

# CSAM NEWS

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PARITY

## Nondiscriminatory Health Insurance Coverage for Mental Illness

*Two bills in the California legislature call for parity for treatment of mental illness but not substance abuse. Both have good support and have made it successfully through the first half of the legislative process: AB 88 passed the Assembly 59 to 14; SB 468 passed the Senate 29-8. The following article, excerpted from the newsletter of the California Psychiatric Association, is by Connie Barker, JD, Director of CPA Government Affairs.*

AB 88 by Assembly member Helen Thomas (D-Davis) requires health plans and insurers to cover schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorders, panic disorder, obsessive-compulsive disorder, autism, anorexia and bulimia on the same basis as they cover all other illnesses, with the same coverages, co-pays, deductibles, caps, and other limits as apply to any other disease or disorder.

SB 468 by Senator Richard Polanco (D-Los Angeles), sponsored the psychologists, is a broad mental health parity bill, which requires all mental illnesses to be covered the same as any other illness, except substance abuse. The psychologists told us that they are taking a year off on their efforts to practice medicine because comprehensive parity is their first priority this year. To help them pursue full parity they have commissioned Price, Waterhouse, Coopers (Price Waterhouse merged with Coopers and Lybrand last year) to prepare an actuarial study of the

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## Youth and Cannabis

PREPARED BY

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AND THE CSAM TASK FORCE ON MEDICAL MARIJUANA

*In a previous CSAM paper, the basic pharmacology and psychopharmacology, potential medical uses and side effects of cannabis were explored from the perspective of addiction medicine. The paper appeared in CSAM News, Vol. 24 No. 1. This paper addresses child and adolescent use of cannabis, including its prevalence, patterns, and risks.*

Humans experience a longer postpartum maturational period than most other species. Successful navigation of childhood and adolescence requires completion of a series of very intricate developmental tasks. The added complexities presented by today's highly urbanized/industrialized/computerized world further complicate, and probably prolong, the preparation phase for human adulthood.

Transition into adolescence occurs when a child develops "provisional autonomy," which can be seen as autonomy without independence. The later transition into adulthood occurs when independence is also developed. While the transition from adolescent to young adult is often cited as a critical time, the earlier transition from child to adolescent is fraught with at least as much risk. Failure of children to effectively enter the teen years leads to frequent psychological casualties, too often of devastating magnitude both to individuals and families.

While the demands placed on children and adolescents to mature are increasing, our basic natures are probably substantially the same as our earlier, "less civilized" ancestors, and include a tolerance — even a need for — high-risk behaviors. Risk-taking and adventure undoubtedly have had evolutionary value, but today's world no longer has the same number of oceans to explore and wild beasts to fight. More than any other age group, children and adolescents are least equipped to deal with the discomforts of modern civilization. Gone are the shared rites and physical challenges, which previously marked passage into adulthood.

Any exploration of youth and cannabis must maintain two paramount perspectives: First, *cannabis use always begins and continues within the context of social forces generated by a youth's peers, or a subculture of those peers, and the social/cultural environment as a whole, with special emphasis on the current state of legal prohibition in the United States.* Because they are related to risk-taking, these forces may often be as significant in initiating and sustaining cannabis use as the actual pharmacological effects themselves. Therefore, any exploration of youth and cannabis must maintain a systems perspective, including interpersonal, environmental, and sociopolitical influences.

Second, *the impact of cannabis on children, adolescents, and young adults can be understood only within the context of the developmental tasks*

required of youth at each life stage. It is the impact on completion of these developmental tasks that ultimately determines the role cannabis plays in most individuals' lives.

With an eye toward these two perspectives, this paper reviews the available data regarding youth and cannabis and draws conclusions.

### Literature Review

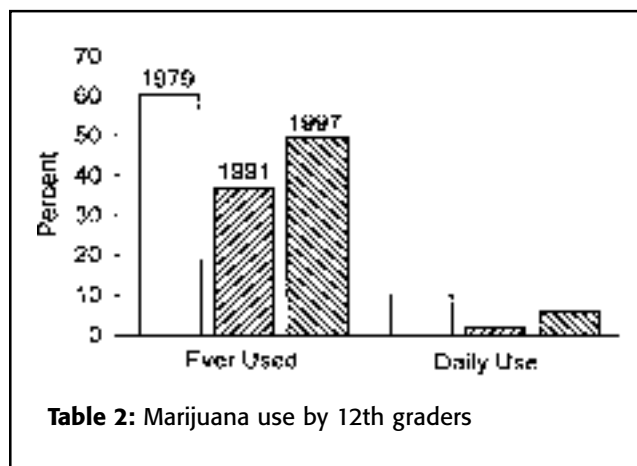
Literature databases provided by the National Medical Library (using the PubMed search engine), the National Institute of Drug Abuse, NCADI, NIAAA, and NCADD were searched through respective websites. Articles of interest tended to fall under the following topics: epidemiology, high-risk behavior in general, transition to first and subsequent use, function of cannabis use, problems, and prevention.

### Epidemiology

The National Institute on Drug Abuse (NIDA, 1999)<sup>2</sup> provides the most reliable epidemiological statistics by funding the Monitoring the Future (MTF, 1999) Study through the University of Michigan.<sup>3</sup> MTF conducts an annual assessment of drug use among 12<sup>th</sup>, 10<sup>th</sup> and 8<sup>th</sup> grade students. It is on the basis of MTF's reports that we know marijuana use among students began to increase again in the 1990s after decreasing for the previous decade. It should be noted that rates today still remain far below those seen in 1979, when 60.4% of twelfth graders had tried marijuana, 36.5% had used in the past month, and 10.3% were daily users.

In 1997, 22.6% of 8<sup>th</sup> graders had smoked marijuana at least once, and this increased to 42.3% of the 10<sup>th</sup> graders and 49.6% of the 12<sup>th</sup> graders. (In 1991, only 10.2% of 8<sup>th</sup>

In 1997, 10.2% of 8<sup>th</sup> graders had used marijuana in the month preceding the survey, and this increased to 20.5% of 10<sup>th</sup> graders and 23.7% of 12<sup>th</sup> graders (Table 1). (In 1991, only 3.2% of 8<sup>th</sup> graders had used marijuana in the last month, 8.7% of 10<sup>th</sup> graders, and 13.8% of 12<sup>th</sup> graders.) For comparison, in 1997, 8% of 8<sup>th</sup> graders, 22% of 10<sup>th</sup> graders and 34 % of 12<sup>th</sup> graders had been drunk during the previous month. And past month smoking of tobacco was 19.1% for the 8<sup>th</sup> grade, 27.9% for the 10<sup>th</sup> grade, and 33.5% of 12<sup>th</sup> graders.



In 1997, 1.1% of 8<sup>th</sup> graders used marijuana daily. This rose to 3.7% in the 10<sup>th</sup> grade and 5.8% in the 12<sup>th</sup> grade. By contrast, in 1991 .2% of 8<sup>th</sup> graders, .8% of 10<sup>th</sup> graders and 2% of 12<sup>th</sup> graders were daily users.

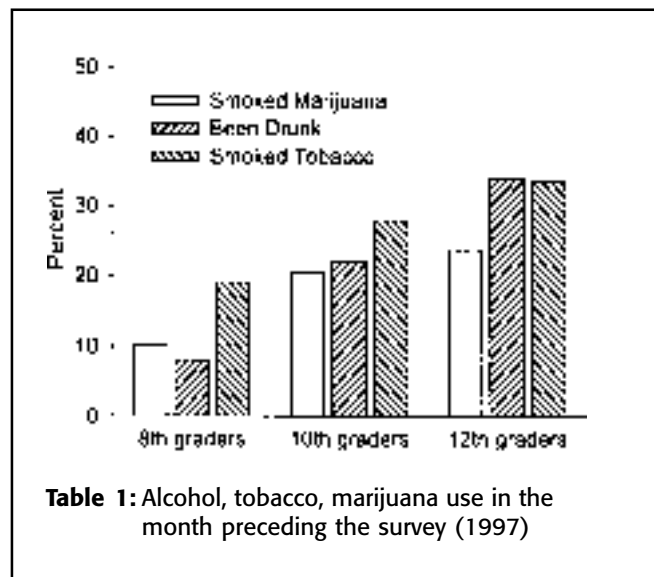
Clearly, many adolescents begin making the transition to marijuana experimentation/use by 13-14 years old and have established relatively stable patterns of use for the rest of high school by the time they are 15-16 years old.

Confidence in the figures provided by NIDA's MTF assessment is enhanced by similar figures reported by The Youth Risk Behavior Surveillance System and by studies in other industrialized western countries. For example, in 1993, Ferguson<sup>4</sup> reported 9.8% of 15 year old New Zealanders has tried marijuana. And, in 1997, Poulton et al<sup>5</sup> reported that the figure had risen to 15% of 15 year olds having tried marijuana, while over 50% of 21 year olds had experienced marijuana on at least one occasion.

### High Risk Behavior

Before looking at high-risk behavior with cannabis by children and adolescents, it is important to look at what is known about high-risk behavior in general in this population.

The Youth Risk Behavior Surveillance System (YRBSS)<sup>6</sup> monitors six categories of priority health-risk behaviors among youth: tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancies and STDs; dietary habits; and physical inactivity. In 1997, this national survey of high school students found that 26.2% had used marijuana during the 30 days



graders, 23.4% of 10<sup>th</sup> graders and 36.7% of 12<sup>th</sup> graders had ever tried.) Put another way, in 1997, nearly half of high school students were no longer naïve regarding cannabis by the time they graduated; and nearly half of these had already tried marijuana by the 8<sup>th</sup> grade.

preceding the survey. At the same time, 19.3% had rarely or never worn a seat belt, 36.6% had ridden with a driver who had been drinking alcohol, 18.3% had carried a weapon, 50.8% had drunk alcohol, and 36.4% had smoked cigarettes during the preceding 30 days. Clearly, to no one's surprise, adolescence is a time of high-risk behavior in a wide variety of venues.

### Transitions to First and Subsequent Use

In *At-Risk Youth*, McWhirter et al (1997)<sup>7</sup> posed an important question:

Some youngsters experiment briefly with drugs (including tobacco and alcohol) and never use them again, whereas others' experimentation leads to patterns of abuse and dependence. What is the difference between these two groups?

The differences between these groups exist on many different levels. McWhirter et al suggests a tree as the best metaphor for risk. Problems in the soil (society/culture) can affect the tree's growth. The roots (family and school) must anchor the tree securely in the soil and provide support and nurturance; and problems in the root structure can topple a tree that would otherwise grow straight and tall. Finally, the branches (individual traits) can be stunted by temperament, neuropsychological disabilities and psychopathology, or invigorated by resilience. In other words, we must not look to the individual child or adolescent alone to understand the reasons for either initial or subsequent cannabis use.

*"To take risks successfully, an adolescent should be able to weigh the dangers and benefits of a particular situation and know how his or her own strengths, weaknesses, and biases may affect the consequences, all of which help build self-confidence. Learning to assess risks in a thoughtful manner is one of the most important developmental tasks of adolescence.*

*"Adolescents taking risks today confront some of society's most serious problems.... Easy exposure to serious risks at an early age is a major societal problem. One would like to see adolescents gradually exposed to increasingly serious risks as they acquire more refined tools for risk assessment."*

*The Romance of Risk*, Lynn E. Ponton, M.D (1997), p. 52<sup>1</sup>

Hammer and Vaglum (1990)<sup>8</sup> found that factors increasing the probability of ever using cannabis could not predict the persistence/cessation of cannabis use. Two separate interpretations of this can be made. Either the motivations to initiate use differ from the motivations for subsequent use. Or, those youth who continue to use had different motivations for initiating use than those who did not continue. Understanding the relative importance of these two interpretations is critical.

A genetic component is suggested by Kendler and Prescott (1998)<sup>9</sup> who found in a study of female twins that genetic risk factors have only a moderate impact on the probability

of ever using cannabis, but a strong impact on the liability to heavy use, abuse, and dependence. The conclusion would be that young people first try cannabis for social reasons, but at least a subset continue its use because of genetic susceptibility.

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## It is impossible to separate marijuana use from tobacco and alcohol use.

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Important to understanding the initiation/continuation of cannabis use is the report by Van Etten et al (1997)<sup>10</sup> that the prevalence of "opportunity to try marijuana has been rather stable for 15 years" – 1979-1994. Data does suggest, however, that the probability of moving rapidly to first marijuana use from first opportunity to use is increasing. This conclusion is consistent with a decrease in perceived harmfulness regarding marijuana, and MTF does report that 8<sup>th</sup> graders' concern that people risk harming themselves if they smoke marijuana once or twice fell from 40.4% in 1991 to 25.3% in 1997. Van Etten found that the transition from first marijuana opportunity to first use also depends upon age at first opportunity; and decline of perceived harmfulness with increasing age reported by MTF makes sense of this finding.

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## Prior alcohol use is one strong predictor of cannabis use.

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Pederson (1990)<sup>11</sup> reports that those who initiate marijuana use and subsequently experiment only a few times were characterized as essentially normative. Those who initiate use and subsequently move on to heavy use and abuse "also have family problems and poor mental health." Shedler and Block (1990)<sup>12</sup> analyzed adolescents similarly, finding well-adjusted experimenters, troubled heavy users and relatively anxious, emotionally constricted never-users.

Predictors of early adolescent cannabis use include preadolescent tobacco use (especially daily)<sup>13</sup>, prior alcohol use (especially weekly use)<sup>14</sup>, conduct disorder, low academic aspirations<sup>15</sup>, nonconformity and rebelliousness, attention deficit disorder<sup>16</sup>, poor parental relationships, earliness of first use, and a parental history of drug and alcohol problems. In turn, oppositional defiant disorder and the absence of anxiety disorders predicted preadolescent tobacco use, and preadolescent conduct disorder predicted early adolescent regular use of alcohol<sup>17</sup>. These intertwined contingencies emphasize the impossibility of abstracting marijuana from tobacco and alcohol use.

The same studies by Clark et al (1998)<sup>17</sup> also reveal that having a substance-abusing father leads to a significant increase in preadolescent tobacco experimentation and early adolescent regular alcohol use, when compared with

matched controls without fathers with substance use disorder. Preadolescent conduct disorder also predicted early adolescent regular alcohol use. And preadolescent tobacco use and conduct disorder were highly predictive of early adolescent cannabis use.

Additional studies<sup>18</sup> confirm the clinical observation that adolescents with alcohol use disorders often have complex histories that include childhood maltreatment and other traumas. Adolescents with alcohol abuse and dependence are 6-12 more times likely than a control group to have been the victim of physical abuse (more common in boys), and 18-21 times more likely to have a sexual abuse history (more likely in girls). Other traumas found more often in adolescents with substance use disorders were having a close friend die, arguments within the family, and legal difficulties (obviously related to conduct disorders and/or substance abuse).

The psychiatric conditions associated with adolescent alcohol use appear to be gender specific<sup>19</sup>, as young women were more inclined toward affective disturbances and young men most frequently exhibit conduct disorders. Real's book, *I Don't Want to Talk About It*<sup>20</sup>, which focuses on the covert depression which males more easily deny by turning outward, may be relevant to these findings.

An important interplay between experience and temperament has been documented<sup>21</sup>. Irritability (the propensity to experience and express anger following actual or perceived provocation), in conjunction with family discord, is associated with substance use as a coping mechanism in early adolescence. Another study<sup>22</sup> verified that, although substance abusing adolescents are discriminated from normal controls on seven of the nine scales comprising the revised Dimensions of Temperament Scales, only activity was associated with drug use severity. This behavioral trait (seemingly relevant to children and adolescents with Attention Deficit Hyperactivity Disorder (ADHD) correlates with severity of substance use, behavior problems, psychiatric disorders, and disruptions in the interpersonal realm.)

Although Fergusson et al (1993)<sup>23</sup> report no association between ADD and cannabis use, Milberger et al (1997)<sup>16</sup> report that ADHD is significantly linked to cigarette smoking and psychoactive substance use disorders. Milberger concluded that "...findings linking ADHD and PSUD could have significant public health significance. Since ADHD is a prevalent, childhood onset disorder that is often characterized by impulsive behavior, it could represent a large group of youth at high risk for illicit drug use."

Disruptive behavior disorders are more present in boys with substance abusing fathers than in controls, and childhood conduct disorders are strongly associated with early tobacco, alcohol and cannabis use<sup>24</sup>. Fifth and sixth grader's reports of their parents' and their own level of drinking shows a significant increase in the rates of alcohol misuse and heavy use among the children of heavy using parents.<sup>25</sup>

Data<sup>26</sup> confirm that adult men who had the onset of substance use during adolescence have higher lifetime rates of cannabis use disorders, shorter times from first exposure

to dependence, shorter times between the development of their first and second dependence diagnoses, higher rates of disruptive behavior disorders and major depression than adult men who had the onset of substance use during adulthood.

Although one interpretation of the above data could be that the estimated risk of developing drug problems clearly seen in youths whose drug taking had started during the pre-adolescent and very early adolescent years was due primarily to the sheer duration of drug use (5-7 years), requiring no additional 'mechanism' by which early-onset drug users experience greater risk of drug problems.<sup>27</sup> This interpretation fails to account for the findings of Clark et al<sup>26</sup> that the progression to dependence and polysubstance dependence occurs faster during adolescence. This acceleration could not be secondary to length of time an individual has used, but must instead be related to the state of development (psychologically and perhaps neurologically) of individual and environmental influences.

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### **It is the youngster's perception of his or her stress level that is most important.**

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Finally, Crowley et al (1998)<sup>28</sup> studied a population of adolescent cannabis users at a university-based substance treatment program. Two-thirds of cannabis-dependent teens reported experiencing withdrawal. Conduct disorder was present in 82%, depression in 17.5% and attention deficit/hyperactivity in 15%. In this group of heavy users, progression from first to regular cannabis use was as rapid as tobacco progression, and more rapid than that of alcohol.

Hall et al (1995)<sup>29</sup> concluded from an exhaustive review of the literature that the crude risk of cannabis dependence is small, probably more like that for alcohol than that for nicotine or the opiates. "...the overall estimate of cannabis abuse and dependence would be that 17% of those who used cannabis more than five times would meet DSM-III criteria for dependence." Kandel and Davies<sup>13, 29</sup> estimate the rate of abuse and dependence among those who had used cannabis 10 or more times was 39%. "For those who have ever used cannabis, the risks of developing dependence is probably of the order of one chance in 10." (Hall, 1995)<sup>29</sup> "... all the evidence suggests that the proportion of cannabis smokers who become daily smokers is substantially less than the proportion of tobacco smokers who do so."<sup>29</sup>

#### **Function of Cannabis Use**

Literature regarding the function, or possible adaptive significance, of marijuana use is scarce.

Hendin and Haas (1985 and 1987)<sup>30, 31</sup> wrote that marijuana provides "a buffer zone of sensation" that serves to maintain adolescents (and adults) "in a troubled

## Basic Research Update

Research continues to make rapid strides in outlining the neural systems affected by anandamide, an endogenous cannabinoid. As early as 1980 we knew that THC affects sodium-dependent high affinity chloride uptake<sup>58</sup>, most markedly in the septal, hippocampal and amygdalar areas.<sup>59</sup> The last two years, however, have produced a burst of new data.

Anandamide receptor sites exist during fetal development<sup>60</sup> and cannabinoid mRNA expression steadily rises in the postnatal period.<sup>61</sup> These receptors have two subtypes: CB1 occur in neural tissue and CB2 exist in the periphery.<sup>62</sup> These receptors differentially regulate various adenylyl cyclase isoenzymes.<sup>62</sup> Cannabinoid stimulation therefore modulates neuronal voltage sensitivity by affecting ion channels.<sup>63</sup>

There is a dose-response increase in dopaminergic neurons when THC is administered, and this increase is reversed with SR 1241716 A, a selective cannabinoid antagonist.<sup>64</sup> Dopamine release in the nucleus accumbens occurs with THC<sup>65</sup> and withdrawal from chronic cannabinoid administration is associated with reduced dopaminergic transmission in the limbic system.<sup>66</sup> Both of these latter phenomena are observed with other addictive drugs. Investigation of cannabinoid tolerance demonstrates agonist-induced receptor down-regulation.<sup>67</sup>

Cannabinoids produce a long lasting inhibition of acetylcholine release in the hippocampus, which is reversed by a cannabinoid antagonist.<sup>68</sup> Higher doses of an antagonist increase acetylcholine release, which suggests that acetylcholine output is tonically inhibited by endogenous cannabinoids. Doses used in this research were within those relevant to human use of marijuana.

Of potential medical significance, CB1 receptors have been found in the pain-processing areas of the brain and spinal cord.<sup>69</sup> Cannabinoid stimulation of both CB1 and CB2 peripheral receptors cause a synergistic effect, reducing pain responses 100-fold more than stimulation of either alone. Antagonism prolongs and enhances pain. Other research has established that cannabinoids and heroin exert similar effects on mesolimbic dopamine transmission through a common mu 1 opiod receptor mechanism.<sup>70</sup> In other words, endogenous cannabinoids may play an intrinsic role in the control of pain.

Finally, levels of CB1 and CB2 have been explored in the ciliary body<sup>71</sup>, suggesting a specific role for the CB1 receptor in controlling intraocular pressure.

Stay tuned - an exciting scientific puzzle embedded in each of our brains is being unraveled from several different directions at once.

adaptation, reinforcing their tendency not to look at, understand, or attempt to master their difficulties." They hypothesized that marijuana had adaptive or defensive functions, mediating detachment from the painful or unpleasant realities of life. Use of marijuana by adolescents was seen to provide relief and enhance the ability to "cope with the challenges of growing up is likely lead to adult patterns of using marijuana as an escape."

Hendin et al<sup>32</sup> proposed five "key functions" that marijuana use plays in a family's dynamics: defiance and provocation, self-destructiveness, control of anger, grandiosity, and escape from competitive conflicts. Conspicuously missing are any positive reasons (such as curiosity, pleasure and peer group bonding) that might propel an adolescent to try marijuana. Also missing are issues related to parental use of psychoactive substances and the possibility of self-medicating an unrecognized internal psychopathology.

Within individuals, psychic pain and an inability to cope were identified as the two interacting factors that lead frequently to chemical dependence<sup>33, 34</sup>. This view emphasizes that it is the youngster's *perception* of his or her stress level that is most important. Indeed, some adolescents are unable to cope effectively with the pressures associated with normal development, while others are able to cope effectively with the stress of overtly abusive families.

In 1996, Gruber et al<sup>35</sup> suggested that several lines of evidence point to an antidepressant effect of cannabis. Clinical anecdotes supporting this argument exist, but no controlled studies have been conducted.

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Several articles<sup>16</sup> on the association between Attention Deficit Disorder and substance use disorders have appeared, but there is little written on whether this use functions as self-medication. Others<sup>23</sup> report no association between early attention deficit behaviors and cannabis use. However, clinical experience and ADD patients' testimony tend to support the possibility of an association, especially in those who have experienced academic failures secondary to their ADD.

While self-medication is undoubtedly one factor contributing to continuance (not to initiation) of cannabis use among adolescents, at least two red flags jump up in

this regard. First, such a function would serve to delay proper identification and diagnosis of the underlying psychopathology. Abstinence is critical for clarifying whether an underlying psychopathology exists. Second, it is highly unlikely that smoked cannabis is the treatment of choice for any psychopathology in adolescents, as more specific treatments are available, generally with far fewer side-effects and abuse potential.

Missing from most researchers' perspective is the normative view advanced by Andrew Weil (*The Natural Mind*, 1986)<sup>36</sup>. Weil believes that "the desire to alter consciousness periodically is an innate, normal drive analogous to hunger.... Drugs are merely one means of satisfying this drive.... The omnipresence of the phenomenon argues that we are dealing not with something socially or culturally based but rather with a biological characteristic of the species."<sup>36</sup> If Weil is believed, then curiosity and pleasure must be added to the list of reasons some adolescents initiate drug use. The pleasure may not be the artificial pleasure of a pharmacological high, but rather the pleasure of exploring new territory and finding it interesting. Such curiosity about altering consciousness probably applies more to true experimenters, and less to regular users who are using pharmacology to avoid negative affects.

#### At-Risk Youth

Unless it can be documented that cannabis use, or heavy use, causes or complicates problems, then statistics about its prevalence are only a curiosity. To date, the measured, cause-and-effect scientific method of research does not appear to have established proof that cannabis use by adolescents is the necessary and sufficient cause of any specific problems. In effect, proof that adolescent use of marijuana causes problems, beyond those difficulties created by adults' judgments, fear and punitive approaches, remains elusive -- in part because many cannabis users do not experience a significant impact on their lives, and in part because of the methodological difficulties that stem from not being able to control the huge number of variables inherent in a moving target (i.e., adolescence).

A summary of the research literature quickly stumbles into the conundrum that adolescents who have problematic family environments, conduct disorders, ADD, etc., tend to use tobacco, alcohol and cannabis at younger ages and more often. At the same time, adolescents who use tobacco, alcohol and cannabis at early ages tend to have more problematic relationships, conduct disorders, ADD, etc. There currently seems to be no way for research to sort out the "chicken and egg" problem when it comes to early drug and alcohol use and problems during adolescence.

Fergusson and Horwood (1997)<sup>37</sup> express the complexities well in their abstract to *Early onset cannabis use and psychosocial adjustment in young adults* in two contrasting sentences.

1. "Early onset users had significantly higher rates of later substance abuse, juvenile offending, mental health problems, unemployment and school dropout"

2. "...those electing to use cannabis were a high risk population characterized by social disadvantage, childhood adversity, early onset behavioral difficulties and adverse peer affiliations"

Therefore, when Myers et al (1998)<sup>38</sup> conclude that a high rate of progression to antisocial personality disorder exists among substance abusing adolescents, it remains unclear whether worsening antisocial traits lead adolescents to use more drugs, or whether greater drug use leads to worsened antisocial traits. Further complicating any such research is the fact that the legal prohibition of cannabis means its use satisfies one criteria of antisocial personality disorder - by definition. A majority of the research continues to remain in this interpretive tangle, complicated by a context of illegality.

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For example, when Cousineau (1996)<sup>39</sup> concludes that psychoactive drug use was significantly higher in school dropouts than in students, it is unclear whether the drug use led to dropping out of school, whether dropping out of school led to drug use, and to what extent the subculture of school dropouts would be the primary causative factor.

The concept of risk, as opposed to etiology, becomes useful here. Being "at-risk" refers to a set of dynamics that place a child or adolescent in danger of negative *future events*. For example, youngsters who use tobacco are at risk for alcohol use. Young people who use alcohol are at risk for illicit drug use. Children and adolescents who use illicit drugs are at risk for drug abuse. Thus, a specific behavior, attitude, or deficiency provides an initial marker of later problem behavior.<sup>7</sup> Similarly, weekly marijuana use, as opposed to initial marijuana use, is an independent risk factor for initial cocaine use. Weekly marijuana users were over ten times more likely to initiate cocaine within the next year.<sup>14</sup>

Shedler and Block (1990)<sup>12</sup> threw some light on substance use and "at-risk" youth by investigating the relation between psychological characteristics and drug use in a longitudinal study of preschoolers to 18 year olds. To quote from their abstract:

Adolescents who had engaged in some drug experimentation (primarily with marijuana) were the best-adjusted in the sample. Adolescents who used drugs frequently were maladjusted, showing a distinct personality syndrome marked by interpersonal alienation, poor impulse control, and manifest emotional distress. Adolescents who, by age 18, had never experimented with any drug were relatively anxious, emotionally constricted, and lacking in social

skills. Psychological differences between frequent drug users, experimenters, and abstainers could be traced to the earliest years of childhood and related to the quality of parenting received.

Consistent with Shedler and Block's description of the maladjustment of heavy users, Brook et al (1989)<sup>40</sup> found that regular use of marijuana appears to interfere with adolescents' relationships with their parents and to lead them to associate with more deviant and drug-using friends. While the authors see drug use as a symptom, not a cause of personal and social maladjustment, they may be missing the fact that this symptom, especially in heavy users, may further complicate an individual's already precarious interpersonal and social position. This would be true, in part, because initiation into drug use also generally involves initiation into a subculture that builds some of its identity on its deviance and outlaw behavior.

The question of whether drug use is a symptom or a cause of personal and family maladjustment is simply the wrong question, primarily because it establishes a black and white framework for considering the answer. In any system following bio-logic, i.e., ecological systems, "effects" feed back on "causes," and modify their qualities and intensities.

A better approach is taken by Newcombe and Bentler's (1998)<sup>15</sup> theory of "precocious development" by which drug use accelerates aspects of development and "...drug users tend to bypass or circumvent the typical maturational sequence of school, work and marriage and become engaged in adult roles or jobs and family prematurely without the necessary growth and development to enhance success with these roles... [developing] a pseudomaturity that ill prepares them for the real difficulties of adult life." Herein lies the crux of what is important regarding adolescent use of cannabis – the increased risk that normal developmental processes are likely to be disrupted, thereby placing youngsters further "at-risk" for future negative consequences, by early frequent use of alcohol and other drugs. What can not be known at this point is the degree to which prohibition contributes to this "precocious development," and how much developmental disruption would occur within the context of legal cannabis use.

The most prudent conclusion would be not to throw out the available research, but rather to accept that multiple dynamics are mutually interacting with each other. Each variable affects other variables, and none is paramount. The dynamics of ecological phenomena are less linear than systems better investigated by most research protocols. For example, conduct disorder leads to marijuana use which increases the conduct disorder and interferes with relationships with non-users (including parents), after which adolescents affiliate more with the drug-using subculture. There is a web of positive feedback that enflames every point on the web. The result is that precisely those adolescents who require the most support to overcome difficulties are those adolescents who fall off the radar screen. Being "at-risk" increases the likelihood of "high risk" behavior, and "high risk" behavior makes people more "at-risk."

## Virtual Novelty

Novelty does not exist as an inherent property of the outside world. It is a generally pleasant experience that our brain/mind *adds* to incoming stimuli. When a stimulus is compared to what we have seen or heard in the past, it tends to pass by unnoticed when there is a match. "Nothing new, never mind." But, when there is a mismatch, the brain generates a zing – an energy that arouses, activates and focuses our attention. This zing is a physiological phenomenon with direct psychological impact. And this zing has a biochemical substrate.

The amygdalae are the seat of both novelty, and its opposite habituation. Amygdalized animals treat each situation as entirely novel, while paradoxically erasing the visceral indicators (GSR, changes in heart and respiratory rate). Animals therefore orient to stimuli, but never register them in ways that lead to habituation.

The amygdalae's function depends on input from the hippocampus. The strength of theta rhythms imported to the amygdalae from generators in the hippocampus determines the speed with which the amygdalae learn and habituate. Brain electrodes in the hippocampus reveal that electrophysiological activity is significantly altered in the presence of delta-9-THC.

Suddenly it becomes clear why people smoking cannabis remain so entertained (nay, fascinated) even by a Star Trek episode they are watching for the 5<sup>th</sup> time. Disrupting hippocampal Theta rhythm by flooding its modulatory anandamide receptor sites with exogenous cannabinoids temporarily disorganizes our amygdalae, partially diminishing its function. Experiential changes that ensue include an artificially produced sense of novelty that is added to even the most mundane stimuli. In a sense, consciousness is thrown into a *jamais vue / deja vue* ("never seen / seen before") mode. Virtual novelty - cheap entertainment.

Down-regulated anandamide receptor sites could be expected to produce the opposite effect when THC is absent – little is experienced as new. Novelty is artificially suppressed. The zing, which orients us to the environment, is gone, and we may suffer decreased motivation as a result.

Consistent with the highly theoretical hypothesis outlined above is the fact that amygdalized monkeys and humans become exhibit hyper-orality. They explore the world with their mouths. And they rarely experience satiety, no matter how much they eat.

Cause and effect relationships in the murky field of child and adolescent use of cannabis should be sought in interactive and cumulative variables, with risk being the "quantity" which continually increases – the risk of future negative consequences. As Kleinman et al (1988)<sup>41</sup> stated over a decade ago, "use of marijuana is only one element in a large and complex picture of interrelated problems and behaviors."

### Specific Associations with Cannabis

While the section above points toward a scientific nihilism regarding the exact role of adolescent use of marijuana in creating problems, several reports do provide hints of specific attributes that consistently appear related to marijuana use during teen development.

Just under one-third (30.9%) of 13-14 year old New Zealanders reported some adverse reaction to cannabis use, including feeling ill, dizzy or frightened<sup>4</sup>. Thomas (1996)<sup>42</sup> reports that 22% of 18-34 year old users experienced acute anxiety and panic attacks following cannabis use. He also noted that 15% reported psychotic symptoms.

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**In order to discuss prevention,  
we need clarity about  
what we are trying to prevent.  
Are we attempting to prevent  
all cannabis use?  
Cannabis abuse and dependence?  
Problematic consequences  
of cannabis abuse?**

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Troisi et al (1998)<sup>43</sup> looked at psychiatric symptoms in male cannabis users who used no other illicit drugs (tobacco and alcohol not mentioned). A comorbid psychiatric diagnosis was present in 83% of those who satisfied DSM-III-R criteria for dependence, in 46% of those with criteria for cannabis abuse, and 29% of occasional users.

Solowij (1995)<sup>44</sup> reports that long term cannabis users suffer a relatively subtle impaired ability to focus attention and filter out irrelevant data, which she believes is progressive with the cumulative duration of exposure to cannabis. Testing of ex-cannabis users finds a partial recovery of function, but there remained an adverse effect on the ability to effectively reject complex irrelevant stimuli. (See sidebar – “Artificial Novelty”)

Fergusson et al (1996)<sup>45</sup> have worked to tease apart the influence of cannabis use from an individual's conditions which led to the cannabis use. Their abstract reads:

Early onset cannabis users were at increased risk of later substance use behaviors, conduct/oppositional disorders, juvenile offending, severe truancy, school dropout, anxiety, depression, and suicidal ideation. Early cannabis users had odds of these outcomes ranging from 2.7 to 30.8 times higher than the odds of those who did not use cannabis prior to age 15. Most of the elevated risks of early onset users were explained by the fact that they were a high-risk group of adolescents characterized by family disadvantages, early adjustment problems, and high affiliations with substance-using or delinquent peers. Nonetheless,

even after adjustment for a wide range of confounding factors, early onset users had increased risks of later cannabis use.

A complex association between mortality, depression and cannabis use was reported by Andreasson (1990)<sup>46</sup>. Researchers found that the relative risk of death among high consumers of cannabis (i.e., use on more than 50 occasions) was 2.8 compared with non-users. Controlling for social background variables revealed none of this increase was due to cannabis. (The addition of other drugs, especially by IV routes, raised the risk above that created by dysfunctional social environments alone.) However, the proportion of suicides increased sharply with the level of cannabis consumption. Page et al<sup>47</sup> reported that lonely, substance-using adolescents were 25 times more likely to be severely hopeless than non-using adolescents.

### Prevention

In order to discuss prevention, we need clarity about what we are trying to prevent. Are we attempting to prevent all cannabis use? Cannabis abuse and dependence? Problematic consequences of cannabis abuse? Are we trying to prevent our own fear for our children? There does not appear to be a consensus in the United States regarding these different perspectives, although a political orthodoxy does exist, making flexible and honest dialogue more difficult.

It would be wise to guide our approach to prevention by the quote from the Addiction Research Foundation's *Cannabis, Health and Public Policy* (1996)<sup>49</sup> which encouraged a public health perspective and which was a concluding focus of the CSAM White Paper on Cannabis (1997)<sup>48</sup>:

...the use of alcohol, tobacco and other drugs should be seen primarily as a public health issue rather than one dominated by moral or legal principles. The main goal of public policy and practice should be twofold: to reduce harm and cost from drug use, and to minimize the harms and costs of drug policy [and drug treatment].

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**It is our obligation,  
as physicians,  
to force the debate  
back into the open.**

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Prevention is about the management of risk. Ideally, children and adolescents should be faced with challenges that can be met with growth which lies within their capacities. Optimally, such frustration means that challenges will stimulate growth rather than lead to failure and defeat. Good prevention means managing the risks youngsters encounter until they become capable of managing their own risks effectively.

Drug education has enjoyed considerable support as a prevention tool, although there has often been debate about whether *all use* should be prevented or if *abuse* should be prevented by enhancing responsible decision making. Forces favoring no-use have too often caused educational efforts to be based on scare tactics, top-down teaching, and a test of loyalty, all of which are based more on politics than science.<sup>50</sup> Failed educational programs are often experienced as an intrusive, irrelevant process by adolescents, rupturing the very sense of dialogue that is most necessary for any prevention efforts to have an impact.

Of course, drug "education" designed to *increase* use also targets youth. Fifty-six percent of students in grades 5 to 12 say that alcohol advertising encourages them to drink.<sup>51</sup> Cartoon characters used by both the tobacco and alcohol industries have clearly attracted children, recruiting them to pay attention to specific name brands.

Despite these difficulties, Chou et al (1998)<sup>52</sup> have demonstrated that community-based prevention programs focused on decreasing drug use in high-risk adolescents (6<sup>th</sup> and 7<sup>th</sup> grade) are able to reach and influence high-risk adolescents in a nonstigmatizing way, with a focus on tobacco, alcohol and marijuana. It is likely that their positive results stemmed from a combination of targeting high-risk adolescents, using a community-based approach, and approaching tobacco, alcohol and marijuana as functional complements. Pacula (1998)<sup>53</sup> reports that policies increasing the price of alcohol are actually accompanied by a decrease in consumption of alcohol and at least as much of a decrease in marijuana use.

It makes sense that community-based approaches to prevention are necessary because "...parent use of substances must be considered risk factors with particular effects on their younger offspring. Thus, prevention efforts should be directed at middle childhood and include components aimed at parents as well as at their children."<sup>54</sup>

A similar perspective was echoed by Fleming et al (in press): "...family interventions for preventing substance use in children of substance abusers should focus on reducing parent drug use and promote bonding to parents who are abstinent."<sup>55</sup>

The importance of enhancing bonding with a parent who does not abuse alcohol or other drugs is underscored by Lynn E. Ponton, M.D. in *The Romance of Risk* (1997)<sup>1</sup>

The most effective tool parents have in assisting their adolescent with developing a capacity to assess and negotiate any risk is their relationship with their child. Parents absolutely must learn to listen without being judgmental and to develop this ability as early as possible.

## CSAM Position Statement on Youth and Cannabis

In addition to endorsing the paper, *Youth and Cannabis*, the Executive Council adopted the following position statements:

A. CSAM urges a public health perspective as the backbone of the approach to adolescents with marijuana, alcohol, tobacco and other drug problems.

B. CSAM advocates that prevention efforts be guided by the following principles:

i) Because child and adolescent onset and use of cannabis is accompanied by far higher risk than adult onset and use, **adolescents should be strongly encouraged to avoid, or delay, use.**

ii) Because marijuana use by adolescents is intimately intertwined with tobacco and alcohol use, **all prevention efforts should identify and target the triad of tobacco-alcohol-marijuana.**

iii) Because effective avoidance, or delay, of cannabis use depends heavily on the development of cultural support for such decisions, **drug prevention programs should promote the entire community's support for parents of at-risk youth and for adolescents who choose to avoid or delay use.**

C. CSAM recommends that marijuana remain illegal for adolescents, as tobacco and alcohol are. However, in virtually all cases, adolescents involved in marijuana, tobacco or alcohol use should be diverted into clinical assessment and appropriate treatment when recommended, rather than subjected to punitive actions or environments.

### Youth and Tobacco

The Journal of the National Cancer Institute (April 7, 1999) reports one of the first studies to pinpoint the age at which smoking begins as a predictor of smoking-related DNA damage. Researchers at UCSF and at Harvard examined 143 lung cancer patients and analyzed the genetic damage in the patients' lungs caused by smoking.

They found that while all smokers sustained DNA damage to their lungs, the best predictor of such damage was the age at which subjects began smoking. The highest levels of DNA damage were found in study participants who began smoking between the ages of 9 and 12, even when researchers accounted for variables such as the number of years and the number of cigarettes the participants smoked.

*Quoted from ASAM News May-June 1999, Vol. 14, No. 3*

## CONCLUSIONS

■ *Intertwined contingencies emphasize the impossibility of abstracting marijuana from tobacco and alcohol use.* The tobacco-alcohol-marijuana (TAM) triad represents the first level of drug use, with little regard for which particular drug serves as the port of entry into involvement at this first level.

■ Childhood and adolescence are times of profound developmental vulnerability. When children fail to develop the “provisional autonomy” (autonomy without independence), they do not make a successful transition into adulthood. Eventual transition to the full autonomy of adulthood is then necessarily disrupted. Failure of youngsters to effectively enter the teen years leads to frequent psychological casualties, and no one seems to doubt that adding cannabis use to this mixture is harmful. It seems reasonable to conclude that *child and adolescent use of cannabis is accompanied by far higher risk than adult onset of cannabis use, and youth should be strongly encouraged to avoid, or delay, use.*

■ As neuroscience and neuropsychology advance our understanding of the pervasiveness of anandamide neural systems and subtle frontal lobe deficits (see CSAM White Paper, 1997)<sup>48</sup>, *we should, for the time being, assume that physical changes to the brain are not insubstantial, and that adolescents are likely to be more sensitive to changes than young adults.* Such an assumption may eventually prove to be more conservative than necessary, but is clearly prudent. No less caution would be shown any medication winding its way through the FDA review process.

■ Hall (1995)<sup>29</sup> nicely enunciates the conclusion that *a combination of “selective recruitment” and “socialization” hypotheses are more relevant to understanding cannabis use by children and adolescents than are the pharmacologic actions of cannabis:*

On the available evidence, the case for a pharmacological explanation of the role of cannabis use in progression to other illicit drug use is weak. A sociological explanation is more plausible than a pharmacological one.... Once initiated into cannabis use, heavy users become further distinguished from non-users and those who have discontinued their use by the intensity of their social relations and activities which involve the use of marijuana, such as mixing with other drug users, and buying and selling illicit drugs. ...regular use could increase the pre-existing risk of school failure.

■ Scare tactics, lies and punitive approaches to “encouraging” youth to avoid or delay use are worth little, and often are counter-productive. *Drug prevention programs should promote the entire community’s looking at and supporting parents of at-risk youth.* In many cases, this will involve creating an atmosphere in which adult abuse and dependence can be openly discussed. It is likely that prevention programs would be more effective if they become community-based rather than more narrowly school-based. Anything less would be simultaneously ineffective and hypocritical.

■ Although not supported, or even suggested, by data from the literature, it seems reasonable to conclude that *effective avoidance, or delay, of cannabis use depends heavily on the development of cultural support for such decisions*, similar to the peer-support needed to foster abstinence from sexual activity. Just as a subculture of drugs and coolness supports those who use and denigrates those who do not; and just as a culture of recovery supports those who have become addicted; communities have to develop a culture that values youngsters’ decisions to avoid or delay tobacco/alcohol/cannabis/other drug use.

■ *Little progress in understanding or affecting early use of cannabis by children and adolescents is likely to occur as long as our ambivalence (individually, professionally and culturally) gives rise to duplicity rather than honest dialogue.* There is no greater rationale for prohibition of cannabis use by youth than there is for prohibition of alcohol use. This fact should force people to see that America is out of integrity in its alcohol and other drug policies. The politically motivated War on Drugs has failed. It has not only failed, but it has damaged the fabric of our society, most directly by incarcerating too many prisoners of war. But others have been incarcerated by the government’s having closed out the debate, making acceptance of prohibition and punitive approaches a litmus test. We must stop and ask, “A litmus test of what?”

Debate about the uses of psychoactive chemicals must be legitimized. Physicians in addiction medicine hold an important part of our society’s wisdom about drug use. But the politicization of our experience has silenced professional debate, just as it has disabled families from freely discussing the roles drug use may have in different people’s lives. The conscious dampening down of debate on the federal level, making drug use a moral rather than a health issue, has infiltrated communities and individual families. It is our obligation, as physicians, to force the debate back into the open. Too much harm is done by burying out of awareness the forces which mold our lives. Addiction medicine specialists should be especially sensitive to how such a process of denial disintegrates the fabric of individual personalities, families, and whole communities.

Finally, we return to the public health perspective advocated by the Addiction Research Foundation as the touchstone: *“Public policy and practice should not be dominated by moral or legal principles, but rather by the goal of reducing harm and cost from drug use, including minimizing the harms and costs of drug policy [and drug treatment].”* (Cannabis, Health and Public Policy, 1996)<sup>49</sup>

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*This paper was written by Timmen Cermak, MD, accepted by the CSAM Task Force on Medical Marijuana and by the CSAM Executive Council. Other members of the Task Force are William Brostoff, MD; Tod Mikuriya, MD; Max Schneider, MD; David Smith, MD; J. Thomas Ungerleider, MD; Jane Marmor, MD (CMA representative); and Sandra Bressler (CMA representative).*

## Perspectives on Prohibition

BY TIMMEN L. CERMAK, MD

On the one hand, my preference is to sidestep the issue of cannabis prohibition when the topic involves children and adolescents. The reality of American society is that, even if cannabis were decriminalized/legalized, it is highly unlikely that individuals would be permitted to possess or use cannabis at an earlier age than alcohol. There continues to be general support for restricting a variety of potentially harmful experiences below specific ages, such as automobile driving, tobacco and alcohol use, financially binding contracts, etc. Therefore, the prohibition issue is primarily, if not exclusively, an adult issue.

On the other hand, prohibition forms the context within which all consideration of cannabis exists. Prohibition often creates an irrelevant (to adolescents) circular argument. Cannabis is bad because it is illegal; and it is illegal because it is bad. To the adolescent whose parent is abusing psychoactive chemicals, and who has easy access to cannabis, there are more relevant considerations to debate than an arbitrary notion of illegality. Further, our intellectual integrity should insist that we contend with the multiple commissions that have studied the issue and seriously recommended a public health approach as opposed to the legislative support for prohibition. (1972 National Commission on Marijuana and Drug Abuse - US; 1970 The LeDain Report - Canada; 1982 National Academy of Sciences report - US; 1994 National Drug Strategy Committee - Australia)

Worse, society seems to be more tolerant of early tobacco, alcohol and cannabis use than its laws or political rhetoric implies. Far too many parents instruct their children to avoid drugs that they themselves use, or used at one time. Far too many parents mis-socialize their children into early use, winking at breaking the law, rationalizing teens' drinking and smoking marijuana by saying they would rather have it out in the open than in secret. In other words, there may be laws on the books prohibiting teens under 18 years old from using tobacco, prohibiting youth under 21 from drinking alcohol, and prohibiting all Americans from using cannabis, but these laws are only sporadically and arbitrarily enforced. I believe that adolescents receive a barrage of

mixed messages about tobacco, alcohol and cannabis use because of our own ambivalence both about these drugs and about the punitive approach taken toward prevention.

Well-documented racial imbalance is a particularly horrifying example of the arbitrary enforcement of drug laws. Between 1985 and 1987, 99% of drug-trafficking defendants nationwide were African-American.<sup>56</sup> Racial disparities in enforcement led to one in four young black men being either in jail, in prison, on parole, or on probation.<sup>56</sup> By 1988, the War on Drugs had doubled the prison population. The proportion of state prisoners incarcerated for drugs rose from 1:15 to 1:3, and 85% of them were in for mere possession. In 1989, 35% of the nation's sixteen to thirty five year old black men were arrested.<sup>56</sup> By 1990, America had more black men in prison than in college.<sup>56</sup>

Duplicity crept deeply into society as punitive approaches to cannabis closed out any possibility of legitimate debate. These approaches have narrowed drug education into a belief that blind obedience by our children is preferable to looking honestly at ourselves and facilitating good risk management among our youth. In the process, we have turned a public health issue into one that is primarily seen as bad behavior by bad individuals.

It is important to understand that the prohibition of cannabis eliminates any cannabis *use* - by legal definition, there is only abuse. We have no idea whether adolescent use would carry the same level of risk which it currently does if it did not propel them into a scofflaw subculture. In this regard, the Dutch experience is very instructive. In an admittedly non-diverse society, where cannabis is freely available to adults, the rate of use is similar to the US except in the 12-15 year old group, where 13.5% of Americans had tried marijuana at least once in 1994, but only 7.2% of young teens in the Netherlands had ever used it.<sup>57</sup> □

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# Guidelines for Physician Involvement in the Care of Substance-Abusing Patients

## **Level I: For All Physicians With Clinical Responsibility: Diagnosis and Referral**

Recognize as early as possible alcohol- or drug-caused dysfunction.

Be aware of the medical complications, symptoms, and syndromes by which alcoholism (or drug abuse) is commonly presented.

Ensure that any complete health examination includes an in-depth history of alcohol and other drug use.

Evaluate patient requirements and community resources so that an adequate level of care can be prescribed, with patients' needs matched to appropriate resources. Make a referral to a resource that provides appropriate medical care.

## **Level II: For Physicians Accepting Limited Treatment Responsibility (To Restore the Individual Patient to the Point of Being Capable of Participating In a Long-term Treatment Program)**

Assist the patient in achieving a state free of alcohol and other drugs, including management of acute withdrawal syndrome.

Recognize and treat, or refer, all associated or complicating illnesses.

Apprise the patient of the nature of his disease and the requirements for recovery.

Evaluate resources -- physical health, economic, interpersonal, and social -- to the degree necessary to formulate an initial recovery plan.

Determine the need for involving significant other persons in the initial recovery plan.

Develop a long-term recovery plan in consideration of the above standards and with the patient's participation.

## **Level III: For Physicians Accepting Responsibility for Long-term Treatment**

Acquire knowledge, by training and/or experience, in the treatment of alcoholism (and other drug dependence).

The following responsibilities should be conducted or supervised by the physician:

Establish a supportive, therapeutic, and nonjudgmental relationship with the patient.

Within the confines of this relationship, establish specific conditions and limits under which the therapy will be conducted, and carefully explain them to the patient.

Periodically evaluate and update the recovery plan with the patient's participation.

Involve the patient with an abstinent peer group when appropriate.

Become knowledgeable about and be able to utilize various health, social, vocational, and spiritual support systems.

Evaluate directly or indirectly significant other persons and, unless clearly contraindicated, involve them in treatment.

Continually monitor the patient's medication needs. After treatment of acute withdrawal, use psychoactive drugs *only* if there is a clear-cut and specific psychiatric indication.

Be knowledgeable about the proper use of pharmacotherapy.

Throughout the course of treatment, continually monitor and treat, or refer for care, any complicating illness or relapse.

Be available to the patient as needed for an indefinite period of recovery.

*Adopted by the American Medical Association Council on Scientific Affairs, Oct 8-9, 1979. Copyright by the AMA.*

# 1979 AMA Statement: How Does it Hold Up 20 Years Later?

## The principles are as relevant today as ever

I am a practicing addictionist, certified by ASAM for thirteen years, and a licensed physician for twenty years. Throughout my career, I have interacted extensively with other physicians, enjoying consultation liaison work as much as any aspect of my practice, and being on the clinical faculty of the UW Medical School in the Departments of Family Medicine, Internal Medicine, and Psychiatry. So I've come into contact with hundreds of private practitioners, medical students and residents, and medical academicians, many of whom have frankly asked "What does an addiction medicine physician do?" Two of the most important questions presented during the era of addiction medicine in which I have practiced, have been "What defines the practice of addiction medicine?" and "What is the appropriate role of the addiction medicine specialist *vis a vis* the primary care practitioner in the management of substance-related disorders?" I have seen addiction practice dominated by non-physicians, and have encountered models of substance use and recovery which emphasize social service models more than health care models. This has led some to wonder what is the proper role of the physician in dealing with patients with alcohol and other drug issues.



Michael M. Miller, MD

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### Not every physician needs to know everything about addiction -- of course not.

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Maybe 8 years ago, when I came across the pamphlet published by the AMA on this topic, I realized that these questions had already been addressed with extraordinary clarity, way back in 1979. I view the wording of the AMA Council on Scientific Affairs as having been prescient and timeless, much like the words of the Declaration of Independence and the Bill of Rights. The principles are as relevant today as ever: early recognition, collecting substance use information in every comprehensive new patient exam, recognizing that there are important biomedical manifestations which can be the first presentation of alcoholism, recognizing that psychosocial presentations generally precede biomedical ones, and recognition of the importance of social networks and community resources in recovery. Not every physician needs to know everything about addiction - of course not - but all physicians with clinical responsibility for patients should be aware of the consultants and the agencies and the resources in their locale to whom they can refer those patients who, through screening, have been identified as needing further attention regarding substance use. The 1979 statement indicates that for alcoholics and other drug addicts, abstinence is the desirable clinical state. We know now that it was a probable misapplication of resources to overemphasize the first 28 days of recovery and to view addiction as anything other than what the 1979 statement

implied -- a chronic illness, best approached using chronic disease management models, where a long term recovery plan is important.

Certainly, there are many things "new under the sun" in addiction medicine since 1979. We have new pharmacotherapies. We have better designed psychotherapies. We have knowledge of the specific skills involved in office-based brief intervention, and how to teach these to practicing physicians. We have embarked in the 1990s on the process of broadening the base of treatment for alcohol problems beyond the relatively narrow base of alcohol addiction and into the area of problem drinking.

The 1979 statement had pearls of clinical wisdom that are as brilliant today as ever. The AMA informed us that there is a body of addiction medicine knowledge to be acquired, and that training is important to provide the skill and expertise base for clinicians specializing in addiction practice. But even more importantly, the 1979 statement focused on the central role of the physician/patient relationship -- a personal bond, a commitment to work together, a supportive environment, at once non-judgmental and firm. The enabling of the patient will not yield a successful outcome; the clinician must work with the patient to establish mutually agreed-to goals, and the clinician must set limits and establish contingencies within the treatment plan and promote personal responsibility and accountability on the part of the patient. "Anything goes" will not get the patient where he or she needs to be. Only within a trusting and caring doctor-patient relationship will the physician be able to be successful with brief interventions, with securing treatment acceptance, or with more complex and intense counseling interventions which assist patients when they are in the action phase of the change continuum as described by Prochaska and DeClementi. The successful physician who manages a patient's chronic disease, will accept the patient, will accept the relapsing and remitting nature of their illness, will not scorn them for being sick or for getting worse, and - most fundamentally - will "be there." Given the chronic nature of this illness, the physician who accepts responsibility for the active management of an addict will "be available to the patient as needed for an indefinite period of recovery," in the words of the AMA. This doesn't mean for 28 days. This doesn't mean for as long as the managed care company has authorized it. This means through the active phase of treatment; through subsequent phases of relapse management; and through ongoing phases of monitoring of the patient who is maintaining changes over a long period of time.

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### Tremendous credit is due to the American Medical Association for its embrace of issues important to the addictionist.

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Tremendous credit is due to the American Medical Association for its embrace of issues important to the addictionist. The AMA took the lead in 1956 in declaring that alcoholism was a disease. The AMA has been "out front" again and again, defining drug addiction as a disease, encouraging physicians to be knowledgeable about addiction, encouraging medical schools to improve their training

about addiction, and calling for parity in insurance coverage so that benefits for addiction treatment are equal to those for any other medical/surgical condition. I believe that every ASAM member who gives a Grand Rounds or provides an educational session for medical students, residents, or practicing physicians should hand out the 1979 AMA Guidelines. Our efforts today are not whimsical, not faddish, not "Johnny come lately," not unachievable. They are reasonable, simple, and timeless, and they've been with us for longer than most addictionists realize - since 1979. We could do far worse than to use these guidelines from 20 years ago as a manifesto to guide our next 20 years as a medical specialty.

**Michael Miller, MD**

*Doctor Miller is Director of Meriter Behavioral Sciences, Meriter Hospital, Madison, WI; Secretary of ASAM; the Representative from ASAM to the AMA Section Council on Preventive Medicine; Past Delegate from ASAM to the AMA House of Delegates; and Past President of the Wisconsin Society of Addiction Medicine.*

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## A few modifications seem pertinent

In Reviewing the AMA Guidelines for Physician Involvement in the Care of Substance-Abusing Patients, I am struck by how appropriate and useful these guidelines are twenty years later. They still incorporate basic treatment philosophies of evaluation, referral, and treatment.

I have only a few modifications that seem pertinent to today's Addiction Medicine practice. In the Level 1 category, I would add that there are many simple and brief questionnaires (e.g. CAGE) that could be easily employed to recognize alcohol or drug abuse/dependence.

For the Level 2 Guidelines, I would encourage treatment team personnel, rather than simply the physician, to "appraise the patient of the nature of his disease and requirement for recovery," and "develop a long term treatment plan..." For the physician accepting limited responsibility it seems someone on the treatment team affiliated with a treatment program would be better able to spend the time and explain what is involved in a long term treatment plan.

Finally, I would recommend that ASAM be listed as a source of information for training and experience in the field of Addiction Medicine for Level 3 guidelines. This would provide interested physicians with a source for training programs and outline requirements to be certified by ASAM.

**Steven R. Ey, MD**

*Doctor Ey has a private practice of Addiction Medicine and Family Practice in Laguna Beach. He is affiliated with the chemical dependency treatment programs at South Coast Medical Center and Hoag Memorial Hospital.*

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## It is time for a new AMA statement

Twenty years ago the AMA statement on the three levels of competence expected of physicians treating patients with addictive disorders was far-sighted. Studies had shown that most physicians felt uninformed and incompetent to deal with addiction in their patients. In hospital settings, where the serious sequelae of addiction were found, diagnosis of the primary problem was rare.

When the diagnosis was made, physicians rarely made any attempt to treat the addiction.

In the seventies, physicians interested in addiction medicine were split into two camps. Those of us interested in alcoholism joined the American Medical Society on Alcoholism. Physicians interested in drug addiction had no national organization and many joined the California Society.

In 1983, the AMA supported the development of a national medical organization which became ASAM. In 1989, the AMA created a seat in its House of Delegates for ASAM and added Addiction Medicine (ADM) to the list of subspecialties which a physician can use to describe his/her practice in AMA records. Now, as we approach the millennium, addiction medicine is being taught in all medical schools. A Certificate of Added Qualification (CAQ) in addiction psychiatry was established in 1993. We hope that CAQs will be established for all medical specialties. Until that time, ASAM certification is available to any licensed physician.

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## A new AMA statement should encourage physicians to identify and work with their certified colleagues as consultants.

It is time for a new AMA statement. Addictive disorders have not diminished in frequency or severity. Early diagnosis and intervention are even more important today than they were 20 years ago. Recognition of the chronic nature of addictive disorders, well described by O'Brien and McLellan (Lancet, 1996), means that physicians must educate and support these patients over years rather than days or weeks. No one treatment episode will cure addiction. Relapse and noncompliance are the norm. Physicians should know how to respond to these events comfortably and competently. Basic knowledge for each physician should include the fundamentals for recovery in addiction to the fundamentals of active addiction.

The new AMA statement should recognize the subspecialty of addiction medicine and encourage physicians to identify and work with their certified colleagues as consultants. This pattern of medical practice has been well established with the development of clinical specialties in medicine.

Two decades of clinical experience and research make the development of a new AMA statement both timely and appropriate. AMA leadership is important in providing support and direction for the practicing physician and for medical education. CSAM and ASAM can do much to facilitate that leadership.

**John N. Chappel, MD**

*Doctor Chappel is a Professor of Psychiatry at the University of Nevada School of Medicine and Medical Director of the Chemical Dependency Program, West Hills Hospital, Reno.*

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Over the past 5 years I have changed my practice from one that specialized in the treatment of patients who presented to a treatment facility for their alcohol and/or drug dependence to a general internal medicine practice which has special expertise in the assessment and treatment of patients who present with alcohol

and/or drug related problems. This transition has made me aware that in the clinical world of unselected patients the assessment of those presenting with alcohol and/or drug related problems requires the practitioner to be knowledgeable about not only chemical dependency but also psychiatric disorders and pain syndromes. These disorders merge commonly in the office of a physician who holds him/herself out to be able to assess and treat chemical dependency. This means that the physician needs to also

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**A new AMA statement should indicate that the physician needs to be knowledgeable about the interaction of chemical dependency with pain and psychiatric disorders.**

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be aware of the community resources available to assist with the management of chemical dependence, pain and psychiatric disorders. I suggest that a statement be included to indicate that the physician needs to be knowledgeable about the interaction of chemical dependency with pain and psychiatric disorders.

The guidelines do not deal with the role of the physician as part of a treatment team. Moreover, the guidelines discuss the need to be knowledgeable about and be able to utilize various health, social, vocational, and spiritual *support* systems. They do not address the need to be knowledgeable about and be able to utilize *treatment*

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**If the guidelines do not acknowledge that there are treatment systems, why should insurance reimburse such things?**

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systems. Physicians need to know what works for whom and what is the prognosis for a particular treatment. Patients demand this in every other area of medicine. Moreover, if the guidelines do not acknowledge that there are treatment systems, then why should insurance reimburse such things? I suggest that an additional line be added stating that the physician become knowledgeable about and be able to refer patients to appropriate treatment programs.

**P. Joseph Frawley, MD**

*Doctor Frawley has a private practice of Internal Medicine in Santa Barbara. He is Assistant Medical Director of Cottage Chemical Dependency Treatment Program.* □

## New Policy Research Center for California

Three projects have begun under the aegis of a new policy research center -- the California Collaborative Center for Substance Abuse Policy Research. The mission of the new center is to provide scholarly and objective information to support informed decision-making on substance abuse policy at the state and local levels in California.

David E. Smith, MD and Philip R. Lee, MD are the driving forces behind this new venture. Doctor Smith is the Medical Director and Doctor Lee chairs the Advisory Board. Doctor Lee is UCSF Chancellor Emeritus and former US Assistant Secretary of Health. Doctor Smith is Founder and President of Haight-Ashbury Free Clinics, Inc., Immediate Past President of the American Society of Addiction Medicine, and Medical Director for the California Department of Alcohol and Drug Programs. Carol L. Estes, PhD, Co-Director of the new center, is the Director of the Institute for Health and Aging at UCSF. Joseph Gudysh, PhD, the Research Director, is a research fellow at the UCSF Institute on Health and Policy Studies. Richard Seymour, MA, Managing Editor of the *Journal of Psychoactive Drugs*, is the Center's Coordinator. The new center is to be coordinated by the UCSF Institute for Health and Aging in the School of Nursing and the Institute for Health Policy Studies in the School of Medicine.

Funding for the three projects comes from the California Department of Alcohol and Drug Programs (ADP). In line with its efforts toward improving the medical and scientific basis of addiction treatment in California, ADP is supporting research into prevention outcome, with Friedner Wittman, PhD; adolescent treatment efficacy, with Elaine Zahnd, PhD; and drug court efficacy, with Joseph Gudysh, PhD.

For more information, contact Richard Seymour at 415/565-1904 or hapjpld@aol.com. □

## New Tobacco Research Centers

Why do some children who experiment with tobacco become addicted, while others do not? Are there genes that predispose some people to tobacco addiction or protect them from it?

In the face of an increase in cigarette smoking by young people in recent years as charted by the annual Monitoring the Future surveys, the National Institute on Drug Abuse (NIDA) announced funding of at least \$20 million over the next 5 years to augment tobacco research with new Tobacco Research Centers.

NIDA calls the centers "transdisciplinary," saying they will bring together scientists in economics, marketing, and health policy with scientists in molecular biology, genetics, behavioral science and epidemiology.

Additional information is available from NIDA's website: [www.nida.nih.gov](http://www.nida.nih.gov). □

cost of full parity in California. The sophistication of that report and the prestige of the actuarial firm preparing it make it clear that they are pouring significant dollars into the effort.

- For HMO systems in California, the increase in cost would be:
  - 0.9% for *serious* mental illnesses only (schizophrenia, bipolar disorder, OCD, ...);
  - 1.0% for *all* mental illnesses excluding substance abuse;
  - If substance abuse coverage is added, the increase would jump to 1.3% for serious mental illnesses and 1.4% for all mental illnesses.
- For all systems averaged (fee for service, managed indemnity, preferred provider, point of service and HMO) the average increases would be as follows:
  - 1.5% for serious mental illnesses only;
  - 1.7% for all mental illnesses excluding substance abuse;
  - If substance abuse coverage is added, the increase would be 2.3% for serious mental illnesses and 2.6% for all mental illnesses.

A cost analysis by the staff of the Assembly Appropriations Committee has determined that the cost of implementing AB88 for all state employees and dependents would be \$1.2 million. □

## Web Sites of Interest

[www.whitehousedrugpolicy.gov](http://www.whitehousedrugpolicy.gov)  
Office of National Drug Control Policy  
(ONDCP)

[www.guideline.gov](http://www.guideline.gov)  
National Guideline Clearinghouse

[www.managedcaresurvival.com](http://www.managedcaresurvival.com)

[www.health.org/pubs/insur/](http://www.health.org/pubs/insur/)

SEND INFORMATION ABOUT OTHER WEB SITES OF INTEREST TO ADDICTION MEDICINE SPECIALISTS TO CSAM@COMPUSERVE.COM. THEY WILL APPEAR IN FUTURE ISSUES OF CSAM NEWS.

## Physicians needed for the DEC's for the Nurses' Diversion Program

The California Board of Registered Nursing (BRN) offers a voluntary, confidential, Diversion Program for registered nurses whose practice may be impaired due to chemical dependence or mental illness. The Program is managed for BRN by Managed Health Network (MHN). MHN provides assessment, evaluation, referral and monitoring services for all RNs in the program. After initial assessment, the nurse is assigned to one of 13 Diversion Evaluation Committees (DECs) throughout the state. The DEC's discuss the treatment plan for each nurse, provide a case consultant for each nurse, and evaluate the nurse's progress and determine safety to return to practice.

Each 5-member DEC has three nurses, one physician, and one public member. Each DEC meets four times a year. Travel expenses are paid and members receive \$100 fee for the all-day meeting and an additional \$100 for preparation for each meeting.

Physicians who currently serve include Mickey Ask, MD, of Loma Linda; Daniel Lewis, MD, of Sacramento; and Donald Kurth, MD, of Alta Loma.

Kathleen Meyer, the Diversion Program Manager for BRN, said the Program is recruiting potential physician DEC members. For information, contact her at 916/324-2986. □

### CSAT NATIONAL STRATEGY PLAN

## Questions

- How do you describe the stigma associated with addiction? What examples can you give of its impact?
- What would improve the relationship between the general health care system and the substance abuse treatment system?
- Where are the treatment gaps in the substance abuse treatment system?

The Center for Substance Abuse Treatment (CSAT) requests your answers on these and other questions as they develop a national strategy to guide program and policy development for the future. The complete announcement from CSAT as it appeared in the Federal Register on June 8, 1999 is available from the CSAM office or on the National Treatment Plan web site: <http://www.natxplan.org>.

Send your comments to CSAT by US mail to Rockwall II Building, 5600 Fishers lane, Rockville, MD 20857 or by e-mail from the National Treatment Plan web site. □

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## 12th National Conference on Nicotine Dependence

October 14-17, 1999  
Cleveland, Ohio

**Sponsored** by American Society of Addiction Medicine  
**For information:** ASAM, 4601 North Park Drive, Suite 101, Chevy Chase, MD 20815. Phone: 301/656-3920.  
E-mail: email@asam.org. Web: [www.asam.org](http://www.asam.org)

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## American Society of Addiction Medicine State of the Art in Addiction Medicine

November 4-6, 1999  
Marriott at Metro Center, Washington, DC  
**For information:** ASAM, 4601 North Park Drive, Suite 101, Chevy Chase, MD 20815. Phone: 301/656-3920.  
E-mail: email@asam.org. Web: [www.asam.org](http://www.asam.org)

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## AMERSA National Conference

November 4-6, 1999  
Old Towne, Alexandria, Virginia  
**Sponsored by** Association for Medical Education and Research in Substance Abuse  
**For information** contact AMERSA, Brown University Center for Alcohol and Addiction Studies, Box G Providence, RI 02912, Phone: 401/863-2960

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## 10th Annual Meeting and Symposium American Academy of Addiction Psychiatry

December 2-5, 1999  
Nassau, Bahamas  
**Topics include** The Criminal Justice System and Substance Abuse, American Sports and Substance Abuse, Who Gets Treated Where: Establishing Procedures for Levels of Care, Inpatient v. Outpatient Detoxification Treatments, Office-Based Opioid Treatment, Physician Health, JCAHO Accreditation.  
**For information** contact AAAP, 7301 Mission Road, Suite 252, Prairie Village, KS 66208. Phone: 913/262-6161; Fax: 913/262-4311; E-mail: addicpsych@aol.com

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## Entering the New Millenium – From Pioneers to Innovators American Methadone Treatment Association

April 9-12, 2000  
Hyatt Regency, Embarcadero Center, San Francisco  
**Sponsored by** American Methadone Treatment Association, Inc. and American Society of Addiction Medicine

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### POSITION WANTED

ASAM Certified Connecticut MD with MPH and 10 years experience in a dual diagnosis detoxification program, experience with methadone, and wide knowledge of public health diseases (STDs, TB, hepatitis, etc.) is looking for a California placement.

Contact Claire S. Reyes, MD, Blue Hills Hospital, 51 Coventry Street, Hartford, CT 06112. 860/722-2105 (phone); 860/722-2146 (fax); cmannya@aol.com (e-mail).

## New Members

*As ASAM notifies us of new members, we ask them for information about their current position. When we receive a response, we include it in the newsletter.*

**Evelyn R. Edelmuth**, a psychiatrist, is Service Director, Inpatient Adult Services and Chemical Dependency at Charter Behavioral Health in Palm Springs.

**Walter Eric Jacobson** is a Consultant Psychiatrist at Northridge Hospital Medical Center Pain Management Program.

**David Andrew Sack**, a psychiatrist, is Senior Medical Director at College Hospital in Cerritos and is President and Medical Director of College Health IPA.

**Dykes Maxwell Young** is a psychiatrist with Kaiser Permanente in Pleasanton.

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## News About Members

**H. Westley Clark, MD, JD, MPH** received the Salomon Carter Fuller Award of the American Psychiatric Association. The award honors pioneers in work which has significantly improved the quality of life for Black people. "Doctor Clark personifies the spirit of the Salomon Carter Fuller Award because of his extensive collaborations and contributions to the field of psychiatry in general and for his humanitarian support for those afflicted with substance abuse-related issues," said Nelba Chavez, PhD, SAMSHA Administrator. Previous recipients of the award include Dr. David Satcher, Bill Cosby, Marian Wright Edelman, Lerone Bennett, Dr. James Comer and Coleman Young.

**Donald Gragg, MD** was elected President of the 1,100 member World Affairs Council of San Diego.

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**EDITORS**  
Donald R. Wesson, MD  
Gail Jara

**PRODUCTION**  
Michael Barack

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The California Society is a specialty society of physicians founded in 1973. Since 1989, it has been a State Chapter of the American Society of Addiction Medicine.

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## CONTINUING MEDICAL EDUCATION

*ASAM MRO Course*

### **The Basics of Being a Medical Review Officer**

— Friday morning

### **The Latest on the Science, Rules and Art of Drug Testing and Assessment**

— Friday 1pm to Sunday noon  
July 16-18, 1999 in Washington D.C.

November 12-14, 1999 in Lake Buena Vista, FL

### **Forensic Issues in Addiction Medicine**

Thursday, July 15, 1999 in Washington D.C.

**Credit:** Up to 19 hours of Category 1 credit for MRO Course; 7 hours of Category 1 credit for Forensic Issues Course

**Fees:** Full Course \$575 ASAM members, \$650 non-members; Course One (The Basics...) \$75 members, \$100 non-members; Course Two (The Latest on the Science, Rules and Art...) \$500 members, \$550 non-members.

Forensic Issues, \$225

**For information:** ASAM, 4601 North Park Drive, Suite 101, Chevy Chase, MD 20815. Phone: 301/656-3920. E-mail: email@asam.org. Web: [www.asam.org](http://www.asam.org)

**MRO Certification:** The Medical Review Officer Certification Council (MROCC) will offer the Medical Review Officer Certification Exam immediately following each ASAM course. A separate application/eligibility form must be requested from the MROCC, 9950 West Lawrence Ave., Suite 106A, Schiller Park, IL 60176. Phone: 847/671-1829.

*50th Annual Meeting*

### **International Doctors in Alcoholics**

#### **Anonymous**

August 4-8, 1999

The Camelback Resort Inn, Scottsdale, Arizona

**Credit:** 12 hours of Category 1 Credit for the scientific portions of the meeting

**Fees:** \$300 IDAA member; \$200 spouse/significant other; \$175 resident/student; \$60 Alateen

**For information** contact George A. Streza, MD, registrar 6040 N. 41st Street Paradise Valley, Arizona 85253.

Phone: 602/808-0631; Fax: 602/808-0631;

E-mail: gstreza@home.com

*CSAM's State of the Art 1999:*

### **Evidence-Based Addiction Medicine**

October 6-9, 1999

Marina Beach Marriott, Marina del Rey

**Topics** include: New Treatment Medications including Acamprosate and Buprenorphine, Buprenorphine in Office-Based Treatment, NIDA's Clinical Trials Network, Compulsive Disorders, Update on Smoking Cessation / Pharmacologic Treatments, Alternative Therapies, Assessing the Risks/Benefits of Alcohol Use

**Credit:** 26 hours Category 1 Credit for Thursday-Saturday; an additional 6 hours are available for the pre-conference workshops on Wednesday.

**For more information:** California Society of Addiction Medicine, 3803 Broadway, Oakland, CA 94611.

Phone: 510/428-9091. E-mail: csam@compuserve.com

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#### **Inside:**

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- Parity Legislation Update
- 1999 State of the Art Conference  
October 6-9 in Los Angeles