 21.

<sup>15</sup> Chassin, et al. (2009); Liddle, et al. (2008); Waldron & Turner (2008); Hser, et al. (2001); Dennis, et al. (2001).

<sup>16</sup> Chassin, et al. (2009); Liddle, et al. (2008); Williams, et al. (2000).

- <sup>17</sup> Chassin, et al. (2009).
- <sup>18</sup> Chassin, et al. (2009).

<sup>19</sup> Hser, et al. (2001).

- <sup>20</sup> Muck, et al. (2001); CSAT (1999), TIP No. 32.
- <sup>21</sup> Chassin, et al. (2009); Brannigan, et al. (2004).

<sup>22</sup> NIDA (2012); Chassin, et al. (2009); Liddle, et al. (2008); Waldron & Turner (2008); Muck, et al. (2001); CSAT (1999), TIP No. 32; Office of Juvenile Justice and Delinquency Prevention. *OJJDP Model Programs Guide: Drug, Alcohol* 

*Therapy/Education*. Retrieved from http://www.ojjdp.gov/mpg/progTypesAlcoholDrugImm.aspx.

- <sup>23</sup> Muck, et al. (2001); CSAT (1999), TIP No. 32.
- <sup>24</sup> Muck, et al. (2001), at 154.
- <sup>25</sup> Waldron & Turner (2008).
- <sup>26</sup> Liddle, et al. (2008).
- <sup>27</sup> Liddle, et al. (2008).
- <sup>28</sup> Muck, et al. (2001).
- <sup>29</sup> Muck, et al. (2001).
- <sup>30</sup> Muck, et al. (2001).
- <sup>31</sup> Waldron & Turner (2008).
- <sup>32</sup> Waldron & Turner (2008).
- <sup>33</sup> Liddle, et al. (2008).
- <sup>34</sup> Muck, et al. (2001).
- <sup>35</sup> CSAT (1999), TIP No. 32.
- <sup>36</sup> CSAT (1999), TIP No. 32.
- <sup>37</sup> Muck, et al. (2001).

**DYRS** Substance Abuse Treatment

<sup>&</sup>lt;sup>1</sup> Center for Substance Abuse Treatment (CSAT). (1999). *Treatment of Adolescents with Substance Use Disorders* (Treatment Improvement Protocol (TIP) Series, No. 32). Rockville, MD: Substance Abuse and Mental Health Services Administration. A 1999 study conducted by the National Institute of Justice found that more than 50% of male juvenile arrestees tested positive for at least one illicit substance. Kraft, M.K., Vicary, J.R., & Henry, K.L. (2001). Bringing justice to adolescent substance abuse treatment. *Youth & Society*, (33)2, 133-142., Kraft

<sup>&</sup>lt;sup>2</sup> Chassin, L., Knight, G., Vargas-Chanes, D, Losoya, S.H., & Naranjo, D. (2009). Substance use treatment outcomes in a sample of male serious juvenile offenders. *Journal of Substance Abuse Treatment*, *36*(2), 183-194.

<sup>&</sup>lt;sup>3</sup> Chassin, et al. (2009).

<sup>38</sup> Muck, et al. (2001).

- <sup>39</sup> CSAT (1999), TIP No. 32.
- <sup>40</sup> CSAT (1999), TIP No. 32.
- <sup>41</sup> CSAT (1999), TIP No. 32.
- <sup>42</sup> CSAT (1999), TIP No. 32.
- <sup>43</sup> CSAT (1999), TIP No. 32.
- <sup>44</sup> CSAT (1999), TIP No. 32.
- <sup>45</sup> NIDA (2012); Brannigan, et al. (2004); CSAT (1999), TIP No. 32.
- <sup>46</sup> Chassin (2009); CSAT (1999), TIP No. 32; HHS (1999).
- <sup>47</sup> Brannigan, et al. (2004); CSAT (1999), TIP No. 32; CSAT (1999), TIP No. 31.
- <sup>48</sup> CSAT (1999), TIP No. 32.

<sup>49</sup> CSAT (1999), TIP No. 32. The severity of a substance use problem is a clinical determination that is typically based on diagnostic factors set forth by the American Psychiatric Association in the DSM-IV. Substance use exists on a continuum ranging from abstinence, to recreational use, to abuse, to dependency, but the DSM-IV classifies only abuse and dependency as true substance use disorders. CSAT (1999), TIP No. 32.

- <sup>50</sup> CSAT (1999), TIP No. 32.
- <sup>51</sup> CSAT (1999), TIP No. 32.
- <sup>52</sup> CSAT (1999), TIP No. 32.
- <sup>53</sup> CSAT (1999), TIP No. 32.
- <sup>54</sup> CSAT (1999), TIP No. 32.
- <sup>55</sup> CSAT (1999), TIP No. 32.
- <sup>56</sup> CSAT (1999), TIP No. 32.
- <sup>57</sup> CSAT (1995), TIP No. 21.
- <sup>58</sup> CSAT (1999), TIP No. 32.
- <sup>59</sup> CSAT (1999), TIP No. 32.
- <sup>60</sup> NIDA (2012): CSAT (1999), TIP No. 32.
- <sup>61</sup> NIDA (2012); CSAT (1999), TIP No. 32.
- <sup>62</sup> Liddle, et al. (2008); Waldron & Turner (2008); Dennis, et al. (2004); Hser, et al. (2001); Williams, et al. (2000).
- <sup>63</sup> CSAT (1995), TIP No. 21.
- <sup>64</sup> NIDA (2012); CSAT (1999), TIP No. 32.
- <sup>65</sup> NIDA (2012); CSAT (1999), TIP No. 32.
- <sup>66</sup> CSAT (1999), TIP No. 32.
- <sup>67</sup> NIDA (2012); Chassin, et al. (2009); Brannigan, et al. (2004).
- <sup>68</sup> CSAT (1999), TIP No. 32.
- <sup>69</sup> CSAT (1995), TIP No. 21.
- <sup>70</sup> NIDA (2012): Chassin, et al. (2009).
- <sup>71</sup> Chassin, et al. (2009).
- <sup>72</sup> Cohen, M.A. (1998). The monetary value of saving a high risk youth. *The Journal of Qualitative Criminology*, 14(1), 5-33.
- <sup>73</sup> Brannigan, et al. (2004); CSAT (1995), TIP No. 21.
- <sup>74</sup> CSAT (1999), TIP No. 32; CSAT (1995), TIP No. 21.

<sup>75</sup> Mendel, D. (2011). *No Place for Kids: The Case for Reducing Juvenile Incarceration*. Baltimore, Maryland: Annie E. Casey Foundation; Baglivio, M.T. (2007). *The prediction of risk to recidivate among a juvenile offending population*. (Doctoral dissertation). Retrieved from www.djj.state.fl.us/OPA/ptassistance/documents/Dissertation.pdf.

- <sup>76</sup> NIDA (2012); Chassin, et al. (2009); Brannigan, et. al (2004).
- <sup>77</sup> Brannigan, et al. (2004); CSAT (1999), TIP No. 32.
- <sup>78</sup> CSAT (1999), TIP No. 32.
- <sup>79</sup> Brannigan, et al. (2004); CSAT (1999), TIP No. 32.
- <sup>80</sup> NIDA (2012);Brannigan, et al. (2004); CSAT (1999), TIP No. 32.
- <sup>81</sup> Brannigan, et al. (2004); CSAT (1999), TIP No. 32.
- <sup>82</sup> Brannigan, et al. (2004).