Mindful
Continuing Education

Substance Abuse Among School-Aged Youth

Preface

Professionals working to address barriers to student learning and promote healthy development need ready access to resource materials. The Center's Clearinghouse supplements, compiles, and disseminates resources on topics fundamental to enabling students to learn. Among the various ways we package resources are our *Resource Aid Packets.*

Resource Aid Packets are designed to complement our series of Introductory Packets. These resource aids are a form of *tool kit* related to a fairly circumscribed area of practice. The packets contain materials to guide and assist with staff training and student/family interventions. They include overviews, outlines, checklists, instruments, and other resources that can be reproduced and used as information handouts and aids for training and practice.

This Resource Aid on *Substance Abuse* is designed to provide some resources that are relevant to (a) understanding the nature and scope of substance use/abuse, (b) appropriately identifying and guiding students who need help, (c) preventing and treating abuse, and (d) pursuing additional resources. The aids are grouped into five sections:

I. Basic facts sheets on substance abuse among youngsters; the causes, the impact.

II. Guides and tools relevant to screening/ assessment, including a guide to major assessment tools, a summary outline of indicators of abuse, and an example of a substance abuse screening checklist.

III. Information on prevention, including model school-based programs and guides to additional health education materials.

IV. Treatment strategies and special concerns

V. Resources for more information and support, including Internet sites, centers, agencies, advocacy groups, and relevant publications.

Introduction:

Keeping a Perspective on the Problem of Substance Abuse

What makes working directly with young populations so challenging is the need for a broad and deep psychological and socio-cultural perspective of what motivates their behavior as they develop. Just how critical this awareness is can be seen in areas such as substance abuse, pregnancy, and teen violence. Such problems often reflect the experimentation and risk taking that is so much a part of the developmental processes of moving toward individuation and independence. Characteristic behaviors include skepticism about the warnings and advice given by adults as well as reactions against rules and authority. All this has major implications for preventing and minimizing problems.

With most youngsters, developmental transitions are made without serious upheaval; good judgement and long-term goals keep high-risk behaviors to a minimum. For too many others; the lack of good alternative ways to feel competent, self-determining and connected to others leads to problems. One of these may be substance abuse. Substances do come to play a major role in some youngster's life styles. The very fact that they are illegal and forbidden often adds to the allure.

As a major social problem, substance abuse has received a spotlight in the media. Celebrities are entering treatment programs (repeatedly), failed national drug czars resign, the media reports the seizure of millions of dollars of smuggled drugs. In too many urban centers, the underground economy and life style of substance abuse is endemic to the community. Schools try to provide drug prevention programs, but statistics show a rise in adolescent drug use.

Given that substance abuse is a multi-determined major health and social problem, what is the most responsible and effective role for school staff and programs to play? Schools must approach the problem in ways that ensure staff

- have and provide accurate information
- take the problem seriously, but are careful not to undermine their credibility through use of unbelievable scare messages (remember *Reefer Madness!*)
- implement solutions that go well beyond surveillance and punishment

And, as with all interventions, the solutions must be designed to fit the various groups and individuals who populate the school and whose relationship to substance use differs markedly.

Many students will, because of curiosity and peer inducements, try drugs, alcohol and cigarettes. Fortunately, they stop after trying the substance once or a few times. Such students tend to respond best to *accurate* information about immediate risks (including the risk of accidents, unsafe sex, arrest).

Some students will try drugs, alcohol, and cigarettes and find immediate gratification of various needs. This gratification often outweighs their concerns about immediate risks. Whether the substance use turns into abuse depends on many factors. Efforts to prevent this from happening must include more than information and substance abuse education. Immediate opportunities and activities that can compete with the gratification a youngster finds in substance use and that are incompatible with substance abuse are needed.

It is evident that a few students make drug use a way of life and use, sell, and reshape their choices around it. They seldom are influenced by strategies to inform and educate. They rarely are influenced by concerns about losing out on long-term goals such as graduation, college, and a career. They often don't fear health or legal consequences because they have convinced themselves they are immune, or they believe the consequences will not be all that bad. The need here is for approaches that are comprehensive, multifaceted, and integrated.

Clearly, students differ in their use and abuse. Clearly, schools must design a range of approaches that fit these differences. The range must include

- providing accurate information
- facilitating discussions that are candid and supportive
- offering support systems for those who want to stop (including counseling, mutual support groups, sponsors, alternative activities such as job training/internship programs -- in settings where drug testing won't lead to a youngster's dismissal)
- evolving integrated systems of care (with schools, families, prevention and treatment programs, law enforcement, employment incentive programs all working together).

A sophisticated range of efforts from elementary through high school with the "right" students in the "right" programs is needed. For such a comprehensive, integrated approach to evolve, school staff must enhance their efforts to mesh with the surrounding community's programs and resources, and policy makers must adopt a vision and provide the type of support that fosters such an approach.

As Adelman and Taylor (2003) stress in their article entitled: “Creating School and Community Partnerships for Substance Abuse Prevention Programs” *(Journal of Primary Prevention, 23*), it is important to differentiate between use and abuse. Almost everyone uses “drugs” in some form, such as over-the-counter and prescription medications, caffeinated products, and so forth. Clearly, it is not use of such substances that is at issue with the majority of society. For the most part, society’s concern is with those who use substances excessively or are involved with illegal drugs (MacCoun & Reuter, 1998;

Determinants of Substance Use and Abuse

No specific factors have been established as predetermining drug abuse. Therefore, rather than reviewing the host of variables under study, we think it more useful, from a broad perspective, to start with a developmentally-oriented, transactional view of the determinants of behavior. Such a view stresses that substance abusers can be grouped along a continuum. At one end are those for whom internal factors are the primary determinants of the behavior; at the other end is a group for whom environmental factors are the primary determinants; and at each point along the continuum, there are persons for whom some degree of transaction between internal and environmental factors determine the behavior.

As illustrated in Fig. 1, substance abuse originating from environmental factors is designated at one end of the continuum and is referred to as a Type E problem. At the other end is abuse stemming primarily from factors within the person—called Type P. In the middle are problems arising from a relatively equal contribution of environmental and person sources, labeled Type E/P problems. It is yet to be empirically determined how many fall into each of these groups. However, generalizing from the literature on psychopathology, it seems likely that only a small percentage of substance abuse is *caused primarily by internal factors within a person* (i.e., a Type P problem). Youngsters are socialized by those around them. They respond to competing environmental options. Thus, as with other psychosocial problems, there is a significant group at the other end of the continuum whose substance abuse arises primarily from factors outside the person (i.e., a Type E problem). Such factors always should be considered in hypothesizing and assessing what *initially* caused a given person's behavior. By first ruling out environmental causes, hypotheses about internal factors become more viable. The majority of substance abuse probably reflects varying degrees of environment-person transactions. That is, at each point between the extreme ends, environment-person transactions are the cause, but the degree to which each contributes to the problem varies. Toward the environment end of the continuum, environmental factors play a bigger role (represented as E ◄► p). Toward the other end, person variables account for more of the problem (thus e ◄►P).

Figure 1

Primary Locus of Cause

Problems caused by factors in the environment (E)	Problems caused equally by environment and person	Problems caused by factors in the the person (P)

E (E<--->p) E<--->P (e<--->P) P

|----------|----------|

Type I problems	Type II problems	Type III problems
•caused primarily by environments and systems that are deficient and/or hostile	•caused primarily by a significant *mismatch* between individual differences and vulnerabilities and the nature of that person's environment (not by a person's pathology)	•caused primarily by person factors of a pathological nature
•problems are mild to moderately severe and narrow to moderately pervasive	•problems are mild to moderately severe and pervasive	•problems are moderate to profoundly severe and moderate to broadly pervasive

In this conceptual scheme, the emphasis in each case is on problems that are beyond the early stage of onset.

Examples:

Type E problem - a neighborhood where there are not strong norms against the use of substance abuse and where illicit drugs are easily accessed.

Type E/P problem - a youngster who is not doing well academically and who then gravitates to peers who also are not doing well and who are involved in abuse of substances.

Type P problem - a youngster who is susceptible, psychologically and/or physiologically, to addictive behavior.

Clearly, a simple continuum cannot do justice to the complexities of differentiating and labeling human behavior and designing interventions that fit specific needs. This conceptual scheme does, however, suggest the value of starting with a broad model of cause. In particular, it helps counter tendencies to jump prematurely to the conclusion that an individual's substance abuse is caused by internal deficiencies or pathology. It also helps highlight the notion that improving the environment may be sufficient to prevent many problems.

Discussions of risk and protective factors related to drug abuse and other problem behaviors reflect a transactional model. Such thinking emphasizes not only factors internal to individuals, but environmental factors related to school, home, and neighborhood, and stresses complex transactions between both classes of variables. Researchers, policy makers, and practitioners are especially interested in the interplay between biological and psychosocial risk factors in understanding cause and in protective factors as risk mediators.

Finally and ironically, we note that an underlying motivational view leads to contrasting hypotheses about causal links between prevention efforts and substance experimentation. One view suggests that anti-substance abuse messages lead some youngsters to proactively seek out the experience. The other view hypothesizes that youngsters perceive such messages as filled with half truths and as attempts to indoctrinate them, and this leads to a form of psychological *reactance* motivating substance use. Neither of these hypotheses have been researched directly; they are extrapolated from theorizing about what motivates human behavior (e,g., see Brehm & Brehm, 1981; Deci & Ryan, 1985).

I. A broad overview

A. Some Data

Monitoring the Future Survey, Overview of Findings 2015

This year's Monitoring the Future (MTF) survey of drug use and attitudes among American 8th, 10th, and 12th graders continues to show encouraging news, with decreasing use of alcohol, cigarettes, and many illicit drugs over the last 5 years—many to their lowest levels since this survey's inception; no increase in use of marijuana among teens; decreasing use of synthetic drugs; and decreasing misuse of prescription drugs. However, the survey highlighted continuing concerns over the high rate of electronic cigarette (e-cigarette) use and softening of attitudes around some types of drug use, particularly a continued decrease in perceived harm of marijuana use.

The Good News

- Despite the ongoing opioid overdose epidemic, past-year prescription opioid misuse (reported in the survey as 'narcotics other than heroin') continued to decline and heroin use is at the lowest rate since the MTF survey began. View Graphs online
- For many substances, past-year use has declined to the lowest levels since MTF survey began. View Table online
- Marijuana use remained steady among 8th, 10th, and 12th graders over the past 5 years despite softening of perceived risks. View Graphs online
- There has been a significant decline in past-year use of synthetic cannabinoids (K2/herbal incense, sometimes called "synthetic marijuana") since the survey has been tracking its use. View Graph online
- Five-year trends continue to show significant decreases in alcohol use among all grades. View Graphs online
- Cigarette smoking continues to drop and is currently at its lowest rate in the survey's history. View Graph online
- There was an increase in the percent of 8th and 10th graders who view regular e-cigarette use as harmful. View Graph online

Areas of Concern

- The use of e-cigarettes remains high among teens. View Graphs online
- Past-month marijuana use continues to exceed cigarette use among high school seniors and, for the first time, daily cigarette use was lower than daily marijuana use. View Graph online

Monitoring the Future Study: Trends in Prevalence of Various Drugs

Trends in Prevalence for 8th Graders, 10th Graders, and 12th Graders; 2012 - 2015 (in percent)*

Drug	Time Period	8th Graders				10th Graders				12th Graders			
		2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015
Alcohol	Lifetime	[29.50]	27.80	26.80	**26.10**	54.00	52.10	[49.30]	**47.10**	69.40	68.20	[66.00]	**64.00**
	Past Year	[23.60]	22.10	20.80	**21.00**	48.50	47.10	[44.00]	**41.90**	63.50	62.00	60.20	**58.20**
	Past Month	[11.00]	10.20	9.00	**9.70**	27.60	25.70	[23.50]	**21.50**	41.50	[39.20]	37.40	**35.30**
	Daily	0.30	0.30	0.30	**0.20**	1.00	0.90	0.80	**0.50**	2.50	2.20	1.90	**1.90**
Cigarettes (any use)	Lifetime	[15.50]	14.80	13.50	**13.30**	[27.70]	[25.70]	[22.60]	**[19.90]**	39.50	38.10	[34.40]	**[31.10]**
	Past Month	[4.90]	4.50	4.00	**[3.60]**	10.80	[9.10]	[7.20]	**[6.30]**	17.10	16.30	[13.60]	**[11.40]**
	Daily	1.90	1.80	1.40	**1.30**	5.00	4.40	[3.20]	**3.00**	9.30	8.50	[6.70]	**[5.50]**
	1/2-pack+/day	0.60	0.70	0.50	**0.40**	1.50	1.50	1.20	**1.00**	4.00	3.40	[2.60]	**2.10**
E-cigarettes	Past Month	-	-	8.70	**9.50**	-	-	16.20	**14.00**	-	-	17.10	**16.20**
Smokeless Tobacco	Lifetime	8.10	7.90	8.00	**8.60**	15.40	14.00	13.60	**12.30**	17.40	17.20	15.10	**13.20**
	Past Month	2.80	2.80	3.00	**3.20**	6.40	6.40	5.30	**4.90**	7.90	8.10	8.40	**6.10**
	Daily	0.50	0.50	0.50	**0.80**	2.00	1.90	1.80	**1.60**	3.20	3.00	3.40	**2.90**
Illicit Drugs	Lifetime	18.50	20.30	20.30	**20.50**	36.80	38.80	37.40	**[34.70]**	49.10	50.40	49.10	**48.90**
	Past Year	13.40	[14.90]	14.60	**14.80**	30.10	31.80	29.90	**27.90**	39.70	40.30	38.70	**38.60**
	Past Month	7.70	8.50	8.30	**8.10**	18.60	19.40	18.50	**[16.50]**	25.20	25.50	23.70	**23.60**
Cocaine	Lifetime	1.90	1.70	1.80	**1.60**	3.30	3.30	2.60	**2.70**	4.90	4.50	4.60	**4.00**
	Past Year	1.20	1.00	1.00	**0.90**	2.00	1.90	1.50	**1.80**	2.70	2.60	2.60	**2.50**
	Past Month	[0.50]	0.50	0.50	**0.50**	0.80	0.80	0.60	**0.80**	1.10	1.10	1.00	**1.10**

Drug	Time Period	8th Graders				10th Graders				12th Graders			
		2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015
Crack Cocaine	Lifetime	[1.00]	1.20	1.20	**1.00**	1.40	1.50	[1.00]	**1.10**	2.10	1.80	1.80	**1.70**
	Past Year	[0.60]	0.60	0.70	**0.50**	0.80	0.80	[0.50]	**0.70**	1.20	1.10	1.10	**1.10**
	Past Month	[0.30]	0.30	0.30	**0.30**	0.40	0.40	0.30	**0.30**	0.60	0.60	0.70	**0.60**
GHB	Past Year	-	-	-	-	-	-	-	-	1.40	1.00	1.00	**0.70**
Hallucinogens	Lifetime	2.80	2.50	2.00	**2.00**	5.20	5.40	5.00	**4.60**	7.50	7.60	6.30	**6.40**
	Past Year	[1.60]	1.60	1.30	**1.30**	3.50	3.40	3.30	**3.10**	4.80	4.50	4.00	**4.20**
	Past Month	[0.60]	0.80	0.50	**0.60**	1.20	1.10	1.20	**0.90**	1.60	1.40	1.50	**1.60**
LSD	Lifetime	1.30	1.40	1.10	**1.30**	2.60	2.70	2.60	**3.00**	3.80	3.90	3.70	**4.30**
	Past Year	0.80	1.00	0.70	**0.90**	1.70	1.70	1.90	**2.00**	2.40	2.20	2.50	**2.90**
	Past Month	0.30	0.50	0.30	**0.40**	0.50	0.60	0.60	**0.60**	0.80	0.80	1.00	**1.10**
MDMA	Lifetime	2.00	1.80	1.40	**2.30**	[5.00]	5.70	[3.70]	**[3.80]**	7.20	7.10	5.60	**[5.90]**
	Past Year	[1.10]	1.10	0.90	**1.40**	[3.00]	3.60	[2.30]	**[2.40]**	[3.80]	4.00	3.60	**[3.60]**
	Past Month	0.50	0.50	0.40	**0.50**	[1.00]	1.20	[0.80]	**0.90**	[0.90]	1.50	1.40	**1.10**
Heroin	Lifetime	[0.80]	1.00	0.90	**[0.50]**	1.10	1.00	0.90	**0.70**	1.10	1.00	1.00	**0.80**
	Past Year	0.50	0.50	0.50	**[0.30]**	0.60	0.60	0.50	**0.50**	0.60	0.60	0.60	**0.50**
	Past Month	0.20	0.30	0.30	**0.10**	0.40	0.30	0.40	**0.20**	0.30	0.30	0.40	**0.30**
Inhalants	Lifetime	11.80	10.80	10.80	**[9.40]**	9.90	8.70	8.70	**[7.20]**	7.90	6.90	6.50	**5.70**
	Past Year	6.20	[5.20]	5.30	**4.60**	4.10	3.50	3.30	**2.90**	2.90	2.50	1.90	**1.90**
	Past Month	[2.70]	2.30	2.20	**2.00**	1.40	1.30	1.10	**1.20**	0.90	1.00	0.70	**0.70**
Ketamine	Past Year	-	-	-	-	-	-	-	-	1.50	1.40	1.50	**1.40**
Marijuana/ Hashish	Lifetime	15.20	16.50	15.60	**15.50**	33.80	35.80	33.70	**[31.10]**	45.20	45.50	44.40	**44.70**
	Past Year	11.40	12.70	11.70	**11.80**	28.00	29.80	[27.30]	**25.40**	36.40	36.40	35.10	**34.90**
	Past Month	6.50	7.00	6.50	**6.50**	17.00	18.00	16.60	**14.80**	22.90	22.70	21.20	**21.30**
	Daily	1.10	1.10	1.00	**1.10**	3.50	4.00	[3.40]	**3.00**	6.50	6.50	5.80	**6.00**
K2/Spice (Synthetic Marijuana)	Past Year	4.40	4.00	3.30	**3.10**	8.80	7.40	[5.40]	**4.30**	11.30	[7.90]	[5.80]	**5.20**
Methamphetamine	Lifetime	1.30	1.40	1.00	**0.80**	1.80	1.60	1.40	**1.30**	1.70	1.50	1.90	**1.00**
	Past Year	1.00	1.00	0.60	**0.50**	1.00	1.00	0.80	**0.80**	1.10	0.90	1.00	**0.60**
	Past Month	0.50	0.40	0.20	**0.30**	0.60	0.40	0.30	**0.30**	0.50	0.40	0.50	**0.40**
PCP	Lifetime	-	-	-	-	-	-	-	-	1.60	1.30	-	-

Drug	Time Period	8th Graders				10th Graders				12th Graders			
		2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015
	Past Year	-	-	-	-	-	-	-	-	0.90	0.70	0.80	**1.40**
	Past Month	-	-	-	-	-	-	-	-	0.50	0.40	-	-
Any Prescription Drug	Lifetime	-	-	-	-	-	-	-	-	21.20	21.50	[19.90]	**18.30**
	Past Year	-	-	-	-	-	-	-	-	14.80	15.00	[13.90]	**12.90**
	Past Month	-	-	-	-	-	-	-	-	7.00	7.00	6.40	**5.90**
Amphetamine	Lifetime	4.50	4.20	6.70	**6.80**	8.90	8.10	10.60	**9.70**	12.00	12.40	12.10	**10.80**
	Past Year	2.90	2.60	4.30	**4.10**	6.50	5.90	7.60	**6.80**	7.90	8.70	8.10	**7.70**
	Past Month	1.30	1.40	2.10	**1.90**	2.80	2.80	3.70	**[3.10]**	3.30	4.10	3.80	**3.20**
Bath Salts	Past Year	0.80	1.00	[0.50]	**0.40**	0.60	0.90	0.90	**0.70**	1.30	0.90	0.90	**1.00**
Adderall	Past Year	1.70	1.80	1.30	**1.00**	4.50	4.40	4.60	**5.20**	7.60	7.40	6.80	**7.50**
Ritalin	Past Year	0.70	1.10	0.90	**0.60**	1.90	1.80	1.80	**1.60**	2.60	2.30	1.80	**2.00**
Cough Medicine (non-prescription)	Past Year	3.00	2.90	[2.00]	**1.60**	4.70	4.30	3.70	**3.30**	5.60	5.00	4.10	**4.60**
Narcotics other than Heroin	Lifetime	-	-	-	-	-	-	-	-	12.20	11.10	[9.50]	**[8.40]**
	Past Year	-	-	-	-	-	-	-	-	7.90	7.10	[6.10]	**5.40**
	Past Month	-	-	-	-	-	-	-	-	[3.00]	2.80	[2.20]	**2.10**
Vicodin	Past Year	1.30	1.40	1.00	**0.90**	4.40	4.60	3.40	**2.50**	7.50	[5.30]	4.80	**4.40**
OxyContin	Past Year	1.60	2.00	[1.00]	**0.80**	3.00	3.40	3.00	**2.60**	4.30	3.60	3.30	**3.70**
Tranquilizers	Lifetime	3.00	2.90	2.90	**3.00**	6.30	5.50	5.80	**5.80**	8.50	7.70	7.40	**6.90**
	Past Year	1.80	1.80	1.70	**1.70**	4.30	3.70	3.90	**3.90**	5.30	4.60	4.70	**4.70**
	Past Month	0.80	0.90	0.80	**0.80**	1.70	1.60	1.60	**1.70**	2.10	2.00	2.10	**2.00**
Rohypnol	Lifetime	[1.00]	0.70	0.60	**0.80**	0.80	1.10	1.00	**0.50**	-	-	-	-
	Past Year	0.40	0.40	0.30	**0.30**	0.50	0.60	0.50	**0.20**	1.50	0.90	0.70	**1.00**
	Past Month	0.10	0.10	0.20	**0.10**	0.20	0.10	0.40	**0.10**	-	-	-	-
Salvia	Past Year	1.40	1.20	[0.60]	**0.70**	[2.50]	2.30	1.80	**1.20**	[4.40]	[3.40]	[1.80]	**1.90**
Steroids	Lifetime	1.20	1.10	1.00	**1.00**	1.30	1.30	1.40	**1.20**	1.80	2.10	1.90	**2.30**
	Past Year	0.60	0.60	0.60	**0.50**	0.80	0.80	0.80	**0.70**	1.30	1.50	1.50	**1.70**
	Past Month	0.30	0.30	0.20	**0.30**	0.40	0.40	0.40	**0.40**	0.90	1.00	0.90	**1.00**

* Data in brackets indicate statistically significant change from the previous year.

Drug and Alcohol Dependence

Early adolescent patterns of alcohol, cigarettes, and marijuana polysubstance use and young adult substance use outcomes in a nationally representative sample☆

A B S T R A C T

Background: Alcohol, tobacco and marijuana are the most commonly used drugs by adolescents in the U.S. However, little is known about the patterning of early adolescent substance use, and its implications for problematic involvement with substances in young adulthood. We examined patterns of substance use prior to age 16, and their associations with young adult substance use behaviors and substance use disorders in a nationally representative sample of U.S. adolescents.
Method: Using data from Wave 4 of the Add Health Survey ($n = 4245$), we estimated the prevalence of various patterns of early adolescent use of alcohol, cigarettes, and marijuana use individually and in combination. Then we examined the effects of patterns of early use of these substances on subsequent young adult substance use behaviors and DSM-IV substance use disorders.
Results: While 34.4% of individuals reported no substance use prior to age 16, 34.1% reported either early use of both alcohol and marijuana or alcohol, marijuana and cigarettes, indicating the relatively high prevalence of this type of polysubstance use behavior among U.S. adolescents. Early adolescent use of all three substances was most strongly associated with a spectrum of young adult substance use problems, as well as DSM-IV substance use disorder diagnoses.
Conclusions: This research confirms the elevated prevalence and importance of polysubstance use behavior among adolescents prior to age 16, and puts early onset of alcohol, marijuana and cigarette use into the context of use patterns rather than single drug exposures.

Quotes About Substance Abuse

"An alcoholic is someone you don't like, who drinks as much as you do."
– Dylan Thomas

"An over-indulgence of anything, even something as pure as water, can intoxicate."
– Criss Jami, Venus in Arms

"If the last to know he's an addict is the addict, then maybe the last to know when a man means what he says is the man himself, he reflected."
– Philip K. Dick, A Scanner Darkly

"If he were any other man, I might have suspected him of substance abuse, of being coked up or something. But Barrons was too much a purist for that; his drugs were money, power, and control"
– Karen Marie Moning, Darkfever

"They got drunk and high on a regular basis, but this is a vestige of youth that you either quit while you're young or you become an addict if you don't die.
If you are the Old Guy In The Punk House, move out. You have a substance abuse problem."
– Bucky Sinister, Get Up: A 12-Step Guide to Recovery for Misfits, Freaks, and Weirdos

"Alcohol does not a change a person's fundamental value system. People's personalities when intoxicated, even though somewhat altered, still bear some relationship to who they are when sober. When you are drunk you may behave in ways that are silly or embarrassing; you might be overly familiar or tactlessly honest, or perhaps careless or forgetful. But do you knock over little old ladies for a laugh? Probably not. Do you sexually assault the clerk at the convenience store? Unlikely. People's conduct while intoxicated continues to be governed by their core foundation of beliefs and attitudes, even though there is some loosening of the structure. Alcohol encourages people to let loose what they have simmering below the surface.
ABUSERS MAKE CONSCIOUS CHOICES EVEN WHILE INTOXICATED"
– Lundy Bancroft, Why Does He Do That?: Inside the Minds of Angry and Controlling Men

"We recognize that you've used substances to try to regain your lost balance, to try to feel the way you did before the need arose to use addictive drugs or alcohol. We know that you use substances to alter your mood, to cover up your sadness, to ease your heartbreak, to lighten your stress load, to blur your painful memories, to escape your hurtful reality, or to make your unbearable days or nights bearable."
– Chris Prentiss, The Alcoholism and Addiction Cure

The CBHSQ Report: A Day in the Life of American Adolescents: Substance Use Facts Update

- **This *CBHSQ Report* presents facts about adolescent substance use, including information on the initiation of substance use, past year substance use, emergency department visits, and receipt of substance use treatment**
- **The data presented are from the 2010 and 2011 National Surveys on Drug Use and Health (NSDUHs), the 2010 Treatment Episode Data Set (TEDS), the 2010 National Survey of Substance Abuse Treatment Services (N-SSATS), and the 2011 Drug Abuse Warning Network (DAWN)**

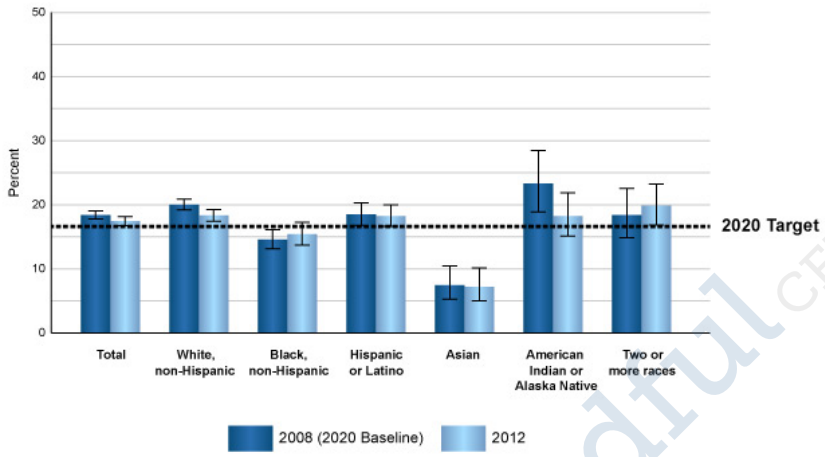
In the United States in 2011, there were an estimated 25.1 million adolescents aged 12 to 17.[1] In the past year, more than one quarter of adolescents drank alcohol, approximately one fifth used an illicit drug, and almost one eighth smoked cigarettes.[2] Although the percentage of adolescents using alcohol, cigarettes, and illicit drugs declined between 2008 and 2011, the percentage of persons aged 12 to 17 receiving substance abuse treatment remained relatively stable.[3] In addition, the number of adolescents seen in an emergency department (ED) for the use of illicit drugs and the misuse or abuse of pharmaceuticals remained stable from 2004 to 2011.[4] In 2010, 7.3 percent of all persons admitted to publicly funded treatment facilities were aged 12 to 17.[5]

The Center for Behavioral Health Statistics and Quality (CBHSQ) in the Substance Abuse and Mental Health Services Administration (SAMHSA) collects, analyzes, and disseminates critical public health data. CBHSQ manages four national data collections that offer insight into adolescent substance use and treatment: the National Survey on Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), the National Survey of Substance Abuse Treatment Services (N-SSATS), and the Drug Abuse Warning Network (DAWN).[6,7,8,9]

This *CBHSQ Report* presents facts about adolescent substance use, including initiation, receipt of treatment, and emergency department visits for substance use "on an average or typical day."[10] Data in this report from NSDUH, TEDS, and DAWN are for adolescents aged 12 to 17; data from N-SSATS are for youths aged 17 or younger.

Alcohol or Illicit Drug Use, Adolescents, 2006 and 2012

↓ Decrease Desired



SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.
NOTES: Data are for the proportion of adolescents aged 12–17 years who reported using at least one of the following substances in the past 30 days: alcohol, marijuana or hashish, cocaine (including "crack"), inhalants, hallucinogens (including PCP and LSD), heroin, or any nonmedical use of analgesics, tranquilizers, stimulants, or sedatives. Respondents were asked to select one or more races. The single-race categories are for persons who reported only one racial group. Persons of Hispanic origin may be of any race.
I= 95% confidence interval.

There was no significant change between 2008 (18.4%) and 2012 (17.4%) in the proportion of adolescents aged 12–17 years who reported using alcohol or illicit drugs in the past 30 days. Rates of alcohol or illicit drug use varied by race and ethnicity. For example, in 2012, 7.2% of Asian adolescents aged 12–17 years reported using alcohol or illicit drugs in the past 30 days, compared with:

- 15.4% of non-Hispanic black adolescents; more than twice the rate of alcohol or illicit drug use among Asian adolescents.
- 18.2% of American Indian or Alaska Native adolescents; approximately two and a half times the rate among Asian adolescents.
- 18.3% of Hispanic or Latino adolescents; approximately two and a half times the rate among Asian adolescents.
- 18.3% of non-Hispanic white adolescents; approximately two and a half times the rate among Asian adolescents.
- 19.8% of adolescents of two or more races; nearly three times the rate among Asian adolescents.

B. Causes and Correlates

When and how does drug abuse start and progress?

Studies such as the National Survey on Drug Use and Health, formally called the National Household Survey on Drug Abuse, reported by the Substance Abuse and Mental Health Services Administration, indicate that some children are already abusing drugs at age 12 or 13, which likely means that some begin even earlier. Early abuse often includes such substances as tobacco, alcohol, inhalants, marijuana, and prescription drugs such as sleeping pills and anti-anxiety medicines. If drug abuse persists into later adolescence, abusers typically become more heavily involved with marijuana and then advance to other drugs, while continuing their abuse of tobacco and alcohol. Studies have also shown that abuse of drugs in late childhood and early adolescence is associated with greater drug involvement. It is important to note that most youth, however, do not progress to abusing other drugs.

> *Preventive interventions can provide skills and support to high-risk youth to enhance levels of protective factors and prevent escalation to drug abuse.*

Scientists have proposed various explanations of why some individuals become involved with drugs and then escalate to abuse. One explanation points to a biological cause, such as having a family history of drug or alcohol abuse. Another explanation is that abusing drugs can lead to affiliation with drug-abusing peers, which, in turn, exposes the individual to other drugs.

Researchers have found that youth who rapidly increase their substance abuse have high levels of risk factors with low levels of protective factors.[32] Gender, race, and geographic location can also play a role in how and when children begin abusing drugs.

Top 8 Reasons why Teens Try Alcohol and Drugs

There is no single reason for teenage drug use and alcohol use. Dr. Neil I. Bernstein In How to Keep Your Teenager Out of Trouble and What to Do if You Can't, Dr. Neil I. Bernstein details some of the core issues and influences behind teenage drug and alcohol use. It's important that you, as a parent, understand these reasons and talk to your kids about the dangers of drinking and using drugs.

1. **Other People** — Teenagers see lots of people using various substances. They see their parents and other adults drinking alcohol, smoking, and, sometimes, abusing other substances. Also, the teen social scene often revolves around drinking and smoking pot. Sometimes friends urge one another to try a drink or smoke something, but it's just as common for teens to start using a substance because it's readily available and they see all their friends enjoying it. In their minds, they see drug use as a part of the normal teenage experience.
2. **Popular Media** — Forty-seven percent of teens agreed that movies and TV shows make drugs seem like an OK thing to do, according to a 2011 study. Not surprisingly, 12- to 17-year-olds who viewed three or more "R" rated movies per month were seven times more likely to smoke cigarettes, six times more likely to use marijuana, and five times more likely to drink alcohol, compared to those who hadn't watched "R" rated films (Amy Khan 2005).
3. **Escape and Self-Medication** — When teens are unhappy and can't find a healthy outlet for their frustration or a trusted confidant, they may turn to chemicals for solace. Depending on what substance they're using, they may feel blissfully oblivious, wonderfully happy, or energized and confident. The often rough teenage years can take an emotional toll on children, sometimes even causing depression, so when teens are given a chance to take something to make them feel better, many can't resist.
4. **Boredom** — Teens who can't tolerate being alone, have trouble keeping themselves occupied, or crave excitement are prime candidates for substance abuse. Not only do alcohol and marijuana give them something to do, but those substances help fill the internal void they feel. Further, they provide a common ground for interacting with like-minded teens, a way to instantly bond with a group of kids.

5. **Rebellion** — Different rebellious teens choose different substances to use based on their personalities. Alcohol is the drug of choice for the angry teenager because it frees him to behave aggressively. Methamphetamine, or meth, also encourage aggressive, violent behavior, and can be far more dangerous and potent than alcohol. Marijuana, on the other hand, often seems to reduce aggression and is more of an avoidance drug. LSD and hallucinogens are also escape drugs, often used by young people who feel misunderstood and may long to escape to a more idealistic, kind world. Smoking cigarettes can be a form of rebellion to flaunt their independence and make their parents angry. The reasons for teenage drug-use are as complex as teenagers themselves.
6. **Instant Gratification** — Drugs and alcohol work quickly. The initial effects feel really good. Teenagers turn to drug use because they see it as a short-term shortcut to happiness.
7. **Lack of Confidence** — Many shy teenagers who lack confidence report that they'll do things under the influence of alcohol or drugs that they might not otherwise. This is part of the appeal of drugs and alcohol even for relatively self-confident teens; you have the courage to dance if you're a bad dancer, or sing at the top of your lungs even if you have a terrible voice, or kiss the girl you're attracted to. And alcohol and other drugs tend not only to loosen your inhibitions but to alleviate social anxiety. Not only do you have something in common with the other people around you, but there's the mentality that if you do anything or say anything stupid, everyone will just think you had too many drinks or smoked too much weed.
8. **Misinformation** — Perhaps the most avoidable cause of substance abuse is inaccurate information about drugs and alcohol. Nearly every teenager has friends who claim to be experts on various recreational substances, and they're happy to assure her that the risks are minimal. Educate your teenager about drug use, so they get the real facts about the dangers of drug use.

Please note that information from the book has been edited for length.

C. Commonly Abused Drugs

Most drugs of abuse can alter a person's thinking and judgment, leading to health risks, including addiction, drugged driving, and infectious disease. Most drugs could potentially harm an unborn baby; pregnancy-related issues are listed in the chart below for drugs where there is enough scientific evidence to connect the drug use to specific negative effects.

The following drugs are included in this resource:

- Alcohol
- Ayahuasca
- Cocaine
- DMT
- GHB
- Hallucinogens
- Heroin
- Inhalants
- Ketamine
- Khat
- Kratom
- LSD
- Marijuana (Cannabis)
- MDMA (Ecstasy/Molly)
- Mescaline (Peyote)
- Methamphetamine
- Over-the-counter Cough/Cold Medicines (Dextromethorphan or DMX)
- PCP
- Prescription Opioids
- Prescription Sedatives (Tranquilizers, Depressants)
- Prescription Stimulants
- Psilocybin
- Rohypnol® (Flunitrazepam)
- Salvia
- Steroids (Anabolic)
- Synthetic Cannabinoids
- Synthetic Cathinones ("Bath Salts")
- Tobacco

**The Drug Enforcement Agency (DEA) schedule indicates the drug's acceptable medical use and its potential for abuse or dependence.

Prescription Drugs Abuse Among Youth

More and more reports are highlighting the abuse of prescription medications. And, as always, abuse among kids is a major concern. Drug abuse is a constant worry for parents and schools. It becomes even more frightening around the end of the school year when so many teens are celebrating and partying. From what we hear, abuse of prescription drugs is increasingly part of the scene.

How Big is the Problem?

The 2002 National Survey on Drug Use and Health warned that: "Kids as young as 12 are trying or using prescription medications non-medically – to get high or for 'self-medicating.' Pharmaceuticals are often more available to 12 year olds than illicit drugs because they can be taken from the medicine cabinet at home, rather than marijuana which necessitates knowing someone who uses or sells the drug. Also, pills may have a perception of safety because they are easier to take than smoking pot or drinking alcohol and are professionally manufactured in a lab."

More specifically that survey found that:

- 4 types of prescription medications are commonly abused – pain relievers, stimulants, sedatives and tranquilizers. Eleven percent of teens (aged 12-17) reported lifetime non-medical use of pain relievers and four percent reported lifetime non-medical use of stimulants.
- Painkillers are the most common pharmaceutical abused by teens, especially by younger teens. Stimulant abuse is more common among older teens and college students than younger teens. Girls are more likely to be current (past month) abusers of prescription medications than boys (4.3 vs. 3.6 percent).

Here is a flavor of what 2005 reports have indicated:

> From: *Preventing Teen Abuse of Prescription and Over-the-counter Medications* (2005)
> (The Partnership for a Drug Free America

"For teens, prescription and over-the-counter medications may have appeal for a number of reasons. They are easily accessible. They are perceived as safe when compared with street drugs. They are legal, doctor-prescribed and FDA-approved.

The latest annual study on teen drug use from the Partnership for a Drug-Free America reports that an alarming number of teenagers are abusing a variety of prescription (Rx) and over-the-counter (OTC) medications to get high. Millions of teens report abusing Rx painkillers, Rx stimulants and OTC cough medications to get high. Medications can be abused in a number of ways. Some teens simply swallow the pills or drink liquids; others may crush pills before snorting or smoking the powder. Still others melt or dissolve the medications and then inject them. Another popular way of abusing prescription drugs is to mix them with alcohol and street drugs into 'cocktails'."

> From: the annual tracking study report by the Partnership for a Drug Free America (2005)

- "1 in 6 teens has abused a prescription pain medication"
- "1 in 10 report abusing prescription stimulants and tranquilizers"
- "1 in 11 has abused cough medicine"
- "Many teens think these drugs are safe because they have legitimate uses"

> From: *Prescription Drugs: Abuse and Addiction* (2205)
> (The National Institute on Drug Abuse

"The nonmedical use or abuse of prescription drugs is a serious and growing public health problem in this country. ... an estimated 48 million people (ages 12 and older) have used prescription drugs for nonmedical reasons in their lifetimes. This represents approximately 20 percent of the U.S. population."

"Youth who use other drugs are more likely to abuse prescription medications. According to the 2001 National Household Survey on Drug Abuse (now the NSDUH), 63 percent of youth who had used prescription drugs nonmedically in the past year had also used marijuana in the past year, compared with 17 percent of youth who had not used prescription drugs nonmedically in the past year."

"Data from the 2003 NSDUH indicate that 4.0 percent of youth ages 12 to 17 reported nonmedical use of prescription medications in the past month. Rates of abuse were highest among the 18-25 age group (6.0%).

Among the youngest group surveyed, ages 12-13, a higher percentage reported using psychotherapeutics (1.8 percent) than marijuana (1.0 percent). The NIDA Monitoring the Future survey of 8th-, 10th-, and 12th-graders found that ... 5.0 percent of 12th-graders reported using OxyContin without a prescription in the past year, and 9.3 percent reported using Vicodin, making Vicodin one of the most commonly abused licit drugs in this population. Past year, nonmedical use of tranquilizers (e.g., Valium, Xanax) in 2004 was 2.5 percent for 8th-graders, 5.1 percent for 10th-graders, and 7.3 percent for 12th-graders. Also within the past year, 6.5 percent of 12th-graders used sedatives/ barbiturates (e.g., Amytal, Nembutal) nonmedically, and 10.0 percent used amphetamines (e.g., Ritalin, Benzedrine)."

"The abuse of certain prescription drugs-opioids, central nervous system (CNS) depressants, and stimulants- can alter the brain's activity and lead to addiction. While we do not yet understand all of the reasons for the increasing abuse of prescription drugs, we do know that accessibility is likely a contributing factor. ... some online pharmacies dispense medications without a prescription and without appropriate identity verification, allowing minors to order the medications easily over the Internet."

What to Do?

As with all substance abuse and other risky behaviors, the basic questions that arise still have only limited answers. For example:

- Why do kids take such risks?
- What preventive interventions work?
- What are the positive and negative outcomes of current efforts to discourage risky behaviors?
- How best to help after a problem has developed?

Obviously, the more we know, especially about what motivates the behavior, the better our chances of doing something effective. And, this involves understanding personal and social motivation.

Obviously, the better we related to kids, the more likely we can guide and counsel them and the more likely we will be in a position to help if a problem arises.

Obviously, efforts should be taken to safeguard medications at home, school, etc. (e.g., keeping them out of easily accessible places; ensuring appropriate school policies for distributing medications to students are in place).

And clearly, if a youngster has a substance abuse problem, treatment should be pursued quickly.

Programmatic Approaches to Prevention

Over the years, four major prevention strategies have prevailed:

(1) school and public education campaigns to enhance knowledge about substances and present a negative view about their impact,
(2) skill training to enhance positive social coping, with a major emphasis on resisting peer pressure,
(3) multifaceted school programs,
(4) multifaceted community programs.

Available evidence indicates that information-oriented strategies alone have little impact. More promising are skill training programs that

- include a wide range of personal and social skills designed to enhance general competence and curtail interest in substance use,
- pursue implementation in ways that ensure skills are learned,
- provide subsequent "booster inoculations."

However, an emphasis on skills, per se, also is insufficient. (It is clear that lack of skills does not inevitably lead to drug abuse, and some very socially adept youngsters are drug abusers.) Thus, multifaceted programs are emerging in an attempt to influence not only youngsters, but their families, schools, neighborhoods, and the media. Such approaches usually include strategies to develop cognitive and behavioral skills, change school and community norms and practices, and enhance social supports.

Resources

See the Center Online Clearinghouse Quick Find on *Substance Abuse Prevention and Intervention*

There you will find overviews, articles, and resources aids developed by the Center, such as:

- *Creating School and Community Partnerships for Substance Abuse Prevention Programs*
- *Substance Abuse: Indicators and Screening*
- *Substance Abuse Prevention: Toward Comprehensive, Multifaceted Approaches*
- *Lessons Learned: Prevailing Approaches to Substance Abuse Prevention*
- *Substance Abuse*
- *Students and Psychotropic Medication: The School's Role*

And, you will find links to a variety of other resources and Centers.

BUT, don't limit your thinking to this one risky behavior/barrier to learning! Remember, that youngsters who engage in one risky behavior engage usually are or will engage in more than one such endeavor. Moreover, from a broad school and home perspective, we need to be concerned about neighborhood, family, school and peer, as well as individual factors. So, use the Center's Online Clearinghouse Quick Find's for exploring ways to enhance a wide range of school and community practices and enhance social supports. The following Quick Finds are relevant:

- Classroom Climate/Culture
- Classroom-focused Enabling
- Learning Supports: Enabling Students to Succeed
- Mentoring
- Motivation
- Parent/Home Involvement in Schools
- Prevention for Students "At Risk"
- Resilience/Protective Factors
- Self-Esteem
- School-community Partnerships
- Youth Development

Remember: It Is A Drug Store!

It's surprising how many legal and easily accessible products can become dangerous substances of abuse. Beside the many household and industrial solvents and gases that become inhalants, newspapers and medical journals carry reports about youngsters dying from misuse of products sold over drugstore counters as health aids (such as asthma inhalers). Cough medicine is one such innocent appearing nonprescription product that young people have come to abuse in their pursuit of a "high." In the last few years, increasing reports suggest individuals are experiencing a host of serious negative drug effects from taking large doses of these antitussive medicines.

Dextromethorphan is the d-isomer of the opiate agonist levorphanol and is found in antitussive products such as Romilar and Robitussin. The *Physicians Desk Reference for Nonprescription Drugs* lists 53 different formulations that contain this drug. As an example of the problem, Murray and Brewerton (1993)* report the case of a 16 year old who was admitted to a psychiatric hospital because of self-destructive behavior. Robitussin cough medicine was among the drugs he indicated using regularly. "He reported that he and several of his friends often use this particular cough preparation as a substitute for alcohol and other drugs, and that he uses an average of three 8-oz bottles of Robitussin each week to make himself feel 'high and 'drunk'." The authors conclude with the caution: "Although usually thought to be nonaddictive, dextromethorphan produces a substance dependence syndrome, and physicians should be aware of its abuse potential, particularly by youths."

III. Guides & Tools ...

A. Screening, Brief Intervention, and Referral to Treatment (SBIRT)

SBIRT is an approach to the delivery of early intervention and treatment to people with substance use disorders and those at risk of developing these disorders.

About SBIRT

- » Screening quickly assesses the severity of substance use and identifies the appropriate level of treatment.
- » Brief intervention focuses on increasing insight and awareness regarding substance use and motivation toward behavioral change.
- » Referral to treatment provides those identified as needing more extensive treatment with access to specialty care.

Coding for Reimbursement

Reimbursement for screening and brief intervention is available through commercial insurance Current Procedural Technology (CPT), Medicare G codes, and Medicaid Healthcare Common Proceedure Coding System (HCPCS).

View available reimbursement codes.

Resources

Resources are available online or by calling SAMHSA's toll-free helpline at 800-662-HELP (800-662-4357).

Learn more about SBIRT resources.

Contact

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B. Frequently Asked Questions About Drug Testing in Schools

Do all schools conduct drug testing?

Following models established in the workplace, some schools have initiated random drug testing and/or reasonable suspicion/cause testing. This usually involves collecting urine samples to test for drugs such as marijuana, cocaine, amphetamines, PCP, and opioids (both heroin and prescription pain relievers).

In random testing, schools select one or more students to undergo drug testing using a random process (like flipping a coin). Legally, only students who participate in competitive extracurricular activities (including athletics and school clubs) can be subject to random drug testing.[1]

In reasonable suspicion/cause testing, a student can be asked to provide a urine sample, if the school suspects or has evidence they are using drugs. Such evidence might include direct observations made by school officials, physical symptoms of being under the influence, and/or has patterns of abnormal or erratic behavior.

Why do some schools conduct random drug tests?

Schools that have adopted random student drug testing seek to decrease drug use among students via two routes. First, they hope random testing will serve as a deterrent and give students a reason to resist peer pressure to take drugs. Secondly, drug testing can identify teens who have started using drugs and would be good targets for early intervention, as well as identify those who already have drug problems, so they can be referred for treatment. Using drugs not only interferes with a student's ability to learn, but it can also disrupt the teaching environment, affecting other students as well.

Is student drug testing effective?

Drug testing should never be undertaken as a stand-alone response to a drug problem. If testing is done, it should be a component of broader prevention, intervention, and treatment programs, with the common goal of reducing students' drug use.

If a student tests positive for drugs, should that student face disciplinary consequences?

The primary purpose of drug testing is not to punish students who use drugs but to prevent drug abuse and to help students already using become drug-free. If a student tests positive for drugs, schools can respond to the individual situation. If a student tests positive for drug use but has not yet progressed to addiction, the school can require counseling and follow-up testing. For students diagnosed with addiction, parents and a school administrator can refer them to effective drug treatment programs to begin the recovery process.

Why test teenagers at all?

Adolescents' brains and bodies are still developing, and this makes them especially vulnerable to the harmful effects of drug use. Most teens do not use drugs, but for those who do, it can lead to a wide range of adverse effects on their behavior and health.

Short term: Even a single use of an intoxicating drug can affect a person's judgment and decision making—resulting in accidents, poor performance in school or sports activities, unplanned risky behavior, and the risk of overdosing.

Long term: Repeated drug use can lead to serious problems, such as poor academic outcomes, mood changes (depending on the drug: depression, anxiety, paranoia, psychosis), and social or family problems caused or worsened by drugs.

Repeated drug use can also lead to the disease of ***addiction***. Studies show that the earlier a teen begins using drugs, the more likely he or she will develop a substance use disorder or addiction. Conversely, if teens stay away from drugs while in high school, they are less likely to develop a substance use disorder later in life.

How many students actually use drugs?

Drug use among high schools students has dropped significantly since 2001. In December, the 2013 Monitoring the Future study of 8th, 10th, and 12th graders showed that drug use was down from 31.8 percent in 2001 to 28.4 percent. While drug use is still below that from 2001, it has been increasing over the last several years largely due to increased marijuana use.

About 50 percent of 12th graders say that they've used any illicit drug at least once in their lifetime, and over 35 percent report using marijuana in the last year. Abuse and misuse of prescription drugs are also high—for example, in 2013, 7.4 percent of high school seniors reported non-medical use of the prescription stimulant Adderall in the past year.

What testing methods are available?

There are several testing methods currently available that use urine, hair, oral fluids, and sweat. These methods vary in cost, reliability, drugs detected, and detection period. Schools can determine their needs and choose the method that best suits their requirements, as long as the testing kits are from a reliable source.

Which drugs can be tested for?

Various testing methods normally test for a "panel" of five to ten different drugs. A typical drug panel tests for marijuana, cocaine, opioids (including the prescription pain relievers OxyContin and Vicodin), amphetamines, and PCP. If a school has a particular problem with other drugs, such as MDMA, GHB, or steroids, they can include testing for these drugs as well. It is also possible to screen for synthetic cannabinoids, commonly known as spice and K2.

What about alcohol?

Alcohol is a drug, and its use is a serious problem among young people. However, alcohol does not remain in the blood long enough for most tests to detect most recent use. Breathalyzers, oral fluid tests, and urine tests can only detect use within the past few hours. The cut-off is usually detection of the presence of alcohol for the equivalent of a blood alcohol content greater than 0.02 percent (20mg/1dL).[2] Teens with substance use problems are often polydrug users (they use more than one drug) so identifying a problem with an illicit or prescription drug may also suggest an alcohol problem.

How accurate are drug tests? Is there a possibility a test could give a false positive?

Tests are very accurate but not 100 percent accurate. Usually samples are divided so that if an initial test is positive a confirmation test can be conducted. Federal guidelines are in place to ensure accuracy and fairness in drug testing programs.

Can students "beat" the tests?

Many drug-using students are aware of techniques that supposedly detoxify their systems or mask their drug use. Popular magazines and Internet sites give advice on how to dilute urine samples, and there are even companies that sell clean urine or products designed to distort test results. A number of techniques and products are focused on urine tests for marijuana, but masking products increasingly are becoming available for tests of hair, oral fluids, and multiple drugs.

Most of these products do not work, are very costly, are easily identified in the testing process, and need to be on hand constantly due to the very nature of random testing. Moreover, even if the specific drug is successfully masked, the product itself can be detected, in which case the student using it would become an obvious candidate for additional screening and attention. In fact, some testing programs label a test "positive" if a masking product is detected.

Is random drug testing of students legal?

In June 2002, the U.S. Supreme Court broadened the authority of public schools to test students for illegal drugs. Voting 5 to 4 in *Pottawatomie County v. Earls*, the court ruled to allow random drug tests for all middle and high school students participating in competitive extracurricular activities. The ruling greatly expanded the scope of school drug testing, which previously had been allowed only for student athletes.

Just because the U.S. Supreme Court said student drug testing for adolescents in competitive extracurricular activities is constitutional, does that mean it is legal in my city or state?

A school or school district that is interested in adopting a student drug testing program should seek legal expertise so that it complies with all federal, state, and local laws. Individual state constitutions may dictate different legal thresholds for allowing student drug testing. Communities interested in starting student drug testing programs should become familiar with the law in their respective states to ensure proper compliance.

What has research determined about the utility of random drug tests in schools?

Research in this area shows mixed results, however study authors generally agree that student drug testing should not be a stand-alone strategy for reducing substance use in students, and that school climate (the quality and character of school life) is an important factor for achieving positive results in drug prevention programs.

- A NIDA-funded study published in 2013 found significant associations between both random and for-cause student drug testing and use of marijuana or other drugs. The authors note that while drug testing was associated with moderately lower marijuana use, it was also associated with higher use of other illicit drugs.[3]
- A study published in 2013 found that perceived school climate was associated with reduced likelihood of marijuana and cigarette initiation and cigarette escalation, and that student drug testing was not associated with improved drug use outcomes. The authors conclude that improving school climates is a promising strategy for preventing student substance use, while testing is a relatively ineffective drug-prevention policy.[4]
- A study published in 2012 found that students subject to mandatory random student drug testing reported less substance use than comparable students in high school without such testing. The study found no impact of randing drug testing on intention to use substances, perceived consequences of substance use, participation in covered activities, or school connectedness.[5]
- Results from a study published in 2012 indicate that drug testing is primarily effective at deterring substance use for female students in schools with positive climates. The authors conclude that drug testing should not be implemented as a stand-alone strategy for reducing substance use, and that school climate should be considered before implementing drug testing.[6]
- A NIDA-funded study published in 2012 showed little empirical evidence supporting or refuting the efficacy of random student drug testing in schools.[7]
- A NIDA-funded study published in 2007 found that student athletes who participated in randomized drug testing had overall rates of drug use similar to students who did not take part in the program, and in fact some indicators of future drug use increased among those participating in the drug testing program.[8]

Because of the conflicting findings on student drug testing, more research is needed.

C. What to Do If You Have a Problem with Drugs: For Teens and Young Adults

How do I know if I have a drug abuse problem?

Addiction can happen at any age, but it usually starts when a person is young. If you continue to use drugs despite harmful consequences, you could be addicted. It is important to talk to a medical professional about it—your health and future could be at stake.

Have friends or family told you that you are behaving differently for no apparent reason—such as acting withdrawn, frequently tired or depressed, or hostile? You should listen and ask yourself if they are right—and be honest with yourself. These changes could be a sign you are developing a drug-related problem. Parents sometimes overlook such signs, believing them to be a normal part of the teen years. Only you know for sure if you are developing a problem because of your drug use. Here are some other signs:

- hanging out with different friends
- not caring about your appearance
- getting worse grades in school
- missing classes or skipping school
- losing interest in your favorite activities
- getting in trouble in school or with the law
- having different eating or sleeping habits
- having more problems with family members and friends

There is no special type of person who becomes addicted. It can happen to anyone. (See NIDA's video, "Anyone Can Become Addicted to Drugs.")

Thanks to science, we know more than ever before about how drugs work in the brain, and we also know that addiction can be successfully treated to help young people stop using drugs and lead productive lives. Asking for help early, when you first suspect you have a problem, is important; don't wait to become addicted before you seek help. If you think you are addicted, there is treatment that can work. Don't wait another minute to ask for help.

Why can't I stop using drugs on my own?

Repeated drug use changes the brain. Brain imaging studies of drug-addicted people show changes in areas of the brain that are needed to learn and remember, make good decisions, and control yourself. Quitting is difficult, even for those who feel ready. NIDA has an excellent video (below) that explains why drugs are so hard to quit (hint: it's all about the brain). If you aren't sure you are addicted, it would be helpful for you to look at this brief video. It helps explains why your inability to stop using drugs does not mean you're a bad person, just that you have an illness that needs to be treated.

If I want to ask for help, where do I start?

Asking for help is the first important step. If you have a good relationship with your parents, you should start there. Ask them to read "What to Do If Your Teen or Young Adult Has a Problem with Drugs" (online), which is similar to this page but written for parents. If you do not have a good relationship with your parents (or if they are having some problems of their own and might need help), find an adult you trust and ask him or her for help.

The next step is to go to your doctor. You might want to ask your parents to call your doctor in advance to see if he or she is comfortable discussing drug use. Believe it or not, sometimes doctors are as uncomfortable discussing it as teens are! You will want to find a doctor who has experience with these issues. Your parents can find you a great doctor by checking out this fact sheet online.

Together with your parents and doctor, you can decide if you should enter a treatment program. If you do not have a good relationship with your parents, ask another adult you trust to help you.

It takes a lot of courage to seek help for a possible drug problem because there is a lot of hard work ahead and it might get in the way of school and social activities. But treatment works, and you can recover. It just takes time, patience, and hard work. It is important because you will not be ready to go out into the world on your own until you tak care of this issue. Treatment will help you counteract addiction's powerful hold on your brain and behavior so you can regain control of your life.

I'll talk to a doctor, but I am afraid they will tell my parents everything. Can I prevent that?

There are privacy laws that prevent your doctor from telling your parents everything. They can't even tell law enforcement about your drug use, in case that worries you. But your parents might ask you to sign a permission form, so your doctor can discuss your issues with them. If you feel your parents are truly trying to help you, you should consider signing the form, because having accurate information will help them find the right care and treatment for you. For more information on how private medical information is protected by law, read the HHS information on Health Information Privacy (HIPAA) online.

There is one exception to this rule: Doctors can speak to parents and some officials if they think you are in danger of hurting yourself or others.

If you feel you are being abused by your parents or caretakers, you should discuss it with your doctor or contact a school counselor. If you are being abused, you can call the National Child Abuse Hotline for help at 1-800-4-A-CHILD (1-800-422-4453).

What will the doctor ask me?

The doctor will ask you a series of questions about your use of alcohol and drugs and other risky behaviors like driving under the influence or riding with other people who have been using drugs or alcohol. Your doctor can help you the best if you tell the truth. The doctor might also give a urine and/or blood test. This will provide important information about your drug use and how it is affecting your health.

If your goal is to truly get better and get your old life back, you should cooperate with your doctor. If you think problems at home are only making it harder to stay clean, share that information with your doctor. If he or she recommends counseling or treatment, you should give it a try. There is a whole network of trained adults out there who want to help you.

What is treatment like?

Treatment for drug problems is tailored to each patient's unique drug abuse patterns and other medical, psychiatric, and social problems.

Some treatment centers offer outpatient treatment programs, which would allow you to stay in school, at least part time. Some teens and young adults, though, do better in inpatient (residential) treatment, where you stay overnight for a period of time. An addiction specialist can advise you about your best options.

NIDA has created an online publication outlining the best treatment principles for your age group. You might want to have this these materials handy when you talk to treatment centers, to help you ask the right questions.

I don't feel well when I stop using drugs. Do treatment centers force people to stop taking drugs immediately?

Treatment is always based on the person's needs. However, if you are still using a drug when you are admitted to a treatment program, one of the first things addiction specialists need to do is help you safely remove drugs from your system (called "detox"). This is important because drugs impair the mental abilities you need to make treatment work for you.

When people first stop using drugs, they can experience different physical and emotional withdrawal symptoms, including depression, anxiety, and other mood disorders, as well as restlessness and sleeplessness. Remember that treatment centers are very experienced in helping you get through this process and keeping you safe and comfortable during it. Depending on your situation, you might also be given medications to reduce your withdrawal symptoms, making it easier to stop using.

Who will be helping me in treatment?

Different kinds of addiction specialists will likely be involved in your care—including doctors, nurses, therapists, social workers, and others. They will work as a team.

Are there medications that can help me stop using?

There are medications that help treat addiction to alcohol, nicotine, and opioids (heroin and pain relievers). These are usually prescribed for adults, but sometimes doctors may prescribe them for younger patients. When medication is available, it can be combined with behavioral therapy for added benefit.

Medications are also sometimes prescribed to help with drug withdrawal and to treat possible mental health conditions (like depression) that might be contributing to your drug problem.

Your treatment provider will let you know what medications are available for your particular situation. You should be aware that some treatment centers don't believe a drug addiction should be treated with other drugs, so they may not want to prescribe medications. But scientific research shows that medication does help in many, many cases.

I tried rehab once and it didn't work—why should I try it again?

If you have already been in rehab, it means you have already learned many of the skills needed to recover from addiction, and you should try it again. Relapsing (going back to using drugs after getting off them temporarily) does not mean the first treatment failed. People with all kinds of diseases relapse; people with other chronic diseases such as high blood pressure, diabetes, and asthma—which have both physical and behavioral components—relapse about as much as people who have addictions.

Treatment of all chronic diseases, including addiction, involves making tough changes in how you live and act, so setbacks are to be expected along the way. A return to drug use means treatment needs to be started again or adjusted, or that you might need a different treatment this time.

What kind of counseling should I get?

Behavioral treatments ("talk therapy") help teens and young adults increase healthy life skills and learn how to be happy without drugs. They can give you some coping skills and will keep you motivated to recover from your drug problem.

Treatment can be one-on-one with a doctor, but some of the most effective treatments for teens are ones that involve one or more of your parents or other family members. You can read more about the different kinds of behavioral treatment options online.

I have heard of support groups. What are those like?

These groups—called peer support groups—aren't the same thing as treatment, but they can help you a lot as you go through treatment and afterward. Self-help groups and other support services offer you an added layer of social support, to help you stick with your healthy choices over the course of a lifetime. If you are in treatment, ask your treatment , provider about good support groups.

The most well-known self-help groups are those affiliated with Alcoholics Anonymous (AA) Narcotics Anonymous (NA), Cocaine Anonymous (CA) , and Teen-Anon, all of which are based on the 12-step approach. You can check the Internet sites of any of these groups for information about teen programs or meetings in your area.

There are other kinds of groups that can provide a lot of support, depending on where you live. To find support groups in your area, contact local hospitals, treatment centers, or faith-based organizations.

Other services available for teens include recovery high schools (in which teens attend school with other students who are also recovering) and peer recovery support services.

I don't like lying to my parents but, they don't understand me and my problems. If we talk about drugs, they will just yell at me. How can I avoid a fight?

First of all, remember that they were teens once, and they understand teen life more than you think. Secondly, when you first tell them about your problem, they might get angry out of fear and worry. They might raise their voices because they are very, very worried about you and your future. Try to stay calm and simply ask for help. Repeat over and over again that you need their help.

Parents do get angry when they find out their kids have been lying to them. You'd do the same! Be honest with them. Let them know you want to change and need their help.

I am also afraid my parents will take away the car keys—what can I do about that?

The single most responsible thing you can do is stop driving until you get help for your drug use. This might be inconvenient, but if you do drugs and drive, you could end up not only

killing yourself but killing others as well. That could lead to a lifetime in prison. This is no different than drinking and driving. For more see our DrugFacts on drugged driving.

If you tell your parents that you are willing to give up your driving privileges, they will know you are serious about getting help.

Taking drugs helps me feel less depressed—what's wrong with that?

The relief you feel is only temporary and can cause more problems down the road, as your brain and body start to crave more and more drugs just to feel normal. It is very possible you need to find treatment for your depression as well as for your drug use. This is very common. It is called "comorbidity" or "co-ocurrence" when you have more than one health problem at the same time.

Be certain to tell your doctor about your depression (or other mental health problems) as well as your drug use. There are many nonaddictive medicines that can help with depression or other mental health issues. Sometimes doctors do not talk to each other as much as they should, so you need to be your own best friend and advocate—and make sure all of your health care providers know about all of the health issues that concern you. You should be treated for all of them at the same time. For more information see our DrugFacts on comorbidity.

If you ever feel so depressed that you think about hurting yourself, there is a hotline you can call: 1-800-273-TALK (8255). This is called the National Suicide Prevention Lifeline, and you can share all of your problems with them. A caring, nonjudgmental voice will be on the other end, listening.

Where can I find information on specific drugs?

You can review the NIDA for Teens site, with information on a variety of drugs and drug abuse issues.

The NIDA website also has information on specific drugs, including their effects on the body, brain, and behavior.

NIDA also has an Easy-to-Read website with information about many drugs.

You can also check out NIDA's PEERx interactive videos, which focus on prescription drug abuse, or the Scholastic e-poster that discusses health effects of drugs.

Where can I find more information on treatment and recovery?

More information on what to expect in treatment and recovery is in our publication on the science behind addiction, called Drugs, Brains, and Behavior - The Science of Addiction, written by NIDA scientists based on many years of research.

What to Do If Your Teen or Young Adult Has a Problem with Drugs

How do I know if my teen or young adult has a substance use disorder?

Addiction can happen at any age, but it usually starts when a person is young. If your teen continues to use drugs despite harmful consequences, he or she may be addicted.

Anyone Can Become Addicted to Drugs -- see video online

If an adolescent starts behaving differently for no apparent reason—such as acting withdrawn, frequently tired or depressed, or hostile—it could be a sign he or she is developing a drug-related problem. Parents and others may overlook such signs, believing them to be a normal part of puberty. Other signs include:

- a change in peer group
- carelessness with grooming
- decline in academic performance
- missing classes or skipping school
- loss of interest in favorite activities
- trouble in school or with the law
- changes in eating or sleeping habits
- deteriorating relationships with family members and friends

Through scientific advances, we know more than ever before about how drugs work in the brain. We also know that addiction can be successfully treated to help young people stop abusing drugs and lead productive lives. Intervening early when you first spot signs of drug use in your teen is critical; don’t wait for your teen to become addicted before you seek help. However, if a teen is addicted, treatment is the next step.

Why can't some teens stop using drugs on their own?

Repeated drug use changes the brain. Brain imaging studies of people with drug addictions show changes in areas of the brain that are critical to judgment, decision-making, learning and memory, and behavior control. Quitting is difficult, even for those who feel ready. NIDA has an excellent video that explains why drugs are so hard to quit:

It could be helpful to show your teen this video. It helps explain why the inability to stop using drugs is not a moral failing, but rather an illness that needs to be treated.

If I want help for my teen or young adult, where do I start?

Asking for help from professionals is the first important step.

You can start by bringing your child to a doctor who can screen for signs of drug use and other related health conditions. You might want to ask in advance if he or she is comfortable screening for drug use with standard assessment tools and making a referral to an appropriate treatment provider. If not, ask for a referral to another provider skilled in these issues.

You can also contact an addiction specialist directly. There are 3,500 board-certified physicians who specialize in addiction in the United States. The American Society of Addiction Medicine website has a Find a Physician feature on its home page, and the American Academy of Child & Adolescent Psychiatry has a Child and Adolescent Psychiatrist Finder on its website. you and the physician can decide if your teen or young adult should be referred to treatment.

It takes a lot of courage to seek help for a child with a possible drug problem because there is a lot of hard work ahead for both of you, and it interrupts academic, personal, and possibly athletic milestones expected during the teen years. However, treatment works, and teens can recover from addiction, although it may take time and patience. Treatment enables young people to counteract addiction's powerful disruptive effects on their brain and behavior so they can regain control of their lives. You want to be sure your teen is healthy before venturing into the world with more independence, and where drugs are more easily available.

What kind of screening will the doctor do?

The doctor will ask your child a series of questions about use of alcohol and drugs, and associated risk behaviors (such as driving under the influence or riding with other drivers who have been using drugs or alcohol). The doctor might also give a urine and/or blood test to identify drugs that are being abused. This assessment will help determine the extent of a teen's drug use (if any) and whether a referral to a treatment program is necessary.

If my child refuses to cooperate, should the family conduct an intervention?

Most teens, and many young adults still being supported by their family, only enter treatment when they are compelled to by the pressure of their family, the juvenile justice, or other court system. However, there is no evidence that confrontational "interventions" like those familiar from TV programs are effective. It is even possible for such confrontational encounters to escalate into violence or backfire in other ways. Instead, parents should focus on creating incentives to get the teen to a doctor. Oftentimes, young people will listen to professionals rather than family members, as the latter encounters can sometimes be driven by fear, accusations, and emotions.

People of all ages with substance use disorders live in fear of what will happen if their drugs are taken away. You can ensure your teen that professional treatment centers will keep him or her safe and as comfortable as possible if a detoxification process is needed. Be sure to let your teen know that family and loved ones will stand by and offer loving support.

How do I find the right treatment center?

If you or your medical specialist decides your teen can benefit from substance abuse treatment, there are many options available. You can start by contacting the government's Treatment Locator service at 1-800-662-HELP (4357) or go online at http://findtreatment.samhsa.gov/. (This service is supported by the Substance Abuse and Mental Health Administration in the U.S. Department of Health and Human Services.) This Treatment Locator service lets you to search for a provider in your area; it will also tell you information about the treatment center and if it works with teens.

What do I look for in a treatment center for this age group?

Treatment approaches must be tailored to address each patient's unique substance abuse patterns and related medical, psychiatric, and social problems. Some treatment centers offer outpatient treatment programs, which would allow your teen to stay in school, at least part time. However, some adolescents do better in inpatient (residential) treatment. An addiction specialist can advise you about your best options.

NIDA has put 30 years of research into finding general principles of drug addiction that are most effective. We have just created an online publication outlining the best treatment

principles for this age group. You might want to have these materials handy when you talk to treatment centers to help you ask the right questions.

Who will provide treatment to my child?

Different kinds of addiction specialists will work together in your teen's care, including doctors, nurses, therapists, social workers, and others.

Is there medication that can help?

There are medications available to treat addictions to alcohol, nicotine, and opioids (heroin and pain relievers). These are generally prescribed for adults but, in some circumstances, doctors may prescribe them for younger patients. When medication is available, it can be combined with behavioral therapy to ensure success for most patients. In addition, nonaddictive medication is sometimes prescribed to help with withdrawal. Other medications are available to treat possible mental health conditions (such as depression) that might be contributing to your child's addiction.

Your treatment provider will advise you about what medications are available for your particular situation. Some treatment centers follow the philosophy that they should not treat a drug addiction with other drugs, but research shows that medication can help in many cases.

Read more about what treatments are available to treat your teen's addiction.

If my teen or young adult confides in his or her doctor, will I be able to find out what's going on?

If your child talks to a doctor or other medical expert, privacy laws might prevent that expert from sharing the information with you. However, you can speak to the doctor before your child's appointment and express your concerns, so the doctor knows the importance of a drug use screening in your child's situation. In addition, most health care providers that specialize in addiction treatment can't share your information with anyone (even other providers) without your written permission. For more information on how private medical information is protected by law, read the HHS information on Health Information Privacy (HIPAA) and the substance abuse confidentiality regulations (PDF, 388KB).

In certain cases when health professionals believe your child might be a danger to him- or herself or to others, the provider may be able to share relevant information with family members. Here is more information on when it is appropriate for the clinician to share protected information.

What if my teen or young adult has been in rehab before?

This means your child has already learned many of the skills needed to recover from addiction, and he or she will only benefit from further treatment. Relapse does not mean the first treatment failed. Relapse rates with addiction are similar to rates for other chronic diseases, such as hypertension, diabetes, and asthma. Treatment of chronic diseases involves changing deeply imbedded behaviors, so setbacks are to be expected along the way. A return to substance abuse indicates that treatment needs to be reinstated or adjusted, or that a different treatment might be called for.

How will I pay for treatment?

If your child has health insurance, it may cover substance abuse treatment services. Many insurance plans offer inpatient stays. When setting up appointments with treatment centers, you can ask about payment options and what insurance plans they take. They can also advise you on low-cost options.

The Behavioral Health Treatment Services Locator provided by the Substance Abuse and Mental Health Services Administration provides payment information for each of the treatment services listed, including information on sliding fee scales and payment assistance. Its "Frequently Asked Questions" section addresses cost of treatment. In addition, you can also call the treatment helpline at 1-800-662-HELP (1-800-662-4357) or 1-800-487-4889 (TTY) to ask about treatment centers that offer low- or no-cost treatment. You can also contact your state substance abuse agency—many states offer help with payment for substance abuse treatment.

Note that the new The Mental Health Parity and Addiction Equity Act ensures that co-pays, deductibles, and visit limits are generally not more restrictive for mental health and substance abuse disorder benefits than they are for medical and surgical benefits. The Affordable Care Act builds on this law and requires coverage of mental health and substance use disorder services as one of ten essential health benefits categories. Under the essential health benefits rule, individual and small group health plans are required to comply with these parity regulations. For more information on the Affordable Care Act, you can call 1-800-318-2596 or go to: https://www.healthcare.gov/.

When you research payment options, be sure you are speaking to people familiar with the new rules (old websites and pamphlets will not necessarily be accurate.)

What kind of counseling is best for a teen or young adult?

You child's treatment provider will probably recommend counseling. Behavioral treatment (also known as "talk therapy") can help patients engage in the treatment process, change their attitudes and behaviors related to substance abuse, and increase healthy life skills. These treatments can also enhance the effectiveness of medications and help people stay in treatment longer.

Treatment for substance abuse and addiction can be delivered in many different settings using a variety of behavioral approaches. With adults, both individual therapy and group counseling settings with peers are used. However, studies suggest group therapy can be risky with a younger age group, as some participants in a group may have negative influence over the others, or even steer conversation toward stories about having fun with drugs. Some research suggests that the most effective treatments for teens are those that involve one or more family members present. You can read more about the different kinds of behavioral treatment options.

Will a support group help my teen?

While group counseling is sometimes discouraged for teens, peer support groups for teens can be a useful companion to treatment. Self-help groups and other support services can extend the effects of professional treatment for a teen recovering from an addiction. Such groups can be particularly helpful during recovery, offering an added layer of community-level social support to help teens maintain healthy lifestyle behaviors over the course of a lifetime. If your teen is in treatment, your treatment provider will likely be able to tell you about good support groups.

The most well-known self-help groups are those affiliated with Alcoholics Anonymous (AA), Narcotics Anonymous (NA), Cocaine Anonymous (CA), and Teen-Anon. All of these are based on the 12-step model. Support groups for family members of people with addictions, like Alateen, can also be helpful. You can check the web sites of any of these groups for information about teen programs or meetings in your area. To find other meetings in your area, contact local hospitals, treatment centers, or faith-based organizations.

Other services available for teens include recovery high schools (where teens attend school with others in recovery and apart from potentially harmful peer influences) and peer recovery support services. There are other groups in the private sector that can provide a lot of support.

How do we keep things stable in our home until my teen is in treatment?

First, talk to your teen. There are ways to have a conversation about drugs or other sensitive issues that will prevent escalation into an argument. NIDA's Family Checkup tool gives science-based techniques for communicating with your child effectively without emotions getting in the way, as well as ways for setting limits and supervising your teen. Videos demonstrate the techniques discussed.

Acknowledge your child's opinions but know that many people with substance abuse problems are afraid and ashamed and might not always tell the truth. This is why it is important to involve medical professionals who have experience working with people struggling with substance abuse issues.

Second, if your teen has a driver's license, and you suspect drug use, you should take away your child's driving privileges. This could cause an inconvenience for the family, but could prevent a tragic accident. This could also be used as an incentive to get your child to agree to be evaluated by a medical professional. For more, see our DrugFacts on drugged driving.

I have heard that teens and young adults who use drugs could be "self-medicating" because they feel depressed. How do we handle that problem as well?

It is very possible your child needs to find treatment for both depression and addiction. This is very common. It is called "comorbidity" or "co-ocurrence" when you have more than one health problem at the same time. Parents should encourage their children to tell all of their health care providers about all of their symptoms and behaviors. There are many nonaddictive drugs that can help with depression or other mental health issues. Sometimes health care providers do not communicate with each other as well as they should, so you can be your child's advocate and make sure all relevant health care providers know about all of your child's health issues. Your child should be treated for all health issues at the same time. For more information see our DrugFacts on comorbidity.

If your child ever feels so depressed that you think he or she will do self-harm, there is a hotline you or your child can call. The National Suicide Prevention Lifeline's number is 1-800-273-TALK (8255). You are also welcome to call it to discuss your child's symptoms and get advice on how to best handle the situation.

Are there research studies available for teens?

You can speak with your child's doctor to determine if he or she is a good candidate for a clinical trial. To read some general information about being a part of NIH research studies, see NIH Clinical Trials and You.

To search for a clinical trial that might be right for your child, check out clinicaltrials.gov.

Where can we find information on specific drugs of abuse?

The NIDA website also has information on specific drugs, including their effects on the body, brain, and behavior. NIDA also has an Easy-to-Read website with information about many drugs.

In addition, you can suggest your teen review the NIDA for Teens site, with age-appropriate information on a variety of drugs and drug abuse issues. It might be useful for your teen to check out NIDA's PEERx interactive videos, which focus on prescription drug abuse, or the Scholastic e-poster that discusses health effects of drugs.

Where can I find more information on treatment and recovery?

More information on what to expect in treatment and recovery is in our publication on the science behind addiction, called Drugs, Brains, and Behavior: The Science of Addiction, written by NIDA scientists based on many years of research.

There is more information on the Substance Abuse and Mental Health Administration's resource page on treatment, prevention, and recovery.

You might also want to check out the websites of some other NIH Institutes:

National Institute on Alcohol Abuse and Alcoholism

Treatment for Alcohol Problems: Finding and Getting Help

National Institute of Mental Health

D. Substance Abuse Checklist

It is essential to remember that many of the symptoms of substance abuse are common characteristics of young people, especially in adolescence. This means *extreme caution* must be exercised to avoid misidentifying and inappropriately stigmatizing a youngster. *Never* overestimate the significance of a few indicators.

Student's Name _____ Age _____ Birthdate _____

Date: _____ Interviewer _____

(Suggested points to cover with student, parent, other informed sources)

(1) Substance Use

Has the individual used substances in the past? Y N

In the last year or so? Y N

Does the individual currently use substances? Y N

Does the individual feel s/he has a substance abuse problem? Y N

If so, does s/he want help in dealing with the problem? Y N

How often does the individual	Never	Once in a while,	About Once a Week	Several Times a Week	Every Day
drink beer, wine or hard liquor?	1	2	3	4	5
smoke cigarettes?	1	2	3	4	5
smoke marijuana (pot)?	1	2	3	4	5
use a drug by needle?	1	2	3	4	5
use cocaine or crack?	1	2	3	4	5
use heroine?	1	2	3	4	5
take LSD (acid)?.	1	2	3	4	5
use PCP (angel dust)?	1	2	3	4	5
sniff glue (huff)?	1	2	3	4	5
use speed?	1	2	3	4	5
other? (specify)_____	1	2	3	4	5

Has the individual ever had treatment for a substance problem? Y N

Has anyone observed the individual with drug equipment, needle marks, etc.? Y N

(2) Recent Dramatic Changes in Behavior and Mood

Have there been major changes recently with respect to the individual's

relationship with family members? Y N
relationship with friends? Y N
performance at school? Y N
attendance at school? Y N
participation in favorite activities? Y N
attitudes about things in general? Y N

(3) Prevailing Behavior and Mood Problems

Have any of the following been noted:

poor school performance Y N
skipping or ditching school Y N
inability to cope well with daily events Y N
lack of attention to hygiene, grooming, and dress Y N
long periods alone in bedroom/bathroom apparently doing nothing Y N
extreme defensiveness; argumentative Y N
negative attitudes Y N
dissatisfied about most things Y N
frequent conflicts with others Y N
verbally/physically abusive Y N
withdrawal from long-time friends Y N
withdrawal from family Y N
withdrawal from favorite activities Y N
disregard for others; extreme egocentricity Y N
taking up with new friends who may be drug users Y N
unusual tension or depressed states Y N
seems frequently confused and "spacey" Y N
often drowsy Y N
general unresponsiveness to what's going on (seems "turned off") Y N
increasing need for money Y N
disappearance of possessions (e.g., perhaps sold to buy drugs) Y N
stealing/shoplifting Y N
excessive efforts to mislead (lying, conning, untrustworthy, insincere) Y N
stooped appearance and posture Y N
dull or watery eyes; dilated or pinpoint pupils Y N
sniffles; runny nose Y N

**Use this checklist as an exploratory guide with students about whom you are concerned. Because of the informal nature of this type of assessment, it should not be filed as part of a student's regular school records.*

LISTA DEL ABUSO DE LA SUBSTANCIAS*

Es esencial recordar que muchos de los síntomas del abuso de las sustancias son características comunes de la gente joven, especialmente en la adolescencia. Esto significa que precaución extrema se debe ejercitar para evitar la interpretación o estigmatización incorrecta de un joven. *Nunca* sobrestime el significado de algunos indicadores.

Nombre del Estudiante _____ Edad _____
Fecha de Nacimiento _____

Fecha _____ Entrevistador _____

(Puntos sugeridos a cubrir con los estudiantes, padres, y otras referencias)

(1) El Uso de Sustancias

¿Ha la persona usado sustancias en el pasado? Y N

¿Durante el año pasado? Y N

¿Está la persona usando sustancias actualmente? Y N

Que tan frecuente la persona?	Nunca	De vez en Cuando	Una Vez por Semana	Varias Veces a la Semana	Todos Los Dias
¿Bebe Cerveza, vino, o licor?	1	2	3	4	5
¿Fuma cigarrillos?	1	2	3	4	5
¿Fuma marihuana (pot)?	1	2	3	4	5
¿Usa una droga con jeringas?	1	2	3	4	5
¿usa cocaína o crack?	1	2	3	4	5
¿usa heroína?	1	2	3	4	5
¿Toma LSD (acido)?.	1	2	3	4	5
¿usa PCP (angel dust)?	1	2	3	4	5
¿sniff glue (huff)?	1	2	3	4	5
¿usa speed?	1	2	3	4	5
otros? (especifique)_____	1	2	3	4	5

¿Ha sido tratado la persona por abuso de drogas? Y N

¿Alguien ha observado a la persona con instrumentos de drogas, marcas de agujas, etc? Y N

*Use esta lista como una guía exploratoria con estudiantes que usted esta preocupado. Por la naturaleza informal de esta evaluación, no debe ser archivado como parte de los expedientes regulares del estudiante en la escuela.

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(2) Cambios Dramáticos Recientes en Comportamiento y Ánimo

Ha habido cambios importantes recientemente con respecto al individuo

¿Relación con los miembros de la familia?	Y	N
¿Relación con los amigos?	Y	N
¿Rendimiento en la escuela?	Y	N
¿Asistencia en la escuela?	Y	N
¿Participación en actividades favoritas?	Y	N
¿Actitudes acerca de cosas en general?	Y	N

(3) Problemas Prevalentes del Comportamiento y el Humor

Se ha observado algo de lo siguiente:

desempeño escolar pobre	Y	N
ausencia en la escuela	Y	N
inhabilidad de hacer frente bien a acontecimientos diarios	Y	N
Falta de higiene, la limpieza, y el vestir	Y	N
Mucho tiempo solo en el cuarto/baño aparentemente haciendo nada	Y	N
defensividad extrema; controvertido	Y	N
actitudes negativas	Y	N
descontento sobre la mayoría de las cosas	Y	N
conflictos frecuente con otros	Y	N
verbalmente físicamente abusivo	Y	N
alejarse de los viejos amigos	Y	N
alejarse de la familia	Y	N
alejarse en hacer actividades favoritas	Y	N
indiferencia para otros; egocentricida extrema	Y	N
Hacerse amigo de personas que puedan usar drogas	Y	N
tensión inusual o estados depresivo	Y	N
parece confundido y perturbado	Y	N
a menudo soñoliento	Y	N
insensibilidad general a lo que está pasando (como apagado)	Y	N
necesidad de dinero	Y	N

desaparición de posesiones (e.g., quizás vendido para comprar drogas)	Y	N
robar/robar en tienda	Y	N
esfuerzos excesivos para engañar (mentir, manipulación, insincero)	Y	N
aspecto y postura inclinada	Y	N
ojos lloroso; pupilas dilatadas	Y	N
nariz que moquea	Y	N

III. Prevention (including risk and protective factors)

A. ***What are risk factors and protective factors?***

From: Preventing Drug Use among Children and Adolescents (In Brief)

Research over the past two decades has tried to determine how drug abuse begins and how it progresses. Many factors can add to a person's risk for drug abuse. Risk factors can increase a person's chances for drug abuse, while protective factors can reduce the risk. Please note, however, that most individuals at risk for drug abuse do not start using drugs or become addicted. Also, a risk factor for one person may not be for another.

Risk and protective factors can affect children at different stages of their lives. At each stage, risks occur that can be changed through prevention intervention. Early childhood risks, such as aggressive behavior, can be changed or prevented with family, school, and community interventions that focus on helping children develop appropriate, positive behaviors. If not addressed, negative behaviors can lead to more risks, such as academic failure and social difficulties, which put children at further risk for later drug abuse.

> *Research-based prevention programs focus on intervening early in a child's development to strengthen protective factors before problem behaviors develop.*

The table below describes how risk and protective factors affect people in five domains, or settings, where interventions can take place.

Risk Factors	Domain	Protective Factors
Early Aggressive Behavior	Individual	Self-Control
Lack of Parental Supervision	Family	Parental Monitoring
Substance Abuse	Peer	Academic Competence
Drug Availability	School	Anti-drug Use Policies
Poverty	Community	Strong Neighborhood Attachment

Risk factors can influence drug abuse in several ways. The more risks a child is exposed to, the more likely the child will abuse drugs. Some risk factors may be more powerful than others at certain stages in development, such as peer pressure during the teenage years; just as some protective factors, such as a strong parent-child bond, can have a greater impact on reducing risks during the early years. An important goal of prevention is to change the balance between risk and protective factors so that protective factors outweigh risk factors.

Risk and Protective Factors and Initiation of Substance Use: Results from the 2014 National Survey on Drug Use and Health

Abstract

Background. Whether someone engages in substance use is often related to exposure to factors that are typically associated with an increased likelihood of substance use (i.e., risk factors) or factors that are typically associated with a decreased likelihood of substance use (i.e., protective factors). Efforts to prevent substance use generally aim to reduce the influence of risk factors and to enhance the effectiveness of protective factors. One major goal of substance use prevention programs is to prevent or delay the initiation of substance use (i.e., first use).

Methods. This report presents data from the 2002 through 2014 National Surveys on Drug Use and Health (NSDUHs) for trends in people's perceptions of great risk of harm associated with the use of cigarettes, alcohol, and specific illicit drugs and the perceived availability of substances. The data are presented for the population aged 12 years old or older and for specific age groups. Trends in perceived great risk of harm associated with the use of specific substances (i.e., marijuana, alcohol, and cigarettes) were compared with trends in the use of these substances in the past 30 days. The report also includes trends for measures that are specific to youths aged 12 to 17, such as perceptions about parents strongly disapproving of youth substance use. Finally, this report includes trends in the estimated numbers of individuals who initiated substance use in the past year and the average age at first use among people who initiated use in the past year (i.e., past year initiates). The report focuses on long-term trends by comparing estimates from the 2014 NSDUH with NSDUH estimates in 2002 to 2013. Statistically significant differences are noted between estimates in 2014 and those in prior years.

Results. People aged 12 or older were less likely to perceive great risk of harm from monthly or weekly marijuana use in 2014 than in 2002 to 2013. This pattern was also observed for youths aged 12 to 17, young adults aged 18 to 25, and adults aged 26 or older. There also were declines in the percentages of people aged 12 or older who perceived that the use of cocaine or LSD was risky. Nevertheless, in 2014, the majority of people aged 12 or older perceived great risk of harm from the use of cocaine or LSD. The percentage of people aged 12 or older in 2014 who perceived great risk from trying heroin (83.1 percent) was somewhat higher than the percentages in 2002 to 2013. Percentages of people aged 12 or older in 2014 who perceived great risk from binge alcohol use were lower than the percentages in most years from 2002 to 2013. Percentages of people aged 12 or older who perceived great risk from smoking one or more packs of cigarettes a day were similar between 2009 and 2014.

Consistent with the decrease in the perceptions of marijuana use being risky, past month marijuana use increased over time for the population aged 12 or older and for adults aged 26 or older; however, this pattern did not hold for youths or young adults. Changes in binge alcohol use and cigarette use were not as closely related to changes in risk perceptions for binge alcohol use and smoking a pack or more of cigarettes a day as was the case with relationships for marijuana.

The numbers of people who initiated use of many substances in the past year generally remained the same in most recent years. For example, the number of recent marijuana initiates aged 12 or older in 2014 (2.6 million) was greater than the numbers in 2002 to 2008, but it was similar to the numbers in 2009 to 2013. The number of people aged 12 or older in 2014 who were recent initiates for the nonmedical use of pain relievers (1.4 million) was second only to the number of marijuana initiates for the categories of illicit drugs in NSDUH. However, the number of new initiates for the nonmedical use of pain relievers in 2014 was lower than the numbers in 2002 to 2012, which ranged from 1.9 million to 2.5 million new users each year. The numbers of adolescents in 2014 who recently initiated use of alcohol or cigarettes were lower than the numbers in most years from 2002 to 2012, but they were similar to the numbers of initiates in 2013.

Conclusions. Findings from NSDUH on trends in risk perceptions and other issues related to risk and protective factors for substance use are useful to the Substance Abuse and Mental Health Services Administration for gauging the overall effectiveness of prevention efforts on a broad national level and for tracking factors that may signal changes in the extent of substance use in the population. NSDUH data on trends in the initiation of substance use also can be useful to policymakers and program planners for anticipating future needs for services and can help provide information on the long-term effectiveness of prevention programs as a whole. However, these NSDUH data are not intended to be used to evaluate the effectiveness of individual prevention programs. Also, where associations exist between a perceived low risk of harm from substance use and actual use, it is not possible to determine from NSDUH data whether the perception came first and influenced an individual's likelihood to engage in substance use or if substance use came first and influenced an individual's risk perceptions.

B. Examples of Research-Based Drug Abuse Prevention Programs

From: Preventing Drug Use among Children and Adolescents (In Brief)

To help those working in drug abuse prevention, NIDA, in cooperation with the prevention scientists, presents the following examples of research-based programs that feature a variety of strategies proven to be effective. Each program was developed as part of a research study, which demonstrated that over time youth who participated in the programs had better outcomes than those who did not. The programs are presented within their audience category (universal, selective, indicated, or tiered).

Since these programs are only examples, community planners may wish to explore the additional programs and planning guides highlighted in Selected Resources and References. For more information on program materials and references, please consult Preventing Drug Use among Children and Adolescents: A Research-Based Guide for Parents, Educators, and Community Leaders, Second Edition (PDF, 688KB). With NIDA's continued support of research on effective prevention strategies, new research-based programs will continue to be made available in the future.

In This Section

C. Prevention Principles

From: Preventing Drug Use among Children and Adolescents (In Brief)

These principles are intended to help parents, educators, and community leaders think about, plan for, and deliver research-based drug abuse prevention programs at the community level. The references following each principle are representative of current research.

Risk Factors and Protective Factors

PRINCIPLE 1 - Prevention programs should enhance protective factors and reverse or reduce risk factors.

- The risk of becoming a drug abuser involves the relationship among the number and type of risk factors (e.g., deviant attitudes and behaviors) and protective factors (e.g., parental support).
- The potential impact of specific risk and protective factors changes with age. For example, risk factors within the family have greater impact on a younger child, while association with drug-abusing peers may be a more significant risk factor for an adolescent.
- Early intervention with risk factors (e.g., aggressive behavior and poor self-control) often has a greater impact than later intervention by changing a child's life path (trajectory) away from problems and toward positive behaviors.
- While risk and protective factors can affect people of all groups, these factors can have a different effect depending on a person's age, gender, ethnicity, culture, and environment.

PRINCIPLE 2 - Prevention programs should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs (e.g., tobacco or alcohol); the use of illegal drugs (e.g., marijuana or heroin); and the inappropriate use of legally obtained substances (e.g., inhalants), prescription medications, or over-the-counter drugs.

PRINCIPLE 3 - Prevention programs should address the type of drug abuse problem in the local community, target modifiable risk factors, and strengthen identified protective factors.

PRINCIPLE 4 - Prevention programs should be tailored to address risks specific to population or audience characteristics, such as age, gender, and ethnicity, to improve program effectiveness.

Prevention Planning

Family Programs

PRINCIPLE 5 - Family-based prevention programs should enhance family bonding and relationships and include parenting skills; practice in developing, discussing, and enforcing family policies on substance abuse; and training in drug education and information.

Family bonding is the bedrock of the relationship between parents and children. Bonding can be strengthened through skills training on parent supportiveness of children, parent-child communication, and parental involvement.

- Parental monitoring and supervision are critical for drug abuse prevention. These skills can be enhanced with training on rule-setting; techniques for monitoring activities; praise for appropriate behavior; and moderate, consistent discipline that enforces defined family rules.
- Drug education and information for parents or caregivers reinforces what children are learning about the harmful effects of drugs and opens opportunities for family discussions about the abuse of legal and illegal substances.
- Brief, family-focused interventions for the general population can positively change specific parenting behavior that can reduce later risks of drug abuse.

School Programs

PRINCIPLE 6 - Prevention programs can be designed to intervene as early as preschool to address risk factors for drug abuse, such as aggressive behavior, poor social skills, and academic difficulties.

PRINCIPLE 7 - Prevention programs for elementary school children should target improving academic and social-emotional learning to address risk factors for drug abuse, such as early aggression, academic failure, and school dropout. Education should focus on the following skills:

- self-control;
- emotional awareness;
- communication;
- social problem-solving; and
- academic support, especially in reading.;

PRINCIPLE 8 - Prevention programs for middle or junior high and high school students should increase academic and social competence with the following skills:

- study habits and academic support;
- communication;
- peer relationships;
- self-efficacy and assertiveness;
- drug resistance skills;
- reinforcement of anti-drug attitudes; and
- strengthening of personal commitments against drug abuse.

Community Programs

PRINCIPLE 9 - Prevention programs aimed at general populations at key transition points, such as the transition to middle school, can produce beneficial effects even among high-risk families and children. Such interventions do not single out risk populations and, therefore, reduce labeling and promote bonding to school and community.

PRINCIPLE 10 - Community prevention programs that combine two or more effective programs, such as family-based and school-based programs, can be more effective than a single program alone.

PRINCIPLE 11 - Community prevention programs reaching populations in multiple settings—for example, schools, clubs, faith-based organizations, and the media—are most effective when they present consistent, community-wide messages in each setting.

Prevention Program Delivery

PRINCIPLE 12 - When communities adapt programs to match their needs, community norms, or differing cultural requirements, they should retain core elements of the original research-based intervention[27] which include:

- Structure (how the program is organized and constructed);
- Content (the information, skills, and strategies of the program); and
- Delivery (how the program is adapted, implemented, and evaluated).

PRINCIPLE 13 - Prevention programs should be long-term with repeated interventions (i.e., booster programs) to reinforce the original prevention goals. Research shows that the benefits from middle school prevention programs diminish without follow-up programs in high school.

PRINCIPLE 14 - Prevention programs should include teacher training on good classroom management practices, such as rewarding appropriate student behavior. Such techniques help to foster students' positive behavior, achievement, academic motivation, and school bonding.

PRINCIPLE 15 - Prevention programs are most effective when they employ interactive techniques, such as peer discussion groups and parent role-playing, that allow for active involvement in learning about drug abuse and reinforcing skills.

PRINCIPLE 16 - Research-based prevention programs can be cost-effective. Similar to earlier research, recent research shows that for each dollar invested in prevention, a savings of up to $10 in treatment for alcohol or other substance abuse can be seen.

D. Prevailing Approaches to Substance Abuse Prevention

The dominant emphasis in the field of substance abuse prevention is on school-based interventions. Moreover, because of interest in making schools safe and drug free, many programs focus on preventing both substance abuse and violence. For the most part, the emphasis is on reducing risks/stressors and enhancing protective factors. From a developmental perspective, advocates argue for beginning programs in elementary school and perhaps even before.

The Many Facets of Substance Abuse Prevention

Prevention initiatives encompass discrete strategies and broad, multifaceted approaches. The focus may be on primary prevention of substance use through "universal" programs for the general population, "selective" programs that target specific "at risk" groups, or "indicated" programs whose preventive focus is on interrupting drug use (e.g., ending drug experimentation, stopping a progression to drug abuse, minimizing the impact of drug abuse, reducing the likelihood of future co-occurring problems or relapse for those who have stopped). Thus, at a school, some initiatives may be school-wide with the intent of having an impact on all students; others may be limited to a classroom; others may target a specific group. In each instance, various strategies may be used to promote healthy development or address factors interfering with positive functioning.

Over the years, four major prevention strategies have prevailed: (1) school and public education campaigns to enhance knowledge about substances and present a negative view about their impact, (2) skill training to enhance positive social coping, with a major emphasis on resisting peer pressure, (3) multifaceted school programs, and (4) multifaceted community programs. The best available evidence indicates that information-oriented strategies alone have little impact. More promising are skill training programs that (a) include a wide range of personal and social skills designed to enhance general competence and curtail interest in substance use, (b) pursue implementation in ways that ensure skills are learned, and (c) provide subsequent "booster inoculations." However, an emphasis on skills, per se, also is insufficient. (It is clear that lack of skills does not inevitably lead to drug abuse, and some very socially adept youngsters are drug abusers.) Thus, multifaceted programs are emerging in an attempt to influence not only youngsters, but their families, schools, neighborhoods, and the media. Such approaches usually include strategies to develop cognitive and behavioral skills, change school and community norms and practices, and enhance social supports. The logic of such approaches is appealing, however, their complexity can be staggering, which makes implementation and evaluation a method-ological nightmare.

How Good Are Substance Abuse Prevention Programs?

Over the last 20 years, the market for substance abuse prevention programs has burgeoned. As a result, many hundreds of packaged "curricula" exist, as do a host of noncurricular approaches. In an effort to bring some coherence to the situation, lists of "research-based" or "evidence-based" approaches have been generated through initiatives sponsored by public agencies and private groups. Different lists apply different criteria for what constitutes satisfactory empirical evidence. Mostly, the criteria used do not reflect stringent research standards.

As an aid to the field, the Substance Abuse and Mental Health Services Administration's Knowledge Exchange Network (KEN) has combined several prominent compilations under the heading "Examples of Exemplary/Promising Programs" (SAMHSA, 1999). This list offers about 125 different programs relevant to violence and substance abuse prevention. Most address some or all of the 19 common risk factors linked by researchers to problems such as youth delinquency, violence, substance abuse, teen pregnancy, and school dropout (Hawkins, Catalano, & Miller, 1992). In keeping with the growing interest in protective factors, some of the programs reframe risk factors into an approach that stresses strengthening protective factors and building assets.

Support for the positive impact and future potential of prevention programs has been extrapolated from literature reviews, including meta-analyses. A different sense of the state of the art is garnered from the Center for the Study and Prevention of Violence's *Blueprint* project, which has used the most stringent criteria to date in generating a list of model and promising programs (Elliott, 1998). Although the project's primary focus is on violence prevention, it also has identified a few programs with evidence of efficacy in preventing substance abuse. The criteria used for designating an approach as a model include: (a) formal evaluation using an experimental or quasi-experimental design which (b) generated evidence of a statistically significant deterrent (or marginal deterrent) effect, (c) encompassed replication on at least one additional site with experimental design and demonstrated effects, and (d) found evidence that the

deterrent effect was sustained for at least one year post-treatment. Despite the rather minimal research standards reflected in these criteria, only 10 model programs were identified. By reducing the criteria to include programs using a single site, those that are unreplicated, or those with a small effect on outcome measures, 13 additional programs were designated as promising. But, again it should be noted that only a few of the 23 provide evidence of direct impact on preventing substance abuse.

So, overall, how good are specific programs in preventing substance abuse? Regardless of whether a program is designated as an exemplary model or promising, at this juncture those generating the best findings still represent a rather limited approach to prevention. Their data mostly suggest short-term impact related to enhancing specific knowledge and skills and/or environmental supports (the absence of which have been identified as constituting risk factors). A few have reported evidence from appropriately controlled studies that show some direct, long-term impact in preventing substance abuse (see page 11). Because the programs are mostly carried out as projects or demonstrations, findings mainly constitute evidence of efficacy not effectiveness -- to say nothing of cost-effectiveness. Moreover, the majority of programs with sound evaluation data have focused on elementary age children and young teens. The few implemented with older youngsters have targeted specific subgroups and problems, such as programs to reduce use of anabolic steroids by high school athletes.

In the long run, raising standards for designating programs as exemplary should help improve standards for practice. In the short-run, however, the problem remains one of extrapolating consensus guidelines from the best available research and from those persons who have the greatest expertise, the broadest perspective, and the most wisdom. Thus, it is not surprising that growing dissatisfaction with the state of the art has increased interest in encapsulating what is known about "best" practices. One example of this trend is the following synthesis of 14 principles published in 1997 by the National Institute of Drug Abuse to guide development of substance abuse prevention initiatives:

- Prevention programs should be designed to enhance "protective factors" and to move toward reversing or reducing known "risk factors."
- Prevention programs should target all forms of drug use, including the use of tobacco, alcohol, marijuana, and inhalants.
- Prevention programs should include skills to resist drugs when offered, strengthen personal commitments against drug use, and increase social competency (e.g., in communications, peer relationships, self-efficacy, and assertiveness) in conjunction with reinforcement of attitudes against drug use.
- Prevention programs for adolescents should include interactive methods, such as peer discussion groups, rather than didactic teaching techniques alone.
- Prevention programs should include a parents' or caretakers' component that reinforces what the children are learning, such as facts about drugs and their harmful effects. Moreover, the intervention should promote opportunities for family discussions about use of illegal substances and family policies about their use.
- Prevention programs should be long term and should continue over the school career, with repeated interventions to reinforce the original prevention goals. For example, school-based efforts directed at elementary school and middle school students should include booster sessions to help with critical transitions from middle school to high school.
- Family-focused prevention efforts have a greater impact than strategies that focus on parents only or children only.
- Community programs that include media campaigns and policy changes, such as new regulations that restrict access to alcohol, tobacco, and other drugs, are more effective when they are accompanied by school and family interventions.
- Community programs need to strengthen norms against drug use in all drug use prevention settings, including the family, school, and community.
- Schools offer opportunities to reach all pop-ulations and also serve as important settings for specific subpopulations at risk for drug use, such as children with behavior problems or learning disabilities and those who are potential dropouts.
- Prevention programming should be adapted to address the specific nature of the drug use problem in a local community.
- The higher the level of risk for the target population, the more intensive the prevention effort must be, and the earlier it must begin.
- Programs should be age-specific, developmentally appropriate, and culturally sensitive.
- Effective prevention programs are cost-effective.

The list drives home that prevention efforts must be comprehensive and multifaceted and must focus on the home, school, and community. And, of course, the principles underscore the importance of attending to developmental and population differences and motivational and developmental considerations.

E. ***Prevention of Substance Abuse and Mental Illness***

Overview

Promoting mental health and preventing mental and/or substance use disorders are fundamental to SAMHSA's mission to reduce the impact of behavioral health conditions in America's communities.

Mental and substance use disorders can have a powerful effect on the health of individuals, their families, and their communities. In 2014, an estimated 9.8 million adults aged 18 and older in the United States had a serious mental illness, and 1.7 million of which were aged 18 to 25. Also 15.7 million adults (aged 18 or older) and 2.8 million youth (aged 12 to 17) had a major depressive episode during the past year. In 2014, an estimated 22.5 million Americans aged 12 and older self-reported needing treatment for alcohol or illicit drug use, and 11.8 million adults self-reported needing mental health treatment or counseling in the past year. These disorders are among the top conditions that cause disability and carry a high burden of disease in the United States, resulting in significant costs to families, employers, and publicly funded health systems. By 2020, mental and substance use disorders will surpass all physical diseases as a major cause of disability worldwide.

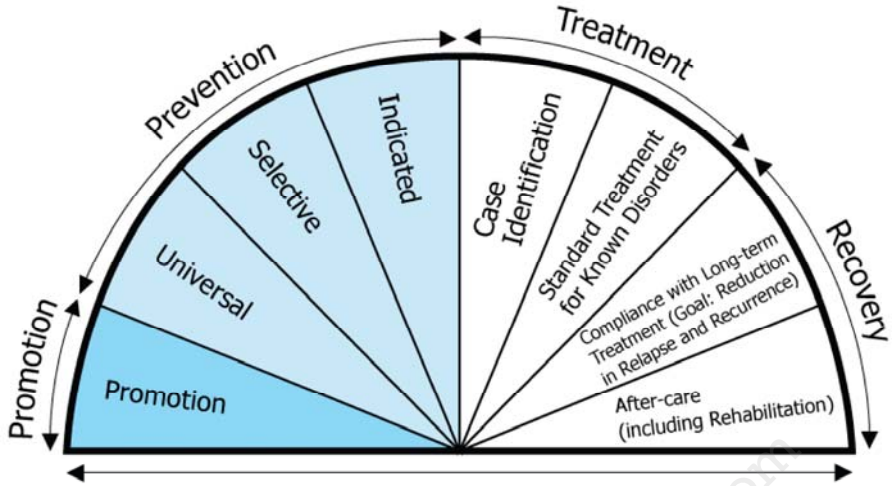
In addition, drug and alcohol use can lead to other chronic diseases such as diabetes and heart disease. Addressing the impact of substance use alone is estimated to cost Americans more than $600 billion each year.

Preventing mental and/or substance use disorders and related problems in children, adolescents, and young adults is critical to Americans' behavioral and physical health. Behaviors and symptoms that signal the development of a behavioral disorder often manifest two to four years before a disorder is present. In addition, people with a mental health issue are more likely to use alcohol or drugs than those not affected by a mental illness. Results from the 2014 NSDUH report (PDF | 3.4 MB) showed that of those adults with any mental illness, 18.2% had a substance use disorder, while those adults with no mental illness only had a 6.3% rate of substance use disorder in the past year. If communities and families can intervene early, behavioral health disorders might be prevented, or symptoms can be mitigated.

Data have shown that early intervention following the first episode of a serious mental illness can make an impact. Coordinated, specialized services offered during or shortly after the first episode of psychosis are effective for improving clinical and functional outcomes.

In addition, the Institute of Medicine and National Research Council's Preventing Mental, Emotional, and Behavioral Disorders Among Young People report – 2009 notes that cost-benefit ratios for early treatment and prevention programs for addictions and mental illness programs range from 1:2 to 1:10. This means a $1 investment yields $2 to $10 savings in health costs, criminal and juvenile justice costs, educational costs, and lost productivity.

Continuum of Care



A comprehensive approach to behavioral health also means seeing prevention as part of an overall continuum of care. The Behavioral Health Continuum of Care Model recognizes multiple opportunities for addressing behavioral health problems and disorders. Based on the Mental Health Intervention Spectrum, first introduced in a 1994 Institute of Medicine report, the model includes the following components:

- **Promotion**—These strategies are designed to create environments and conditions that support behavioral health and the ability of individuals to withstand challenges. Promotion strategies also reinforce the entire continuum of behavioral health services.
- **Prevention**—Delivered prior to the onset of a disorder, these interventions are intended to prevent or reduce the risk of developing a behavioral health problem, such as underage alcohol use, prescription drug misuse and abuse, and illicit drug use.
- **Treatment**—These services are for people diagnosed with a substance use or other behavioral health disorder.
- **Recovery**—These services support individuals' abilities to live productive lives in the community and can often help with abstinence.

Risk and Protective Factors

People have biological and psychological characteristics that can make them vulnerable or resilient to potential behavioral health problems. Individual-level protective factors might include a positive self-image, self-control, or social competence.

In addition, people do not live in isolation, they are part of families, communities, and society. A variety of risk and protective factors exist within each of these environmental contexts. Learn more from the SAMHSA Center for the Application of Prevention Technologies' Key Features of Risk and Protective Factors webpage and from the Risk and Protective Factors and Initiation of Substance Use: Results from the 2014 National Survey on Drug Use and Health (PDF | 1.5 MB). Review the chapter on Risk Factors and Protective Factors in the National Institute on Drug Abuse's report, Preventing Drug Use among Children and Adolescents.

Evidence-Based Practices

Experts attest that an optimal mix of prevention interventions is required to address substance use issues in communities, because they are among the most difficult social problems to prevent or reduce. SAMHSA's program grantees should consider comprehensive solutions that fit the particular needs of their communities and population, within cultural context, and take into consideration unique local circumstances, including community readiness. Some interventions may be evidence-based, while others may document their effectiveness based on other sources of information and empirical data.

Early intervention also is critical to treating mental illness before it can cause tragic results like serious impairment, unemployment, homelessness, poverty, and suicide. The Community Mental Health Services Block Grant (MHBG) directs states to set aside 5% of their MHBG allocation, which is administered by SAMHSA, to support evidence-based programs that address the needs of individuals with early serious mental illness, including psychotic disorders. The Guidance for Revision of the FY2014-2015 MHBG Behavioral Health Assessment and Plan (PDF | 92 KB) provides additional information.

Review SAMHSA's criteria for defining a prevention program or early intervention as evidence-based. Also, search SAMHSA's National Registry of Evidence-based Programs and Practices to find evidence-based programs related to prevention and early intervention for all behavioral health issues.

Prevention Strategies

Many prevention approaches, such as selective prevention strategies, focus on helping individuals develop the knowledge, attitudes, and skills they need to make good choices or change harmful behaviors. Many of these strategies can be classroom-based. Learn more from the SAMHSA Center for the Application of Prevention Technologies' comprehensive review of classroom-based programs.

Universal prevention approaches include the use of environmental prevention strategies, which are tailored to local community characteristics and address the root causes of risky behaviors by creating environments that make it easier to act in healthy ways. The successful execution of these strategies often involves lawmakers, local officials, and community leaders, as well as the acceptance and active involvement of members from various sectors of the community (such as business, faith, schools, and health). For example, the use of this type of strategy may offer fewer places for young people to purchase alcohol, so consuming alcohol becomes less convenient; therefore, less is consumed.

Environmental change strategies have specific advantages over strategies that focus exclusively on the individual. Because they target a much broader audience, they have the potential to produce widespread changes in behavior at the population level. Further, when implemented effectively, they can create shifts in both individual attitudes and community norms that can have long-term, substantial effects. Strategies that target the environment include:

- Communication and education
- Enforcement

Visit the SAMHSA Center for the Application of Prevention Technologies' Evaluating Environmental Change Strategies webpage for more prevention information and resources.

SAMHSA is a leader in the promotion of prevention and early intervention, most notably through its Strategic Prevention Framework (SPF) and participation in the President's *Now Is The Time* initiative.

Learn about SAMHSA's many prevention and early intervention programs, initiatives, and partnerships:

- SAMHSA's Efforts Related to Prevention and Early Intervention
- SAMHSA's Prevention Efforts for Specific Populations
- Grants Related to the Prevention of Substance Abuse and Mental Illness
- Publications and Resources on the Prevention of Substance Abuse and Mental Illness

Cultural Awareness and Competency

Improving cultural and linguistic competence is an important strategy for addressing persistent behavioral health disparities experienced by diverse communities, including the lesbian, gay, bisexual, and transgender population and racial and ethnic minority groups. These diverse populations tend to have less access to prevention services and poorer behavioral health outcomes.

Cultural and linguistic competence includes, but is not limited to, the ability of an individual or organization to interact effectively with people of different cultures. To produce positive change, prevention practitioners must understand the cultural and linguistic context of the community, and they must have the willingness and skills to work within this context.

For diverse populations to benefit from prevention and early intervention programs, SAMHSA ensures that culture and language be considered at every step when developing and then implementing these programs. For more information and resources, visit the Strategic Prevention Framework's Cultural Competence webpage. In addition, the SAMHSA Center for the Application of Prevention Technologies lists the elements of a culturally competent prevention system. With regard to the development of a culturally diverse workforce, the *Now Is The Time*: Minority Fellowship Program – Youth expands on the existing Minority Fellowship program to support master's level-trained behavioral health providers in the fields of psychology, social work, professional counseling, marriage and family therapy, and nursing. In addition, SAMHSA supports the *Now Is The Time:* Minority Fellowship Program – Addiction Counselors, which supports students pursuing master's level degrees in addiction/substance abuse counseling as well as the Minority Fellowship Program whose purpose is to reduce health disparities and improve health care outcomes of racially and ethnically diverse populations by increasing the number of culturally competent behavioral health professionals available to underserved populations in the public and private nonprofit sectors.

Community Coalitions

Community coalitions are increasingly used as a vehicle to foster improvements in community health. A coalition is traditionally defined as "a group of individuals representing diverse organizations, factions or constituencies who agree to work together to achieve a common goal." Community coalitions differ from other types of coalitions in that they include professional and grassroots members committed to work together to influence long-term health and welfare practices in their community. Additionally, given their ability to leverage existing resources in the community and convene diverse organizations, community coalitions connote a type of collaboration that is considered to be sustainable over time.

The federal government has increasingly used community coalitions as a programmatic approach to address emerging community health issues. Community coalitions are composed of diverse organizations that form an alliance in order to pursue a common goal. The activities of community coalitions include outreach, education, prevention, service delivery, capacity building, empowerment, community action, and systems change. The presumption is that successful community coalitions are able to identify new resources to continue their activities and sustain their impact in the community over time. Given the large investment in community coalitions, researchers are beginning to systematically explore the factors that affect the sustainability of community coalitions once their initial funding ends.

The Office of National Drug Control Policy (ONDCP) and the SAMHSA Center for Substance Abuse Prevention (CSAP) support Drug-Free Communities (DFC) Support Program grants, which were created by the Drug-Free Communities Act of 1997 (Public Law 105-20). The DFC Support Program has two goals:

- Establish and strengthen collaboration among communities, public and private non-profit agencies, as well as federal, state, local, and tribal governments to support the efforts of community coalitions working to prevent and reduce substance use among youth
- Reduce substance use among youth and, over time, reduce substance abuse among adults by addressing the factors in a community that increase the risk of substance abuse and promoting the factors that minimize the risk of substance abuse

Long-term analyses suggest a consistent record of positive accomplishment for substance use outcomes in communities with a DFC grantee from 2002 to 2012. The prevalence of past 30-day use of alcohol, tobacco, and marijuana declined significantly among both middle school and high school students. The prevalence of past 30-day alcohol use dropped the most in absolute percentage point terms, declining by 2.8 percentage points among middle school students and declining by 3.8 percentage points among high school students. The prevalence of past 30-day tobacco use declined by 1.9 percentage points among middle school students, and by 3.2 percentage points among high school students from DFC grantees' first report to their most recent report. Though significant, the declines in the prevalence of past 30-day marijuana use were less pronounced, declining by 1.3 percentage points among middle school students and by 0.7 percentage points among high school students. Learn more from the Drug-Free Communities Support Program: 2012 National Evaluation Report (PDF | 648 KB).

SAMHSA has demonstrated that behavioral health is essential to health, prevention works, treatment is effective, and people recover from mental and/or substance use disorders.

F. ANNOTATED "LISTS" OF EMPIRICALLY SUPPORTED/ EVIDENCE BASED INTERVENTIONS FOR SCHOOL-AGED CHILDREN AND ADOLESCENTS

The following table provides a list of lists, with indications of what each list covers, how it was developed, what it contains, and how to access it.

I. Universal Focus on Promoting Healthy Development

A. ***Safe and Sound. An Educational Leader's Guide to Evidence-Based Social & Emotional Learning Programs*** (2002). The Collaborative for Academic, Social, and Emotional Learning (CASEL).

1. *How it was developed:* Contacts with researchers and literature search yielded 250 programs for screening; 81 programs were identified that met the criteria of being a multiyear program with at least 8 lessons in one program year, designed for regular ed classrooms, and nationally available.

2. *What the list contains:* Descriptions (purpose, features, results) of the 81 programs.

3. *How to access:* CASEL (http://www.casel.org)

B. ***Positive Youth Development in the United States: Research Findings on Evaluations of Positive Youth Development Programs*** *(2002).* Social Develop. Res. Group, Univ. of Wash.

1. *How it was developed:* 77 programs that sought to achieve positive youth development objectives were reviewed. Criteria used: research designs employed control or comparison group and had measured youth behavior outcomes.

2. *What the list contains:* 25 programs designated as effective based on available evidence.

3. *How to access:* Online at: (http://aspe.hhs.gov/hsp/PositiveYouthDev99/index.htm)

II. Prevention of Problems; Promotion of Protective Factors

A. ***Blueprints for Violence Prevention*** (2004). Center for the Study and Prevention of Violence, Institute of Behavioral Science, University Colorado, Boulder.

1. *How it was developed:* Review of over 600 delinquency, drug, and violence prevention programs based on a criteria of a strong research design, evidence of significant deterrence effects, multiple site replication, sustained effects.

2. *What the list contains: 11* model programs and 21 promising programs.

3. *How to access:* Center for the Study and Prevention of Violence (http://www.colorado.edu/cspv/publications/otherblueprints.html)

B. ***Exemplary Substance Abuse and Mental Health Programs*** (SAMHSA).

1. *How it was developed:* These science-based programs underwent an expert consensus review of published and unpublished materials on 18 criteria (e.g., theory, fidelity, evaluation, sampling, attrition, outcome measures, missing data, outcome data, analysis, threats to validity, integrity, utility, replications, dissemination, cultural/age appropriateness.) The reviews have grouped programs as "models," "effective," and "promising" programs .

2. *What the list contains*: Prevention programs that may be adapted and replicated by communities.

3. *How to access:* SAMHSA's National Registry of Evidence-based Programs and Practices (http://nrepp.samhsa.gov)

C. ***Preventing Drug Use Among Children & Adolescents. Research Based Guide*** (1997). National Institute on Drug Abuse (NIDA).

1. *How it was developed:* NIDA and the scientists who conducted the research developed research protocols. Each was tested in a family/school/community setting for a reasonable period with positive results.

2. *What the list contains:* 10 programs that are universal, selective, or indicated.

3. *How to access:* NIDA (http://www.nida.nih.gov/prevention/prevopen.html)

D. ***Safe, Disciplined, and Drug-Free Schools Expert Panel Exemplary Programs*** (2001). U.S. Dept. of Educ. Safe & Drug Free Schools

1. *How it was developed:* Review of *132* programs submitted to the panel. Each program reviewed in terms of quality, usefulness to others, and educational significance.

2. *What the list contains:* 9 exemplary and *33* promising programs focusing on violence, alcohol, tobacco, and drug prevention.

3. *How to access*: U.S. Dept. of Education – (http://www.ed.gov/offices/OERI/ORAD/KAD/expert_panel/drug-free.html)

III. Early Intervention: Targeted Focus on Specific Problems or at Risk Groups

A. ***The Prevention of Mental Disorders in School-Aged Children: Current State of the Field*** (2001). Prevention Research Center for the Promotion of Human Development, Pennsylvania State University.

1. *How it was developed:* Review of scores of primary prevention programs to identify those with quasi-experimental or random-ized trials and been found to reduce symptoms of psychopathology or factors commonly associated with an increased risk for later mental disorders.

2. *What the list contains:* 34 universal and targeted interventions that have demonstrated positive outcomes under rigorous evaluation and the common characteristics of these programs.

3. *How to access:* Online journal *Prevention & Treatment* (http://content.apa.org/journals/pre/4/1/1)

IV. Treatment for Problems

A. American Psychological Association's Society for Clinical Child and Adolescent Psychology, Committee on Evidence-Based Practice List

1. *How it was developed:* Committee reviews outcome studies to determine how well a study conforms to the guidelines of the Task Force on Promotion and Dissemination of Psychological Procedures (1996).

2. *What it contains:* Reviews of the following:

>*Depression (dysthymia):* Analyses indicate only one practice meets criteria for "well-established treatment"(best supported) and two practices meet criteria for "probably efficacious"(promising)

>*Conduct/oppositional problems:* Two meet criteria for well established treatments: videotape modeling parent training programs (Webster-Stratton) and parent training program based on Living with Children (Patterson and Guillion). Ten practices identified as probably efficacious.

>*ADHD:* Behavioral parent training, behavioral interventions in the classroom, and stimulant medication meet criteria for well established treatments. Two others meet criteria for probably efficacious.

>*Anxiety disorders*: For phobias participant modeling and reinforced practice are well established; filmed modeling, live modeling, and cognitive behavioral interventions that use self instruction training are probably efficacious. For anxiety disorders, cognitive-behavioral procedures with and without family anxiety management, modeling, in vivo exposure, relaxation training, and reinforced practice are listed as probably efficacious.

Caution: Reviewers stress the importance of (a) devising developmentally and culturally sensitive interventions targeted to the unique needs of each child; (b) a need for research informed by clinical practice.

3. *How it can be accessed*: http://www.effectivechildtherapy.com

V. Review/Consensus Statements/ Compendia of Evidence Based Treatments

A. ***School-Based Prevention Programs for Children & Adolescents*** (1995). J.A. Durlak. Sage: Thousand Oaks, CA. Reports results from 130 controlled outcome studies that support "a secondary prevention model emphasizing timely intervention for subclinical problems detected early.... In general, best results are obtained for cognitive-behavioral and behavioral treatments & interventions targeting externalizing problems."

B. ***Mental Health and Mass Violence:*** Evidence-based early psychological intervention for victims/ survivors of mass violence. A workshop to reach consensus on best practices (U.S. Departments of HHS, Defense, Veterans Affairs, Justice, and American Red Cross). Available at: (http://www.nimh.nih.gov/health/publications/massviolence.pdf)

C. ***Society of Pediatric Psychology***, Division 54, American Psychological Association, *Journal of Pediatric Psychology.* Articles on empirically supported treatments in pediatric psychology related to obesity, feeding problems, headaches, pain, bedtime refusal, enuresis, encopresis, and symptoms of asthma, diabetes, and cancer.

D. ***Preventing Crime: What works, what doesn't, what's promising. A Report to the United States Congress*** (1997) by L.W. Sherman, Denise Gottfredson, et al. Washington, DC: U.S. Dept. of Justice. Reviews programs funded by the OJP for crime, delinquency and substance use. (http://www.ncjrs.org/pdffiles/171676.pdf). Also see Denise Gottfredson's book: *Schools and delinquency* (2001). New York: Cambridge Press.

E. School Violence Prevention Initiative Matrix of Evidence-Based Prevention Interventions (1999). Center for Mental Health Services SAMHSA. Provides a synthesis of several lists cited above to highlight examples of programs which meet some criteria for a designation of evidence based for violence prevention and substance abuse prevention. (i.e., Synthesizes lists from the Center for the Study and Prevention of Violence, Center for Substance Abuse Prevention, Communities that Care, Dept. of Education, Department of Justice, Health Resources and Services Administration, National Assoc. of School Psychologists)

F. The ***What Works Clearinghouse*** (WWC). Collects, screens, and identifies studies of effectiveness of educational interventions (programs, products, practices, and policies). (http://ies.ed.gov/ncee/wwc/)

BUT THE NEEDS OF SCHOOLS ARE MORE COMPLEX!

Currently, there are about 91,000 public schools in about 15,000 districts. Over the years, most (but obviously not all) schools have instituted programs designed with a range of behavior, emotional, and learning, problems in mind. School-based and school-linked programs have been developed for purposes of early intervention, crisis intervention and prevention, treatment, and promotion of positive social and emotional development. Some programs are provided throughout a district, others are carried out at or linked to targeted schools. The interventions may be offered to all students in a school, to those in specified grades, or to those identified as "at risk." The activities may be implemented in regular or special education classrooms or as "pull out" programs and may be designed for an entire class, groups, or individuals. There also may be a focus on primary prevention and enhancement of healthy development through use of health education, health services, guidance, and so forth – though relatively few resources usually are allocated for such activity.

There is a large body of research supporting the promise of specific facets of this activity. However, no one has yet designed a study to evaluate the impact of the type of comprehensive, multifaceted approach needed to deal with the complex range of problems confronting schools.

It is either naive or irresponsible to ignore the connection between children's performance in school and their experiences with malnutrition, homelessness, lack of medical care, inadequate housing, racial and cultural discrimination, and other burdens . . . .

Harold Howe II

. . . consider the American penchant for ignoring the structural causes of problems. We prefer the simplicity and satisfaction of holding individuals responsible for whatever happens: crime, poverty, school failure, what have you. Thus, even when one high school crisis is followed by another, we concentrate on the particular people involved – their values, their character, their personal failings – rather than asking whether something about the system in which these students find themselves might also need to be addressed.

Alfie Kohn, 1999

What the best and wisest parent wants for (her)/his own child that must the community want for all of its children. Any other idea . . . is narrow and unlovely.

John Dewey

Assessing Adolescent Substance Abuse Programs With Updated Quality Indicators: The Development of a Consumer Guide for Adolescent Treatment

John S. Cacciola, Kathleen Meyers, Suzanne Ward, Beth Rosenwasser, Amelia Arria & A. Thomas McLellan (2015). *Journal of Child & Adolescent Substance Abuse, 24,* 142-154.

Abstract: When adolescent substance abuse requires treatment, few parents know which treatment features are important and which treatment programs are effective. There are few resources to help them select appropriate care. We describe early work on an evaluation method and comparative treatment guide for parents based upon the premise that the quality of a program and its potential effectiveness is a function of the number and frequency of evidence-based treatment practices (EBPs) delivered. Thus, we describe the development of and measurement approach for a set of EBPs toward the goal of developing a Consumer Guide to Adolescent Substance Abuse Treatment.

Student Drug Testing and Positive School Climates: Testing the Relation Between Two School Characteristics and Drug Use Behavior in a Longitudinal Study

Sharon Sznitman & Daniel Romer (2014). *Journal on Studies of Alcohol and Drugs, 75,* 65–73,

ABSTRACT. Objective: Fostering positive school climates and student drug testing have been separately proposed as strategies to reduce student drug use in high schools. To assess the promise of these strategies, the present research examined whether positive school climates and/or student drug testing successfully predicted changes in youth substance use over a 1-year follow-up. Method: Two waves of panel data from a sample of 361 high school students, assessed 1 year apart, were analyzed. Changes in reported initiation and escalation in frequency of alcohol, cigarette, and marijuana use as a function of perceived student drug testing and positive school climates were analyzed, while we held constant prior substance use. Results: Perceived student drug testing was not associated with changes in substance use, whereas perceived positive school climates were associated with a reduction in cigarette and marijuana initiation and a reduction in escalation of frequency of cigarette use at 1-year follow-up. However, perceived positive school climates were not associated with a reduction in alcohol use. Conclusions: Student drug testing appears to be less associated with substance use than positive school climates. Nevertheless, even favorable school climates may not be able to infl uence the use of alcohol, which appears to be quite normative in this age group.

G. Substance Abuse Prevention: Toward Comprehensive, Multifaceted Approaches

Scientific advances have contributed greatly to our understanding of drug use and addiction, but there will never be a 'magic bullet' capable of making these problems disappear. Drug use and addiction are complex social and public health issues, and they require multifaceted approaches.

Alan Lesher, Director
National Institute on Drug Abuse's
Report to Congress (1999)

"Not another program!" That's the principal's lament in this era of high academic standards, high stakes accountability, eliminating social promotion, making schools safe and drug free, and on and on. Principals and school staff find themselves bombarded almost daily with more changes and more programs. However, the reality is that they can't adopt more and more – especially using the piecemeal approach that dominates school policy and practice.

Like many problems, student substance abuse is associated with poor school performance, interpersonal violence, and a variety of other negative activities. It also is associated with areas of life development in which schools play a major socialization role. For these and other reasons, substance abuse is a problem schools are expected to and should address. But not with a "let's add another program" mentality.

A Burgeoning Marketplace

Interventions for "safe and drug free schools" aim to (a) reduce risks, stressors, and other factors that interfere with positive functioning and (b) promote healthy development and enhance protective factors. The focus may be on

- primary prevention using "universal" or general population approaches(e.g., taking a school-wide or classroom-based approach)
- "selective" programs targeting specific groups seen as at risk
- "indicated" interventions to interrupt use (e.g., by ending drug experimentation, stopping a progression to drug abuse, minimizing the impact of abuse, and reducing future co-occurring problems or relapse for those who have stopped using).

The growing concern over making schools safe and drug free has made them an attractive marketplace for prevention programs. Many hundreds of packaged "curricula" and noncurricular approaches exist for use in: (1) education campaigns to enhance knowledge about substances and present a negative view about their impact, (2) skill training to enhance positive social coping, with a major emphasis on resisting peer pressure, and (3) multifaceted school programs (some-times including the community). In an effort to bring coherence to the growing number of programs, lists of "research-based" or "evidence-based" approaches have been generated by public agencies and private groups. Different lists apply different criteria for what constitutes satisfactory empirical evidence. Unfortunately, the criteria often do not adhere to stringent research standards. Nevertheless, all this activity is resulting in more and more programs being identified as *exemplary or promising models*.*

Limited Data, Limited Approaches

Few prevention program evaluations provide data on direct, long-term reduction of substance abuse. Most studies report short-term impact on specific knowledge, skills, and/or environmental supports, the absence of which might constitute risk factors.

Because most programs are carried out as projects or demonstrations, findings primarily constitute evidence of efficacy, not effectiveness. Moreover, those programs with sound evaluation data have focused mostly on elementary age children and young teens. The few for older teens have targeted specific subgroups and problems, such as high school athletes use of anabolic steroids.

Findings indicate information-oriented strategies alone have little impact. More promising is skill training focused on (a) enhancing a wide range of personal-social skills of relevance to curtailing substance use, (b) ensuring skills are learned, and (c) providing "booster inoculations." However, researchers stress that an emphasis on skills, per se, also is insufficient. (Clearly, lack of skills does not inevitably lead to drug abuse, and some very socially adept youngsters are drug abusers.)

Drops in incidence and prevalence of substance use also are used as evidence of prevention efficacy. And attempts are made to relate current use with past participation in prevention programs. The difficulties in making sound interpretations of such data are well-documented.

The intent here is not to denigrate the research on substance abuse prevention. Rather, the point is that the data are an insufficient basis for deciding how a school should proceed. Furthermore, if school decision makers only look at programs that are officially designated as promising or exemplary, they will continue to think mainly in terms of "add-on" programs. This perpetuates the tendency to address substance abuse, violence, dropping out, and many other problems in a narrow, problem-specific, and ad hoc fashion. The inevitable impact of this trend are fragmented and marginalized approaches and a continuation of an unhappy status quo with respect to results.

> Clearly, new directions are required if schools are to resolve the dilemma of *"We understand another program would help – but, we can't take on another thing."*

New Directions: Connecting Schools, Families, and Communities

With respect to substance abuse prevention, Schaps and Battistich (1991) have noted:

> "...prevention programs should attempt to create and maintain a positive social climate that facilitates socialization, rather than attempt to compensate for a prevailing negative social climate. This argues further that prevention programs should be a natural and important part of the school curriculum and, hence, be reflected in the overall organization, practices, and climate of the school. Under this conceptualization, the term 'prevention program' would be inappropriate. The program would disappear as a separate entity; it would be seen by both faculty and students as an integral, inseparable part of the school."

Awareness of the limitations of prevailing approaches and an appreciation of the importance of context are giving rise to new directions. One emphasis is on multifaceted programs. Such approaches usually include strategies to develop cognitive and behavioral skills, change school and community norms and practices, and enhance social supports (e.g., families, schools, neighborhoods, the media).

Many problems are caused by the same factors and may be corrected through common pathways. At the same time, causal factors often are complex and require comprehensive, multifaceted solutions. The evidence indicates this is the case for substance abuse. Thus, we suggest that substance abuse prevention must be approached in a comprehensive, multifaceted manner – as part of a continuum of integrated interventions designed to address barriers to learning and promote healthy development. The nature and scope of such an approach precludes a school adopting programs in an ad hoc manner. Indeed, it precludes a school addressing such problems in isolation of students, families, and the surrounding community. Any truly comprehensive approach is only feasible if the resources of schools, families, and communities are woven together. (A corollary of this is that the committed involvement of school, family, and community can be essential in maximizing intervention implementation and effectiveness.)

> *"...multiple and interrelated problems ... require multiple and interrelated solutions."*
>
> Schorr (1997)

A Full Continuum of Interventions

Awareness of the full range of causal factors supports the view that substance abuse prevention must be comprehensive and multifaceted. The interventions are conceived along a continuum. The continuum ranges from universal primary prevention (including a focus on wellness or competence enhancement) through approaches for treating problems early-after-onset (selective and indicated programs), and extending on to narrowly focused treatments for severe/ chronic problems. Besides spanning primary, secondary, and tertiary prevention, the continuum incorporates a holistic, developmental focus. It envelops individuals, families, and the contexts in which they live, work, and play. It also provides a framework for using the least restrictive and nonintrusive forms of intervention necessary for appropriately handling problems and accommodating diversity.

Moreover, given that many problems are not discrete, the continuum can be designed to address root causes, thereby minimizing tendencies to develop separate programs for each observed problem. In turn, this enables increased coord-ination and integration of resources which can improve impact and cost-effectiveness. Over time, the continuum can be evolved into integrated *systems* by enhancing the way interventions are connected. Such connections may involve horizontal and vertical restructuring of programs and services (a) within jurisdictions, school districts, and community agencies and (b) between jurisdictions, school and community agencies, public and private sectors, among clusters of schools, and among community agencies.

The continuum of interventions described can be fleshed out to provide a template for assessing the nature and scope of programs in local geographic or catchment areas. Unfortunately, when such a template is applied to communities that must rely on underwriting from public funds and private philanthropic groups, many essential programs and services are not found.

For schools, this is certainly the case. In particular, prevention efforts, if present, usually are funded as discrete projects, often with "soft" money. Moreover, where prevention efforts are in place, they are seldom integrated with related programs and services. Thus, the type of approach necessary to deal with a wide range of problems is missing. A major breakthrough in the battle against substance abuse probably can be achieved only when such a comprehensive, multifaceted, and integrated approach is in place.

One of the most effective ways to reduce children's risk of developing problem behaviors is to strengthen their bonds with family members, teachers, and other socially responsible adults.

Integrating with School Reform

It is one thing to stress the desirability of framing primary prevention as one end of a continuum of intervention; it is quite another to argue that schools should pursue the type of comprehensive approach outlined above. In the long-run, the success of such proposals probably depends on anchoring them in the context of the mission of schools. That is, the recommendations must be rooted in the reality that schools are first and foremost accountable for educating the young. More specifically, the proposals must reflect an appreciation that schools are concerned about addressing a problem primarily when it is a barrier to student *learning*. Even then, schools are so enmeshed in instructional and management reforms that all other agendas are marginalized. Therefore, efforts to enhance school participation in evolving comprehensive approaches, including substance abuse prevention initiatives, must work to expand the school reform agenda.

To these ends, we have proposed that policy makers move from the dominant two component model of school reform to a three component framework. Such a model calls for elevating the policy priority for addressing factors interfering with learning. That is, a component is conceived for enabling learning by addressing barriers. This comprehensive "enabling" component is viewed as a fundamental and essential facet of educational reform. Such a concept provides a basis for both combating marginalization and developing a broad framework for policy and practice. It addresses fragmentation by unifying approaches to preventing/ameliorating problems and promoting wellness. From this perspective, safe and drug free school programs and all categorical programs can be integrated into one comprehensive component. When policy, practice, and research are looked at through the lens of this third component, it is evident just how much is missing in efforts to provide all students with an equal opportunity for success at school.

A Comprehensive, Multifaceted Continuum

Youth Development & Primary Prevention

**Promoting Readiness for School -- everyday*

(e.g., home and community-oriented programs to foster healthy social-emotional-cognitive development; quality day care programs; quality Head Start and other preschool programs; health and human services)

**In-service for teachers*

(e.g., school-based in-service programs so that teachers can enhance strategies for preventing and minimizing barriers to learning and promoting intrinsic motivation for learning at school. A key aspect involves enhancing daily on-the-job learning for teachers through strong mentoring and increased collegial teaming and assistance.)

**Home Involvement*

(e.g., programs addressing specific learning & support needs of adults in the home, mobilizing them as problem solvers, and helping them meet basic obligations to youngsters)

**Support for Transitions*

(e.g., school-wide approaches for welcoming, orienting, and providing social supports for new students and families; articulation programs; enhanced home involvement in problem solving; ESL classes for students and those caretakers in the home who need them)

**School-Wide Programs Designed to Enhance Caring and Supportive School Environments*

(e.g., increasing curricular & extra-curricular enrichment & recreation programs; increasing the range of opportunities for students to assume positive roles)

Early-After-Onset Intervention

**Improving and Augmenting Regular Supports as Soon as a Student is Seen to Have a Problem*

(e.g., personalizing instruction; tutoring; using aides and volunteers to enhance student support and direction; mentoring for regular teachers regarding basic strategies for enhancing student support, introducing appropriate accommodations and compensatory strategies, and remedying mild-moderate learning problems; extended-day, after-school/ Saturday/summer school programs)

**Interventions for Mild-Moderate Physical & Mental Health and Psychosocial Problems*

(e.g., school-wide approaches and school-community partnerships to address these needs among the student body)

Provision for Severe and Chronic Problems

**Enhancing Availability & Access to Specialized Assistance for Persisting Problems*

(e.g., school-based and linked student and family assistance interventions, including special education)

**Alternative Placements*

(e.g., options that really offer supportive and promising approaches for the future)

Connecting School-Community-Home

Initiatives to link community resources with each other and with schools are underway across the country. Along with such initiatives has come an increasing emphasis on establishing *collaboratives* involving school, home, and community. Such collaboratives are sprouting in a dramatic and ad hoc manner. In moving toward comprehensive, multi-faceted approaches, there is much to learn from these efforts. They have the potential for improving schools, strengthening neighborhoods, and markedly reducing young people's problems. Or, such "collaborations" can end up being another reform effort that promised a lot, but did little.

While it is relatively simple to make informal link-ages, establishing major long-term collaborations is complicated. They require vision, cohesive policy, and basic systemic reforms. The complications are readily seen in efforts to evolve a comprehensive continuum of interventions. Such a continuum clearly involves much more than linking some services, recreation, and enrichment activities to schools. It involves weaving together a critical mass of resources and strategies to enhance caring communities that support all youth and their families and enable success at school and beyond. Major processes are required to develop and evolve formal and institutionalized sharing of a wide spectrum of responsibilities and resources. And, the intent must be to sustain such "partnerships" over time.

From a local perspective, there are three overlapping challenges in developing partnerships for compre-hensive, multifaceted programs to address matters such as substance abuse prevention. One involves weaving existing school resources together. A second entails evolving programs so they are more effective. The third challenge is broadening the range of partnerships by reaching out to other resources.

Comprehensive school-home-community partnerships represent a rationale direction for efforts to generate essential interventions to prevent substance abuse, address other barriers to learning, enhance healthy development, and strengthen families and neighbor-hoods. Such a direction will enable schools to address many problems in a cohesive, multifaceted manner.

This is not to say that getting from here to there will be easy. Take the matter of blending resources as an example. This entails formally connecting school programs with assets at home and in the business and faith communities, as well as collaborating with enrichment, recreation, and service resources in the neighborhood – and more. For this to happen in optimal ways, there must be an extensive restructuring of all school-owned activity, such as pupil services, safe and drug free school efforts, and special and compensatory education programs. There also must be full integration of such activity with the instructional and management components. And, the allocation and use of community resources must be rethought. All this means policy and practice must undergo a radical transformation, and mechanisms must be developed to move toward appropriate integration of school-home-community resources.

Protective Processes

- *Opportunities for involvement*
- *Skills for successful involvement*
- *Recognition for involvement*

Concluding Comments

Abatement of widespread abuse of substances and other psychosocial problems is unlikely without comprehensive, multifaceted approaches that mesh together the resources of school, home, and community. Such a broadened focus must be based on an understanding of psychological and socio-cultural factors motivating youth behavior. This includes appreciating the degree to which, for some youngsters, substance use represents the type of experimentation and risk taking that is part of the individuation process and development toward independence. Consistent with this devel-opmental phase is skepticism about warnings and advice and psychological reactance to rules and authority. Thus, the very fact that substance use is illegal and forbidden can add to the allure. Countering all this requires ensuring there are good alternative ways for youngsters to feel competent, self-determining, and connected to others.

Clearly there is still a lot to learn about how to prevent substance abuse on a large-scale. It is also clear that more of the same probably won't do the trick. It is time for bold new directions.

Note:

*In recent years, support for the positive impact and future potential of prevention programs has been extrapolated from literature reviews, including meta-analyses. A different sense is garnered from the Center for the Study and Prevention of Violence's *Blueprint* project, which has used the most stringent criteria to date (albeit still rather minimal by research standards). Initially, the criteria generated a list of only 10 model programs. By reducing the criteria to encompass programs using a single site, those that were unreplicated, or those having a small effect on outcome measures, 13 additional programs were designated as promising. However, only a few of the 23 provide evidence of direct impact on preventing substance abuse.

As an aid to the field, SAMHSA's Knowledge Exchange Network (KEN) has combined several prominent program compilations under the heading "Examples of Exemplary/ Promising Programs." This list offers about 125 different programs relevant to violence and substance abuse prevention. Most of the programs address some or all of the 19 common risk factors identified through research as associated with problems such as youth delinquency, violence, substance abuse, teen pregnancy, and school dropout. In keeping with the growing interest in protective factors, some of the programs reframe risk factors into an approach that stresses strengthening protective factors and building assets.

A Few Related References

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Also, see our Center's resource aid packet on *Substance Abuse* and other materials in the Center Clearinghouse.

Most Teens expect to live forever
and experience each moment as
"So far, so good!"

"Legal Highs" - An Emerging Epidemic of Novel Psychoactive Substances

Abstract

During the last decade, there has been an increase in the availability and use of novel psychoactive substances (NPS), also known as "legal highs," across the world. They include a wide range of products, from natural plant-originated substances to synthetic compounds, that can be purchased both online and from high street retailers. "Legal highs" mimic psychoactive effects of illicit drugs of abuse. However, they are claimed to consist of compounds that are legal to sell, possess, and use, often labeled as "not for human consumption" to circumvent drug abuse legislation. Based on the spectrum of their actions on cognitive processes, mood, and behavior, "legal highs" can be classified into four basis categories: amphetamine- and ecstasy-like stimulants, synthetic cannabinoids (SCs), hallucinogenic/dissociative, and opioid-like compounds. NPS may, however, exhibit a combination of these actions due to their designed chemical structure. Although the prevalence and pattern of NPS use differ between various countries, the most popular groups are SCs and psychostimulants, described in this chapter. Currently, there is limited information available on the potential acute toxicity (harms) associated with the use of these substances. However, the number of intoxicated people presenting with emergencies is constantly increasing, providing evidence that negative health and social consequences may indeed seriously affect recreational and chronic users.

H. Drug Free Communiuties (DFC) Program

The Drug-Free Communities (DFC) program has been a central, bi-partisan component of our nation's demand reduction strategy since its passage in 1998. The consistent and steady growth of the program, from $10 million in 1998 to $93.5 million in 2015 and the number of grantees (from 92 original grantees to more than 2000 grantees) is a testament to the program's popularity. The premise of the DFC program is simple – that communities around the country must be organized and equipped to deal with their individual substance abuse problems in a comprehensive and coordinated manner.

- **The Drug Free Communities (DFC) Program At a Glance**
  - The DFC program has been a central, bipartisan component of our nation's demand reduction strategy since its passage in 1998 because it recognizes that the drug issue must be dealt with in every home town in America.
  - Housed in the Office of National Drug Control Policy, it provides the funding necessary for communities to identify and respond to local drug and alcohol use problems.
  - The DFC program recognizes that in order to be sustainable over time it must have community buy-in. In order to be eligible to apply for a DFC grant, a local coalition must:
    - be in existence for 6 months prior to applying;
    - have community wide involvement to reduce youth drug, alcohol and tobacco use, which must include:

▪ Youth ▪ Parents ▪ Businesses ▪ Media ▪ Schools ▪ Youth serving organizations	▪ Religious or fraternal organizations ▪ Law Enforcement ▪ Civic and volunteer groups ▪ Health care professionals ▪ State,local or tribal agencies ▪ Other organizations involved in reducing substance abuse

    - target the entire community with effective strategies; and
    - provide a dollar-for-dollar match for every federal dollar (up to $125,000/year).

- Despite the growth of the program, from $10 million in 1998 to $93.5 million in 2015, since its inception there has only been enough money to fund 32.1% of those who have applied for funds.
- DFC grantees have reduced drug use and abuse in communities throughout the country to levels lower than national averages because they are organized, data driven and take a comprehensive, multi-sector approach to solving and addressing drug issues.
- DFC coalitions are singularly situated to deal with emerging drug trends, such as methamphetamine, prescription drug abuse and synthetic drugs because they have the necessary infrastructure in place to effectively address drug related issues within their communities.
- The DFC program is a worthy investment of scarce federal resources:
    - It is not only effective in reducing youth drug use, but many DFC grantees are currently matching two to three times as much as the federal grant funding they receive; and
    - DFC grantees have clearly shown that they can prevent and reduce drug use in communities nationwide

- **National Evaluation of the Drug Free Communities (DFC) Support Program**

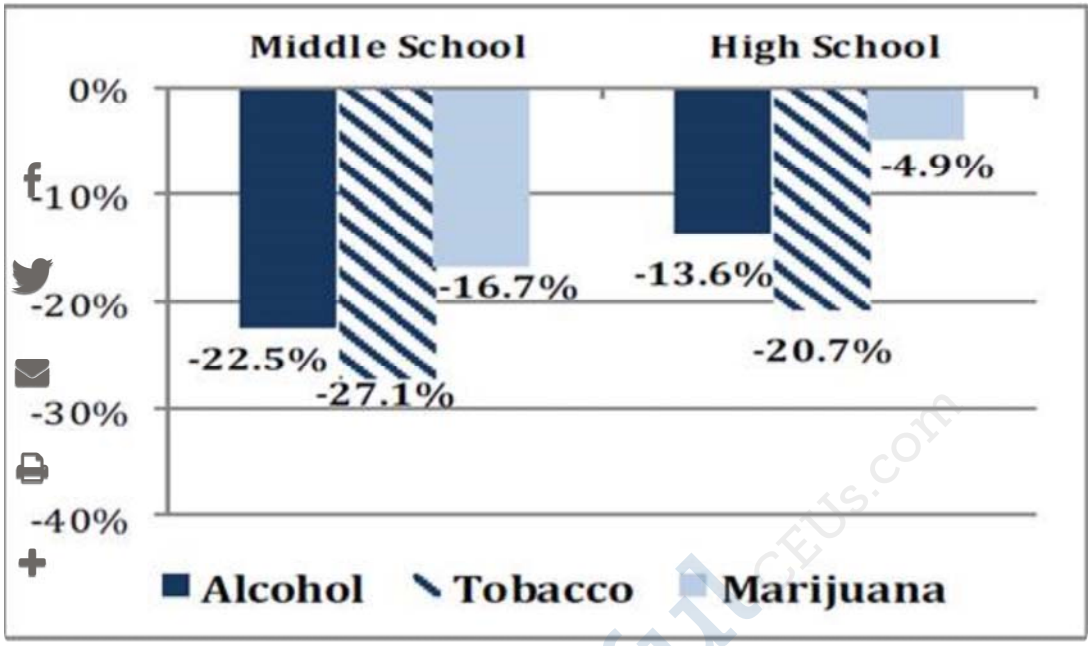
The DFC grant program takes a comprehensive, multi-sector and data driven approach to prevent and reduce youth substance use/abuse in communities throughout the United States. The White House Office of National Drug Control Policy (ONDCP) recently released the findings for its National Evaluation of the DFC Program.

The Findings To Date:

Rates of Substance Use are Dropping in DFC Communities:

Prevalence of past 30-day use declined significantly across all substances (alcohol, tobacco, marijuana) and school levels (middle and high school) between DFC coalitions' first and most recent data reports.

FIGURE 1: PERCENTAGE CHANGE IN PAST 30-DAY USE: FIRST REPORT TO MOST RECENT REPORT (ALL DFC GRANTEES EVER FUNDED)



Coalitions in Action: Florida Coalition Named

The Hernando County Community Anti-Drug Coalition has been honored for their success in addressing alcohol, tobacco,

Medicine Safety: Drug Disposal and Storage

Learn about the dangers of prescription and over-the-counter drug abuse and how you can keep your family, patients and

Make An Impact: Participate in CADCA's

Don't miss the opportunity to be included in the largest survey of substance abuse prevention coalitions in the nation.

IV. Treatment

A. Principles of Adolescent Substance Use Disorder Treatment: A Research-Based Guide

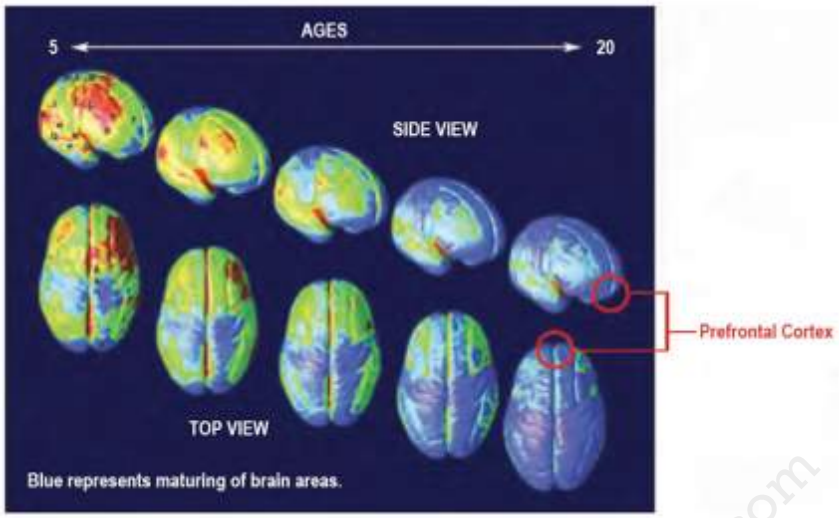
Introduction

People are most likely to begin abusing drugs*—including tobacco, alcohol, and illegal and prescription drugs—during adolescence and young adulthood. ǂ
By the time they are seniors, almost 70 percent of high school students will have tried alcohol, half will have taken an illegal drug, nearly 40 percent will have smoked a cigarette, and more than 20 percent will have used a prescription drug for a nonmedical purpose.[1] There are many reasons adolescents use these substances, including the desire for new experiences, an attempt to deal with problems or perform better in school, and simple peer pressure. Adolescents are "biologically wired" to seek new experiences and take risks, as well as to carve out their own identity. Trying drugs may fulfill all of these normal developmental drives, but in an unhealthy way that can have very serious long-term consequences.

Many factors influence whether an adolescent tries drugs, including the availability of drugs within the neighborhood, community, and school and whether the adolescent's friends are using them. The family environment is also important: Violence, physical or emotional abuse, mental illness, or drug use in the household increase the likelihood an adolescent will use drugs. Finally, an adolescent's inherited genetic vulnerability; personality traits like poor impulse control or a high need for excitement; mental health conditions such as depression, anxiety, or ADHD; and beliefs such as that drugs are "cool" or harmless make it more likely that an adolescent will use drugs.[2]

The adolescent brain is often likened to a car with a fully functioning gas pedal (the reward system) but weak brakes (the prefrontal cortex).

Images of Brain Development in Healthy Children and Teens (Ages 5-20)



The brain continues to develop through early adulthood. Mature brain regions at each developmental stage are indicated in blue. The prefrontal cortex (red circles), which governs judgment and self-control, is the last part of the brain to mature.
Source: PNAS 101:8174–8179, 2004.

The teenage years are a critical window of vulnerability to substance use disorders, because the brain is still developing and malleable (a property known as neuroplasticity), and some brain areas are less mature than others. The parts of the brain that process feelings of reward and pain—crucial drivers of drug use—are the first to mature during childhood. What remains incompletely developed during the teen years are the prefrontal cortex and its connections to other brain regions. The prefrontal cortex is responsible for assessing situations, making sound decisions, and controlling our emotions and impulses; typically this circuitry is not mature until a person is in his or her mid-20s (see figure).

The adolescent brain is often likened to a car with a fully functioning gas pedal (the reward system) but weak brakes (the prefrontal cortex). Teenagers are highly motivated to pursue pleasurable rewards and avoid pain, but their judgment and decision-making skills are still limited. This affects their ability to weigh risks accurately and make sound decisions, including decisions about using drugs. For these reasons, adolescents are a major target for prevention messages promoting healthy, drug-free behavior and giving young people encouragement and skills to avoid the temptations of experimenting with drugs.[3]

Most teens do not escalate from trying drugs to developing an addiction or other substance use disorder;[#] however, even experimenting with drugs is a problem. Drug use can be part

of a pattern of risky behavior including unsafe sex, driving while intoxicated, or other hazardous, unsupervised activities. And in cases when a teen does develop a pattern of repeated use, it can pose serious social and health risks, including:

- school failure
- problems with family and other relationships
- loss of interest in normal healthy activities
- impaired memory
- increased risk of contracting an infectious disease (like HIV or hepatitis C) via risky sexual behavior or sharing contaminated injection equipment
- mental health problems—including substance use disorders of varying severity
- the very real risk of overdose death

How drug use can progress to addiction.
Different drugs affect the brain differently, but a common factor is that they all raise the level of the chemical *dopamine* in brain circuits that control reward and pleasure.

The brain is wired to encourage life-sustaining and healthy activities through the release of dopamine. Everyday rewards during adolescence—such as hanging out with friends, listening to music, playing sports, and all the other highly motivating experiences for teenagers—cause the release of this chemical in moderate amounts. This reinforces behaviors that contribute to learning, health, well-being, and the strengthening of social bonds.

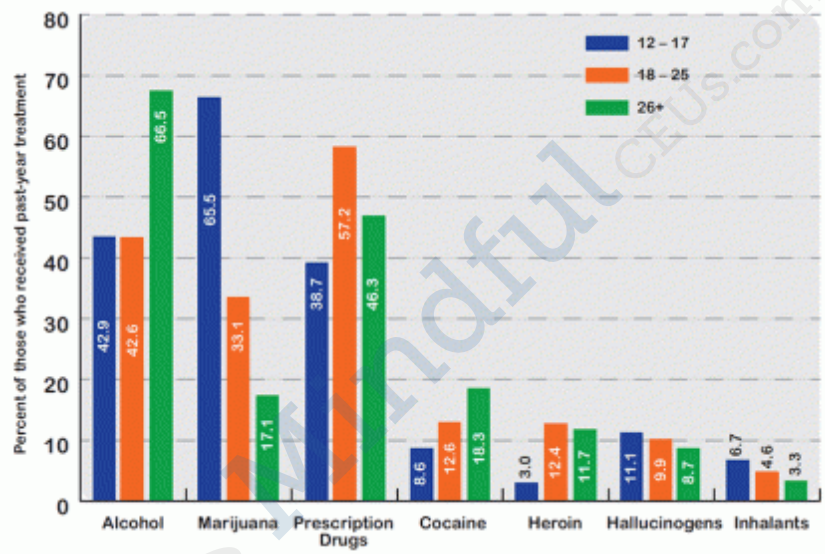
> **Despite popular belief, willpower alone is often insufficient to overcome an addiction. Drug use has compromised the very parts of the brain that make it possible to "say no."**

Drugs, unfortunately, are able to hijack this process. The "high" produced by drugs represents a flooding of the brain's reward circuits with much more dopamine than natural rewards generate. This creates an especially strong drive to repeat the experience. The immature brain, already struggling with balancing impulse and self-control, is more likely to take drugs again without adequately considering the consequences.[4] If the experience is

repeated, the brain reinforces the neural links between pleasure and drug-taking, making the association stronger and stronger. Soon, taking the drug may assume an importance in the adolescent's life out of proportion to other rewards.

The development of addiction is like a vicious cycle: Chronic drug use not only realigns a person's priorities but also may alter key brain areas necessary for judgment and self-control, further reducing the individual's ability to control or stop their drug use. This is why, despite popular belief, willpower alone is often insufficient to overcome an addiction. Drug use has compromised the very parts of the brain that make it possible to "say no."

Adolescents Differ from Adults in Substances Most Abused

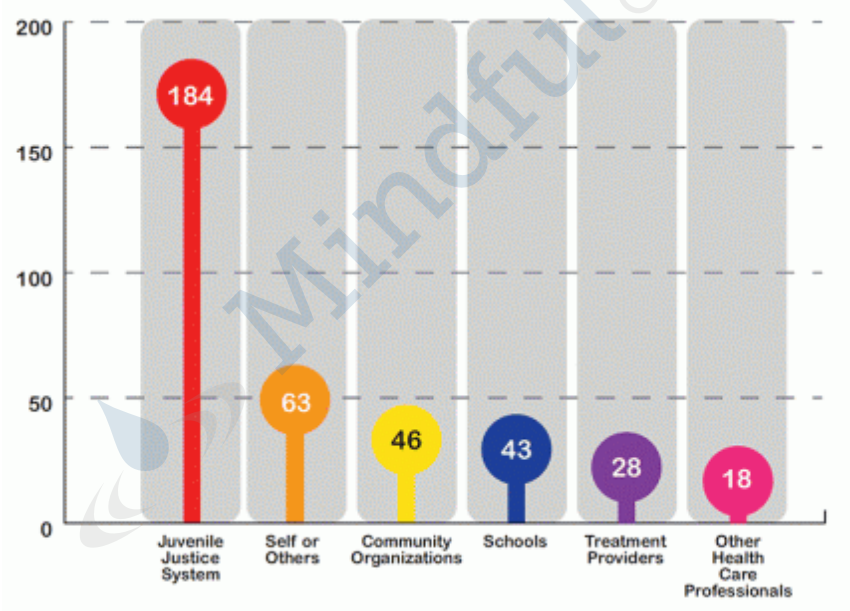


Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2013.

Not all young people are equally at risk for developing an addiction. Various factors including inherited genetic predispositions and adverse experiences in early life make trying drugs and developing a substance use disorder more likely. Exposure to stress (such as emotional or physical abuse) in childhood primes the brain to be sensitive to stress and seek relief from it throughout life; this greatly increases the likelihood of subsequent drug abuse and of starting drug use early.[5] In fact, certain traits that put a person at risk for drug use, such as being impulsive or aggressive, manifest well before the first episode of drug use and may be addressed by prevention interventions during childhood.[6] By the same token, a range of factors, such as parenting that is nurturing or a healthy school environment, may encourage healthy development and thereby lessen the risk of later drug use.

Drug use at an early age is an important predictor of development of a substance use disorder later. The majority of those who have a substance use disorder started using before age 18 and developed their disorder by age 20.[7] The likelihood of developing a substance use disorder is greatest for those who begin use in their early teens. For example, 15.2 percent of people who start drinking by age 14 eventually develop alcohol abuse or dependence (as compared to just 2.1 percent of those who wait until they are 21 or older),[8] and 25 percent of those who begin abusing prescription drugs at age 13 or younger develop a substance use disorder at some time in their lives.[9] Tobacco, alcohol, and marijuana are the first addictive substances most people try. Data collected in 2012 found that nearly 13 percent of those with a substance use disorder began using marijuana by the time they were 14.[10]

Number of Adolescents Aged 12–17 Admitted to Publicly FundedSubstance Abuse Treatment Facilities on an Average Day, by Principal Source of Referral: Treatment Episode Data Set 2008**



Source: 2008 SAMHSA Treatment Episode Data Set (TEDS)

When substance use disorders occur in adolescence, they affect key developmental and social transitions, and they can interfere with normal brain maturation. These potentially lifelong consequences make addressing adolescent drug use an urgent matter. Chronic marijuana use in adolescence, for example, has been shown to lead to a loss of IQ that is not recovered even if the individual quits using in adulthood.[11] Impaired memory or thinking ability and other problems caused by drug use can derail a young person's social and educational development and hold him or her back in life.

The serious health risks of drugs compound the need to get an adolescent who is abusing drugs into treatment as quickly as possible. Also, adolescents who are abusing drugs are likely to have other issues such as mental health problems accompanying and possibly contributing to their substance use, and these also need to be addressed.[12] Unfortunately, less than one third of adolescents admitted to substance abuse treatment who have other mental health issues receive any care for their conditions.[13]

Adolescents' drug use and treatment needs differ from those of adults.
Adolescents in treatment report abusing different substances than adult patients do. For example, many more people aged 12–17 received treatment for marijuana use than for alcohol use in 2011 (65.5 percent versus 42.9 percent), whereas it was the reverse for adults (see figure). When adolescents do drink alcohol, they are more likely than adults to binge drink (defined as five or more drinks in a row on a single occasion).[14] Adolescents are less likely than adults to report withdrawal symptoms when not using a drug, being unable to stop using a drug, or continued use of a drug in spite of physical or mental health problems; but they are more likely than adults to report hiding their substance use, getting complaints from others about their substance use, and continuing to use in spite of fights or legal trouble.

Adolescents also may be less likely than adults to feel they need help or to seek treatment on their own. Given their shorter histories of using drugs (as well as parental protection), adolescents may have experienced relatively few adverse consequences from their drug use; their incentive to change or engage in treatment may correspond to the number of such consequences they have experienced.[15] Also, adolescents may have more difficulty than adults seeing their own behavior patterns (including causes and consequences of their actions) with enough detachment to tell they need help.

Only 10 percent of 12- to 17-year-olds needing substance abuse treatment actually receive any services.[16] When they do get treatment, it is often for different reasons than adults. By far, the largest proportion of adolescents who receive treatment are referred by the juvenile justice system (see figure). Given that adolescents with substance use problems often feel they do not need help, engaging young patients in treatment often requires special skills and patience.

Many treatment approaches are available to address the unique needs of adolescents.
The focus of this guide is on *evidence-based* treatment approaches—those that have been scientifically tested and found to be effective in the treatment of adolescent substance abuse.

Whether delivered in residential or inpatient settings or offered on an outpatient basis, effective treatments for adolescents primarily consist of some form of behavioral therapy. Addiction medications, while effective and widely prescribed for adults, are not generally approved by the U.S. Food and Drug Administration (FDA) for adolescents. However, preliminary evidence from controlled trials suggest that some medications may assist adolescents in achieving abstinence, so providers may view their young patients' needs on a case-by-case basis in developing a personalized treatment plan.

Whatever a person's age, treatment is not "one size fits all." It requires taking into account the needs of the whole person—including his or her developmental stage and cognitive abilities and the influence of family, friends, and others in the person's life, as well as any additional mental or physical health conditions. Such issues should be addressed at the same time as the substance use treatment. When treating adolescents, clinicians must also be ready and able to manage complications related to their young patients' confidentiality and their dependence on family members who may or may not be supportive of recovery.

Supporting Ongoing Recovery—Sustaining Treatment Gains and Preventing Relapse.

Enlisting and engaging the adolescent in treatment is only part of a sometimes long and complex recovery process.[17] Indeed, treatment is often seen as part of a continuum of care. When an adolescent requires substance abuse treatment, follow-up care and recovery support (e.g., mutual-help groups like 12-step programs) may be important for helping teens stay off drugs and improving their quality of life.

When substance use disorders are identified and treated in adolescence—especially if they are mild or moderate—they frequently give way to abstinence from drugs with no further problems. Relapse is a possibility, however, as it is with other chronic diseases like diabetes or asthma. Relapse should not be seen as a sign that treatment failed but as an occasion to engage in additional or different treatment. Averting and detecting relapse involves monitoring by the adolescent, parents, and teachers, as well as follow-up by treatment providers. Although recovery support programs are not a substitute for formal evidence-based treatment, they may help some adolescents maintain a positive and productive drug-free lifestyle that promotes meaningful and beneficial relationships and connections to family, peers, and the community both during treatment and after treatment ends. Whatever services or programs are used, an adolescent's path to recovery will be strengthened by support from family members, non-drug-using peers, the school, and others in his or her life.

* In this guide, the terms drugs and substances are used interchangeably to refer to tobacco, alcohol, illegal drugs, and prescription medications used for nonmedical reasons.

‡ Specifying the period of adolescence is complicated because it may be defined by different variables, and policymakers and researchers may disagree on the exact age boundaries. For purposes of this guide, adolescents are considered to be people between the ages of 12 and 17.

For purposes of this guide, the term addiction refers to compulsive drug seeking and use that persists even in the face of devastating consequences; it may be regarded as equivalent to a severe substance use disorder as defined by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5, 2013). The spectrum of substance use disorders in the DSM-5 includes the criteria for the DSM-4 diagnostic categories of abuse and dependence.

** "Treatment providers" in this chart refers to "alcohol/drug abuse care providers." Treatment providers can and do refer people to treatment if, for example, a person is transferring from one level of treatment to another and the original facility does not provide the level of treatment that the person needs, or if a person changes facilities for some other reason. "Other health care professionals" refers to physicians, psychiatrists, or other licensed health care professionals or general hospitals, psychiatric hospitals, mental health programs, or nursing homes.

Principles

1. **A relapse signals the need for more treatment or a need to adjust the individual's current treatment plan.**

   Many adolescents who abuse drugs have a history of physical, emotional, and/or sexual abuse or other trauma.

   Adolescent substance use needs to be identified and addressed as soon as possible. Drugs can have long-lasting effects on the developing brain and may interfere with family, positive peer relationships, and school performance. Most adults who develop a substance use disorder report having started drug use in adolescence or young adulthood, so it is important to identify and intervene in drug use early.

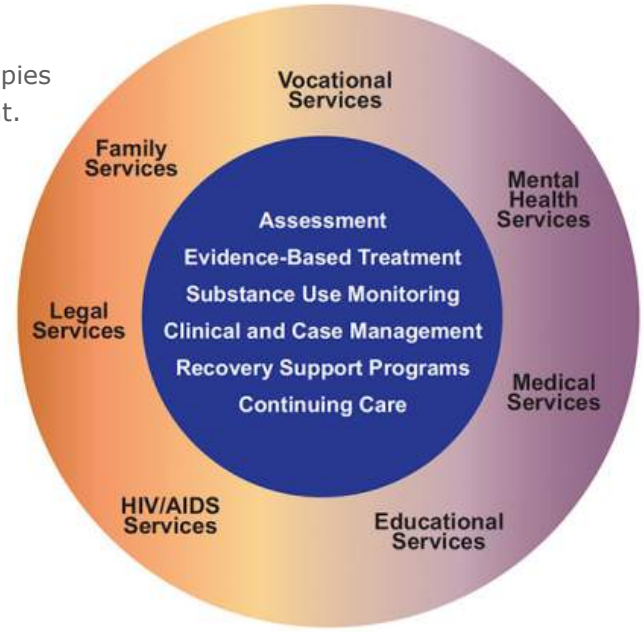
2. **Adolescents can benefit from a drug abuse intervention even if they are not addicted to a drug.** Substance use disorders range from problematic use to addiction and can be treated successfully at any stage, and at any age. For young people, any drug use (even if it seems like only "experimentation"), is cause for concern, as it exposes them to dangers from the drug and associated risky behaviors and may lead to more drug use in the future. Parents and other adults should monitor young people and not underestimate the significance of what may appear as isolated instances of drug taking.
3. **Routine annual medical visits are an opportunity to ask adolescents about drug use.** Standardized screening tools are available to help pediatricians, dentists, emergency room doctors, psychiatrists, and other clinicians determine an adolescent's level of involvement (if any) in tobacco, alcohol, and illicit and nonmedical prescription drug use. When an adolescent reports substance use, the health care provider can assess its severity and either provide an onsite brief intervention or refer the teen to a substance abuse treatment program.
4. **Legal interventions and sanctions or family pressure may play an important role in getting adolescents to enter, stay in, and complete treatment.** Adolescents with substance use disorders rarely feel they need treatment and almost never seek it on their own. Research shows that treatment can work even if it is mandated or entered into unwillingly.

5. **Substance use disorder treatment should be tailored to the unique needs of the adolescent.** Treatment planning begins with a comprehensive assessment to identify the person's strengths and weaknesses to be addressed. Appropriate treatment considers an adolescent's level of psychological development, gender, relations with family and peers, how well he or she is doing in school, the larger community, cultural and ethnic factors, and any special physical or behavioral issues.
6. **Treatment should address the needs of the whole person, rather than just focusing on his or her drug use.** The best approach to treatment includes supporting the adolescent's larger life needs, such as those related to medical, psychological, and social well-being, as well as housing, school, transportation, and legal services. Failing to address such needs simultaneously could sabotage the adolescent's treatment success.
7. **Behavioral therapies are effective in addressing adolescent drug use.** Behavioral therapies, delivered by trained clinicians, help an adolescent stay off drugs by strengthening his or her motivation to change. This can be done by providing incentives for abstinence, building skills to resist and refuse substances and deal with triggers or craving, replacing drug use with constructive and rewarding activities, improving problem-solving skills, and facilitating better interpersonal relationships.
8. **Families and the community are important aspects of treatment.** The support of family members is important for an adolescent's recovery. Several evidence-based interventions for adolescent drug abuse seek to strengthen family relationships by improving communication and improving family members' ability to support abstinence from drugs. In addition, members of the community (such as school counselors, parents, peers, and mentors) can encourage young people who need help to get into treatment—and support them along the way.
9. **Effectively treating substance use disorders in adolescents requires also identifying and treating any other mental health conditions they may have.** Adolescents who abuse drugs frequently also suffer from other conditions including depression, anxiety disorders, attention-deficit hyperactivity disorder (ADHD), oppositional defiant disorder, and conduct problems.[23] Adolescents who abuse drugs, particularly those involved in the juvenile justice system, should be screened for other psychiatric disorders. Treatment for these problems should be integrated with the treatment for a substance use disorder.
10. **Sensitive issues such as violence and child abuse or risk of suicide should be identified and addressed.** Many adolescents who abuse drugs have a history of physical, emotional, and/or sexual abuse or other trauma.[24] If abuse is suspected, referrals should be made to social and protective services, following local regulations and reporting requirements.

11. **It is important to monitor drug use during treatment.** Adolescents recovering from substance use disorders may experience relapse, or a return to drug use. Triggers associated with relapse vary and can include mental stress and social situations linked with prior drug use. It is important to identify a return to drug use early before an undetected relapse progresses to more serious consequences. A relapse signals the need for more treatment or a need to adjust the individual's current treatment plan to better meet his or her needs.
12. **Staying in treatment for an adequate period of time and continuity of care afterward are important.** The minimal length of drug treatment depends on the type and extent of the adolescent's problems, but studies show outcomes are better when a person stays in treatment for 3 months or more.[25] Because relapses often occur, more than one episode of treatment may be necessary. Many adolescents also benefit from continuing care following treatment, including drug use monitoring, follow-up visits at home, and linking the family to other needed services.
13. **Testing adolescents for sexually transmitted diseases like HIV, as well as hepatitis B and C, is an important part of drug treatment.** Adolescents who use drugs—whether injecting or non-injecting—are at an increased risk for diseases that are transmitted sexually as well as through the blood, including HIV and hepatitis B and C. All drugs of abuse alter judgment and decision making, increasing the likelihood that an adolescent will engage in unprotected sex and other high-risk behaviors including sharing contaminated drug injection equipment and unsafe tattooing and body piercing practices—potential routes of virus transmission. Substance use treatment can reduce this risk both by reducing adolescents' drug use (and thus keeping them out of situations in which they are not thinking clearly) and by providing risk-reduction counseling to help them modify or change their high-risk behaviors.

Components of Comprehensive Drug Abuse Treatment

The best treatment programs provide a combination of therapies and other services to meet the needs of the individual patient.



B. Evidence-Based Approaches to Treating Adolescent Substance Use Disorders

Research evidence supports the effectiveness of various substance abuse treatment approaches for adolescents. Examples of specific evidence-based approaches are described below, including behavioral and family-based interventions as well as medications. Each approach is designed to address specific aspects of adolescent drug use and its consequences for the individual, family, and society. In order for any intervention to be effective, the clinician providing it needs to be trained and well-supervised to ensure that he or she adheres to the instructions and guidance described in treatment manuals. Most of these treatments have been tested over short periods of 12–16 weeks, but for some adolescents, longer treatments may be warranted; such a decision is made on a case-by-case basis. The provider should use clinical judgment to select the evidence-based approach that seems best suited to the patient and his or her family.*

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* The treatments listed in this book are not intended to be a comprehensive list of efficacious evidence-based treatment approaches for adolescents.NIDA continues supporting research developing new approaches to address adolescent drug abuse.

In This Section

C. Racial and Ethnic Minority Populations

Racial and ethnic minorities currently make up about a third of the population of the nation and are expected to become a majority by 2050. These diverse communities have unique behavioral health needs and experience different rates of mental and/or substance use disorders and treatment access.

Communities of color tend to experience greater burden of mental and substance use disorders often due to poorer access to care; inappropriate care; and higher social, environmental, and economic risk factors.

African Americans

There are about 44.5 million African Americans in the United States (about 14.2% of the total population). According to data from the National Survey on Drug Use and Health (NSDUH) – 2014 (PDF | 3.4 MB):

- The rate of illegal drug use in the last month among African Americans ages 12 and up in 2014 was 12.4%, compared to the national average of 10.2%.
- The rate of binge drinking (drinking five or more drinks on a single occasion for men) among African Americans ages 12 and up was 21.6%–compared with the national average of 23%.
- African Americans ages 12 to 20 in 2014 reported past-month alcohol use at a rate of 17.3%, compared with the national average of 22.8%. Past-month underage binge drinking was 8.5% for African American youth, while the national average was 13.8%.

Rates of mental disorders are generally low among African Americans. In 2014, 3.8% of African American adults ages 18 and older had a past-year mental illness and a substance use disorder, while the national average was 3.3%. The 2014 national average for any mental illness in the past year for adults was 18.1%, compared to 16.3% for African American adults.

African Americans face higher rates of death from major diseases and higher rates of HIV infection than their Caucasian counterparts. African Americans in 2010 accounted for 44% of HIV infection cases in the country.

American Indians and Alaska Natives

There are about 5.2 million American Indians and Alaska Natives in the United States (about 1.7% of the total population). American Indians and Alaska Natives experience some of the highest rates of substance use and mental disorders compared to other U.S. racial or ethnic groups. For instance:

- The rate of illegal drug use in the last month among American Indians and Alaska Natives ages 12 and up in 2014 was 14.9%.
- American Indians and Alaska Natives ages 12 to 20 in 2014 reported past-month alcohol use at a rate of 21.9%, compared with the national average of 22.8%.
- Past-month underage binge drinking was 14.3% for American Indian and Alaska Native youth, while the national average was 13.8%,
- In 2010, Native Americans had the highest rate of drug-induced death (17.1%).

Rates of mental disorders in American Indians and Alaska Natives in 2014:

- The percentage of American Indians and Alaska Natives ages 18 and up who reported a past-year mental illness was 21.2%.
- The rate of serious mental illness among American Indians and Alaska Natives ages 18 and up in this population was 4%.
- In 2014, 8.8% of American Indians and Alaska Natives ages 18 and up had co-occurring, past-year mental and substance use disorders, while the national average was 3.3%.

In addition, according to a 2012 fact sheet (PDF | 140 KB) published by the the Centers for Disease Control & Prevention, the suicide rate among American Indian and Alaska Native adolescents and young adults between the ages of 15 and 34 (31 per 100,000) is 2.5 times higher than the national average for that age group (12.2 per 100,000). The 2014 NSDUH (PDF | 3.4 MB) rate of serious thoughts of suicide among those ages 18 and up was 4.8% for American Indians and Alaska Natives, compared with the national average of 3.9%.

The SAMHSA Office of Tribal Affairs and Policy (OTAP) serves as SAMHSA's primary point of contact for tribal governments, tribal organizations, federal departments and agencies, and other governments and agencies on behavioral health issues facing American Indians and Alaska Natives. OTAP supports SAMHSA's efforts to advance the development and implementation of data-driven policies and innovative practices that promote improved behavioral health for American Indian and Alaska Native communities and populations. OTAP also brings together SAMHSA's tribal affairs, tribal policy, tribal consultation, tribal advisory, and Tribal Law and Order Act (TLOA) responsibilities to improve agency coordination and meaningful progress.

SAMHSA has programs, initiatives, and resources in place that aim to improve the behavioral health of the nation's 566 Indian entities eligible to receive federal government services – 2014 (PDF | 187 KB). Learn more about these specific efforts, including the TLOA and Tribal Action Plan (TAP) development and how SAMHSA addresses the mental health and substance abuse needs of Native Americans at the Tribal Affairs topic.

Asian Americans, Native Hawaiians, and Other Pacific Islanders

There are about 18.2 million people who identify themselves as Asian American. There are also 1.4 million Native Hawaiians or Other Pacific Islanders in the United States. According to the 2010 U.S. Census, Asians are the fastest growing racial group in the nation.

In 2014:

- Among people ages 12 and up, the rate of illegal drug use in the last month was 4.1% among Asian Americans and 15.6% among Native Hawaiians or other Pacific Islanders.
- The rate of binge alcohol use was lowest among Asian Americans ages 12 and up (14.5%). The binge alcohol use rate was 18.3%among Native Hawaiian or other Pacific Islanders.
- The past-month binge alcohol use rate for youth ages 12 to 20 was 6.7% for Asian Americans, compared with the national average of 13.8%.
- The rate of substance dependence or abuse was 4.5% for Asian Americans and 10% for Native Hawaiians or other Pacific Islanders.

In 2014, the percentage of Asian Americans ages 18 and up reporting a past-year mental illness was 13.1%, and 3.1% of Asian Americans and 1.2% of Native Hawaiian or other Pacific Islanders ages 18 and older had serious thoughts of suicide, compared to the national average of 3.9%.

However, examination of disaggregated data unmasks disparities experienced by groups within the Asian American, Native Hawaiian, and Pacific Islander population. For instance, older Asian American women have the highest suicide rate of all U.S. women over the age of 65. Southeast Asian refugees are also at risk for post-traumatic stress disorder (PTSD) associated with trauma experienced before and after emigration to the United States.

Hispanics or Latinos

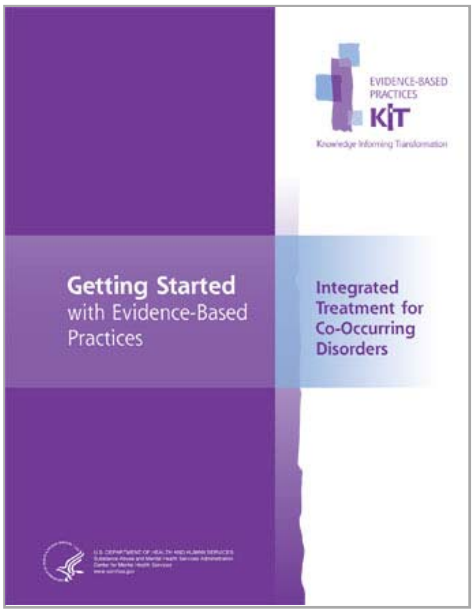
There are about 52 million Hispanics or Latinos in the United States (about 16.7% of the total population). By 2050, the number of people in this population group is expected to double to about 132.8 million, making up approximately 30% of the total U.S. population.

Regarding substance abuse among Hispanics or Latinos, data from the 2014 NSDUH (PDF | 3.4 MB) indicates:

Rates of mental disorders for Hispanics or Latinos in 2014 include:

- The rate of illicit drug use in the past month among Hispanic individuals ages 12 and up was 8.9%, while the national average was 10.2%.
- The percentage of people ages 18 and up reporting a past-year mental illness was 15.6%.
- The rate of binge alcohol use among Hispanics or Latinos within this age group was 24.7%. Alcohol use in the last year among people ages 12 to 17 was 23.9% for Hispanic youth.
- About 3.5% of adult Hispanics or Latinos had a serious mental illness.
- The percentage of people who reported a major depressive episode was 5.6%.
- About 3.3% of this population had a co-occurring mental health and substance use disorder.

D. Integrated Treatment for Co-Occurring Disorders Evidence-Based Practices (EBP) KIT



Average Rating: 4 out of 50 ratings.

Rate!

Comments

Price: **FREE** (shipping charges may apply)

Provides practice principles about integrated treatment for co-occurring disorders, an approach that helps people recover by offering mental health and substance abuse services at the same time and in one setting. Offers suggestions from successful programs.

Add To Favorites

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Kit - **Out Of Stock**

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- How to Use the EBP KIT (PDF, 364 KB)
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- Building Your Program (PDF, 688 KB)
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- Evaluating Your Program (PDF, 1 MB)
- The Evidence (PDF, 737 KB)
- Using Multimedia (PDF, 1 MB)
- Brochure (English) (PDF, 741 KB)
- Brochure (Spanish) (PDF, 720 KB)
- PowerPoint Presentation (PPT, 581 KB)
- Co-Occurring Disorders Introductory Video (Video)

Pub id: SMA08-4367
Publication Date: 1/2010
Popularity: 10
Format: Kit
Audience: Program Planners, Administrators, & Project Managers, Professional Care Providers
Series: Evidence-Based Practices KITs
Population Group: People with Mental Health Problems as Population Group

You May Also Be Interested In

Assertive Community Treatment (ACT) Evidence-Based Practices (EBP) KIT

Provides tools to implement the evidence-based practices of Assertive Community...

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Guides public officials in developing illness-management and recovery mental...

Supported Employment Evidence-Based Practices (EBP) KIT

Provides practice principles about supported employment, an approach to...

Permanent Supportive Housing Evidence-Based Practices (EBP) KIT

Outlines the essential components of supportive housing services and programs...

Family Psychoeducation Evidence-Based Practices (EBP) KIT

Guides public officials in developing family psychoeducation mental health...

MedTEAM (Medication Treatment, Evaluation, and Management) Evidence-Based Practices (EBP) KIT

Equips treatment teams at mental health agencies with a systematic plan to...

Related Resources

1 - 4 of **1060**

Addressing the needs of women and girls: Developing core competencies for mental health and substance abuse service professionals
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (HHS, SAMHSA)
http://store.samhsa.gov/shin/content/SMA11-4657/SMA11-4657.pdf

Substance Abuse and Mental Health Services Administration Disaster Technical Assistance Center (SAMHSA) - U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (HHS, SAMHSA)
http://www.samhsa.gov/programs-campaigns/dtac

Substance Abuse and Mental Health Services Administration - U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (HHS, SAMHSA)
http://www.samhsa.gov/

2012 National Strategy for Suicide Prevention: Goals and Objectives for Action - U.S. Department of Health and Human Services and National Action Alliance for Suicide Prevention
http://www.surgeongeneral.gov/library/reports/national-strategy-suicide-prevention/full_report-rev.pdf

Write a Comment

Customer Comments

03/29/2012 3:54 AM
Anonymous customer said:
This is a great link that can enhance us in how to work with substance abuse user and mental disorders.

Reply

05/31/2012 5:43 PM
Anonymous customer said:
This KIT is awesome! Thank you so much [Portions of this comment containing customer service inquiries have been redacted. Customers with questions about inventory availability, specific orders, or website

Opportunities for the Development of Neuroimmune Therapies in Addiction

Lara A. Ray, Daniel J.O. Roche, Keith Heinzerling, & Steve Shoptaw (2014). *International Review of Neurobiology*, *118*, 381-401.

Abstract

Studies have implicated neuroinflammatory processes in the pathophysiology of various psychiatric conditions, including addictive disorders. Neuroimmune signaling represents an important and relatively poorly understood biological process in drug addiction. The objective of this review is to update the field on recent developments in neuroimmune therapies for addiction. First, we review studies of neuroinflammation in relation to alcohol and methamphetamine dependence followed by a section on neuroinflammation and accompanying neurocognitive dysfunction in HIV infection and concomitant substance abuse. Second, we provide a review of pharmacotherapies with neuroimmune properties and their potential development for the treatment of addictions. Pharmacotherapies covered in this review include ibudilast, minocycline, doxycycline, topiramate, indomethacin, rolipram, anakinra (IL-1Ra), peroxisome proliferator-activated receptor agonists, naltrexone, and naloxone. Lastly, summary and future directions are provided with recommendations for how to efficiently translate preclinical findings into clinical studies that can ultimately lead to novel and more effective pharmacotherapies for addiction,

Resources

Guide to Centers, Agencies, Advocacy Groups & Internet Resources

The following is a list of sites that offer information and resources related to substance abuse. This list is not comprehensive, but is meant to highlight some premier resources and serve as a beginning for your search.

Center for Addiction and Mental Health – http://www.camh.net/

The Centre for Addiction and Mental Health (CAMH) is Canada's leading addiction and mental health teaching hospital. CAMH succeeds in transforming the lives of people affected by addiction and mental illness, by applying the latest in scientific advances, through integrated and compassionate clinical practice, health promotion, education and research.

Center for Substance Abuse Research (CESAR) – http://www.cesar.umd.edu/

CESAR is a research center within the College of Behavioral and Social Sciences, University of Maryland College Park. Its primary mission is to collect, analyze, and disseminate information on the nature and extent of substance abuse and related trends in a national scope. It also conducts policy-relevant researdh on specific initiatives to prevent, treat, and control substance abuse, and evaluates prevention and treatment programs. This website allows access to thier electronic bulletin board, CESAR BOARD, which one of the largest online sources of substance-abuse related information, as well as summarized results of its research activities.

Common Sense: Strategies for Raising Alcohol and Drug-Free Children – http://www.pta.org/commonsense/

Dedicated to helping parents raise drug-and alcohol-free children, sponsored by the National PTA and GTE Corporation. Contains substance abuse prevention facts, positive parenting tips, and family prevention activities. Information is targeted towards parents of young children, counselors and community leaders.

Drug Strategies – http://www.drugstrategies.org/

A non-profit research institute that promotes more effective approaches to the nation's drug problems and supports private and public initiatives that reduce the demand for drugs through prevention, treatment and law enforcement.

National Center on Addiction and Substance Abuse – http://www.nationalcasa.org/

A resource for research on addictions and substance abuse. It provides access to information, research and commentary on tobacco, alcohol, and drug abuse issues including prevention, treatment and cost data. In addition to providing CASA's reports and findings, the site has links to a wide range of Internet resources. A new feature allows visitors to submit their personal stories for posting on the site.

Office of National Drug Control Policy – http://www.whitehousedrugpolicy.gov/

An online source for instant access to information essential to the development and implementation of drug policy. Includes promising drug prevention, treatment, and enforcement programs; research findings; tips for parents; emerging drug problems; current data on drug use; and others.

Project Cork Institute – http://www.projectcork.org/

This resource offers its online database of substance abuse information, the preparation of curriculum materials, and involvement in curriculum development efforts. The Project Cork database contains references (with abstracts) to over 13,000 journal articles, books, etc. on the subject of alcoholism and substance abuse. The file is updated quarterly and is available for searching, at no charge.

Partnership for a Drug-Free America – http://www.drugfree.org/

Description: This internet resource provides one of the largest databases on drug information on the Web. It contains descriptions, drug paraphenalia, slang names, and pictures of different drugs of abuse. This site also contains helpful information for parents who need help.

The Substance Abuse and Mental Health Services Administration (SAMHSA) – http://www.samhsa.gov
Offers updated information on SAMHSA's programs and services to assure that quality substance abuse and mental health services are available to the people who need them, as well as to ensure that prevention and treatment knoledge is used more effectively in the general health care system. This site also provides links to SAMHSA's other divisions such as Center for Mental Health Services (CMHS), Center for Substance Abuse Treatment (CSAT), Center for Substance Abuse Prevention (CSAP), Office of Applied Studies, Office of Managed Care, etc.

Centers, Agencies & Advocacy Groups

Center for Alcohol & Addiction Studies (CAAS)
Brown University, Box G-BH
Providence, RI 02912
Website: http://www.caas.brown.edu/

Join Together
One Appleton Street 4th floor
Boston, MA 02116-5223
617-437-1500
http://www.jointogether.com/

Mothers Against Drunk Driving (MADD)
511 East John Carpenter Freeway, Suite 700
Irving, TX 75062
800-GET-MADD
http://madd.org

National Asian Pacific American Families Against Substance Abuse, Inc. (NAPAFASA)
340 East Second Street, Suite 409,
Los Angeles, CA 90012
213-625-5795
http://www.napafasa.org/

National Association for Children of Alcoholics (NACoA)
11426 Rockville Pike
Rockville, MD 20852
310-468-0985
http://www.nacoa.org/

National Coalition of Hispanic Health Services Organization
1501 Sixteenth Street, NW
Washington, DC 20036
202-387-5000
http://www.hispanichealth.org/

National Institute on Alcohol Abuse & Alcoholism (NIAAA)
5635 Fishers Lane, MSC 9304
Bethesda, MD 20892-9304
http://www.niaaa.nih.gov/

National Institute on Drug Abuse (NIDA)
5600 fishers Lane, Room 10A03
Rockville, MD 20857
301-443-4577
http://www.nida.nih.gov/

National Families in Action
2957 Clairmont Road NE, Suite 150
Atlanta, Georgia 30329
404-248-9676
Website: http://www.nationalfamilies.org/

National Family Partnership
2490 Coral Way, Suite 501
Miami, FL 33145
305-856-4886
http://www.nfp.org/

The National Organization on Fetal Alcohol Syndrome (FAS)
900 17th Street, NW, Suite 910
Washington, DC 20006
Phone: (202) 785-4585
http://www.nofas.org

An Afterword

The Legal High: Factors Affecting Young Consumers' Risk Perceptions and Abuse of Prescription Drugs

Richard Netemeyer, Scot Burton, Barbara Delaney, and Gina Hijjawi (2015)
Journal of Public Policy & Marketing, 34, 103-118.
http://journals.ama.org/doi/10.1509/jppm.14.073

Over the past decade, adolescent prescription drug abuse (PDA) has become such a serious public health problem that it is now classified as an epidemic. In addition, people who abuse prescription drugs are also at greater risk for engaging in other maladaptive behaviors. The purpose of this study is to examine some key adolescent perceptions toward PDA, the incremental role of nonlinear effects, and their interaction effects with demographic variables. Using regression-based techniques, the authors report results from survey response data from more than 1,000 13- to 18-year-olds from 40 geographically dispersed areas in the United States. The results show that the effects of adolescent anxiety, the need to be popular, being a "good teen," and the use of other restricted substances have both nonlinear effects and interaction effects with demographic characteristics on PDA risk perceptions and PDA itself. Perceptions of the risk of PDA partially mediate these effects. The authors offer implications of the pattern of results for consumer welfare and public policy.

Mindful
Continuing Education

"This course was developed from the public domain document: Substance Abuse – The Center for Mental Health in Schools at UCLA (2016)"