

The Need To Invest in Adolescent Treatment: *Policy Recommendations for Adolescent Substance Abuse Treatment in California* Executive Summary

April 2004

This report was prepared by the Charles and Helen Schwab Foundation for California policy makers.

CHARLES AND HELEN SCHWAB FOUNDATION

Substance Abuse Program
Ed Carlson, Program Officer
1650 S. Amphlett Blvd.
Suite 300
San Mateo, CA 94402
650.655.2283
www.schwabfoundation.org

ABOUT THE CHARLES AND HELEN SCHWAB FOUNDATION

The Charles and Helen Schwab Foundation is a private charitable organization that stewards a philanthropic vision of building partnerships to improve lives. Through direct service and partnership in grant making initiatives, the foundation seeks to impact individual lives in a meaningful, lasting way and work collaboratively to inform philanthropic practices.

The foundation focuses its work in four program areas that reflect critical social issues with clear points of intersection — Homelessness, Poverty Prevention, Substance Abuse and Learning Disabilities. The foundation's goal in each of these areas is to promote the self-sufficiency of both individuals and organizations, as well as a positive interdependence with personal and community support systems that individuals require in order to achieve stability and fulfillment in their lives.

Partnership and collaboration are hallmarks of the foundation's work, which enables its programs and initiatives to capitalize on a synergy of resources, a confluence of expertise and a broad familiarity with diverse populations and environments across the country. Working collaboratively in multiple arenas and at many levels enables the foundation and its partners to forge holistic solutions to overlapping problems.

The foundation, based in San Mateo, California, was established by financier Charles R. Schwab and his wife Helen O. Schwab in 2001 from the merger of the Schwab Family Foundation and the Schwab Foundation for Learning.

A LETTER FROM HELEN AND CHARLES SCHWAB

California's substance abuse treatment system for adolescents is in a state of crisis. Less than 10% of adolescents who need treatment actually receive services. The vast majority of those who do obtain treatment receive it as a consequence of entering the criminal justice system.

When we formed our foundation, we made a conscious decision to concentrate our resources on the most fundamental roadblocks to self-sufficiency and attainment in the lives of individuals and families. Alcohol and other drugs are a serious roadblock for many youth during the critical developmental years of adolescence. Effective substance abuse treatment must be made available to all youth who need it, whether it is a child conditioned by parental substance abuse, an adolescent in the juvenile justice system or a student failing in school as a result of drug use.

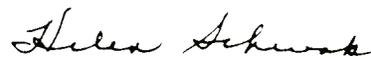
This report is the result of over two years of planning, research and partnership with individuals and agencies working in the field of adolescent substance abuse. Our foundation has worked closely with the County Alcohol and Drug Program Administrators Association of California and provided funding to develop the Alcohol and Drug Policy Institute, whose mission is to conduct and use research to support change in the field. Our first major project is this report on the state of the adolescent treatment system in California. It presents a series of policy recommendations that outline a course of action for California, immediately and over the long term, to establish a responsive system of adolescent care that implements best practices based on sound research.

Such a comprehensive approach will not be achieved without significant collaboration and partnership among public agencies and other providers of ado-

lescent care, and between local, county and state levels of government. The policy recommendations outlined in this report model the value of collaborative work, demonstrating that partnerships have much more profound impact than funding alone because they result in broader expertise and more lasting changes within organizations and systems.

These policy recommendations challenge us with a clear choice: we can partner to use philanthropic and public resources constructively to detect and treat substance abuse before it derails lives, or we can continue to spend our limited resources on the human and societal costs of addiction. These recommendations are a first step — a critical first step we must take because our youth and California's future hang in the balance.

Our goal is to create treatment capacity for 200,000 adolescents throughout the state and ensure that youth suffering from substance abuse have immediate support and treatment in their community. Our hope is that you will join us in our efforts to address this public health challenge and assist us as we work to find solutions. Together, we will make a difference that would be impossible to accomplish acting individually.



Helen O. Schwab

President, Charles and Helen Schwab Foundation



Charles R. Schwab

Chairman, Charles and Helen Schwab Foundation

BACKGROUND AND ACKNOWLEDGEMENTS

When I joined the Charles and Helen Schwab Foundation to head the newly formed Substance Abuse Program, I was directed by the board to focus on treatment expansion and system change for adolescent substance abuse. In researching these issues, I found that the need for treatment services for adolescents was truly at a crisis state in California. Serving as an advisor to the Little Hoover Commission on its 2003 report, *For Our Health and Safety: Joining Forces to Defeat Addiction*, reinforced this assessment. Despite nearly two decades of experience in the treatment field, the scarcity of adolescent-specific services in California came as a shock.

To address this situation, the foundation collaborated with the Alcohol and Drug Policy Institute (ADPI) to develop a report on adolescent substance abuse treatment in California. Our objective was to provide information that would help policy makers understand the nature of substance abuse and the value of treatment, and take action to expand the availability of treatment for adolescents. We commissioned the Public Health Institute to compile California-specific research that would define the problem, analyze the current treatment system for adolescents, outline the characteristics of high-quality treatment design and assess the realistic financing options for such a system.

In December 2003, key people in the substance treatment field — treatment providers, county alcohol and drug administrators, researchers and educators — gathered to review the findings. Two days were spent in detailed discussions about the current state of adolescent treatment, an optimal system for adolescent treatment and what needs to

be done to create such a system in California. The outcome was more than 30 possible policy recommendations that provided the basis for the eight recommendations in this report. It is a tribute to the passion of everyone who contributed to this report that differences of opinion and organizational self-interests were set aside to be able to develop recommendations that do not favor any one organization, service provider or government agency, but rather present non-biased, feasible approaches to help adolescents in need of substance abuse treatment.

A special thanks is owed to all the participants in this project for their input, disagreement, support and discussion. I also want to acknowledge and thank the foundation's board for supporting this initiative, as well as the foundation staff and consultants who helped to make this report a reality. And, to the reader, thank you for your attention to this report. It is only a beginning. There are many dedicated and knowledgeable people who are willing and prepared to help legislators and other state leaders, through future reports and other means, make informed decisions about what they can do to help adolescents who suffer from substance abuse.



Ed Carlson
Substance Abuse Program Officer
Charles and Helen Schwab Foundation

INTRODUCTION

Every resident of California is affected by the ravages of adolescent substance abuse. Millions of tax dollars are spent annually on the crime, delinquency and health care costs associated with teens who abuse alcohol and drugs. While every taxpayer in the state bears the financial burden, the true victims of this epidemic are the young people who are caught up in a cycle of abuse, addiction and despair.

Alcohol and drug treatment for youth is at a turning point, both in California and in the nation as a whole. New treatment methodologies have been designed to address the unique needs of adolescents, giving states the opportunity to create systems of care that address the comprehensive needs of adolescent substance abusers and their families. But in California, two key hurdles prevent adolescents with substance abuse problems from receiving the help they need: the absence of funding for adolescent treatment and the lack of coordination among the agencies and organizations that serve youth.

The little funding that does exist in a complex web of federal and state programs is threatened by California's severe budget crisis, and no clear resolution is in sight. The majority of youth with substance abuse problems are referred to treatment through the juvenile justice system, which, though better funded than many other youth programs, still cannot meet the need for substance abuse treatment for its wards. The remaining publicly funded treatment programs in the state — some 1,700, of which 400 offer services to youth — struggle with inadequate funding, high employee turnover and rudimentary data collection

systems that prevent them from adequately tracking clients' progress and program effectiveness.

Many different state departments, agencies and organizations have a role in serving adolescents with substance abuse problems. Developing collaborative relationships among these groups would significantly improve treatment access, delivery and quality. Yet bureaucratic hurdles and “turf” tensions make such collaborations virtually nonexistent. The state Department of Alcohol and Drug Programs (ADP) has worked to implement reforms, but has not been empowered by the state or policy makers to affect meaningful change.

In exploring these troubling issues, the Charles and Helen Schwab Foundation joined with the Alcohol and Drug Policy Institute (ADPI) — a group comprised of treatment providers, county alcohol and drug administrators, researchers and educators — to define the state of adolescent substance abuse treatment in California. The foundation then held discussions with ADPI members and other interested parties to create a framework for a better system of adolescent substance abuse treatment.

Eight policy recommendations emerged from these activities, each addressing a different component of an integrated continuum of care for adolescents. We recognize that California's current budget crisis stresses the need to optimize existing resources. However, we feel strongly that now is the time to bring these recommendations to the table for discussion. Our desire is not to divert funds from existing programs to support these recommendations. Rather, we encourage the state to make these recommendations — and the overarching problem of adolescent substance abuse — high priorities as the budget crisis abates. Nor do we advocate for the creation of more bureaucracy. Instead, we propose collaboration among the agencies and entities that serve youth to ensure that no child in need goes unnoticed.

The first policy recommendation calls for the establishment of a Governor's Council on Adolescent Substance Abuse, comprised of heads of state departments that work with youth. The challenges of dealing with adolescent substance abuse require high-level intervention, and the Governor's Council is designed to provide a forum for bringing this critical issue to the highest level of state government. The Governor's Council will be responsible for the strategic planning, coordination and allocation of state resources for adolescent substance abuse treatment services. It will provide counties with technical and administrative support to implement county-based adolescent drug and alcohol treatment programs. The head of the California Department of Alcohol and Drug Programs is the likely choice to lead this council.

The second policy recommendation proposes that every county develop an integrated treatment system for youth with substance abuse problems. Most treatment services are delivered at the county level, and the greatest opportunities for collaboration and resource sharing exist here. This recommendation

calls for counties to assemble a coalition of representatives from publicly funded youth programs to inventory existing county resources and collectively define the components needed to create a streamlined continuum of care for adolescent substance abusers. The coalition will draft an annual plan for adolescent drug and alcohol services in the county, approved by the county board of supervisors. Through the planning process, the county will develop a thorough understanding of its strengths and shortfalls in the area of adolescent substance abuse care, enabling it to develop an annual action plan to maximize funding and meet the needs of its youth more effectively.

The third policy recommendation calls for the adoption and mandated adherence to a set of treatment guidelines developed by the Department of Alcohol and Drug Programs. The ADP's Youth Treatment Guidelines present specific standards of care for adolescent substance abuse treatment programs, and provide a blueprint for building treatment systems that address the comprehensive needs of adolescents. But despite their clear value, the guidelines have languished for lack of mandate and funding.

Screening and assessment are two critical precursors to appropriate treatment for youth, yet the state and counties have not adopted standardized, proven screening and assessment instruments. The fourth policy recommendation calls on the state to establish specific protocols for the screening and assessment of adolescents with potential drug and alcohol problems. It recommends that adolescents receive periodic screenings in a variety of settings where youth interact — for example, schools, community health organizations and physicians' offices. Screenings are conducted to identify youth who exhibit signs of a potential drug or alcohol problem. Assessments, performed by health professionals, would provide a diagnosis and a treatment plan to address problems that are identified. It is critically important that counties develop standardized

The Effects Of Drug Treatment

Drug abuse can successfully be treated, and the benefits of treatment continue to be seen one year and five years after treatment, as this survey of adults demonstrates. Similar studies confirm these findings in adolescents.

One Year After Treatment

ILLICIT DRUG USE DECREASED BY 50%
ILLEGAL ACTIVITY DECREASED BY 60%
DRUG SELLING FELL BY NEARLY 80%
ARRESTS DOWN BY MORE THAN 60%
TRADING SEX FOR MONEY OR DRUGS DOWN BY NEARLY 60%
HOMELESSNESS DROPPED BY 43% AND RECEIPT OF WELFARE BY 11%
EMPLOYMENT INCREASED BY 20%

SOURCE: OFFICE OF NATIONAL DRUG CONTROL POLICY: "DRUG ABUSE IN AMERICA."
WASHINGTON, DC: EXECUTIVE OFFICE OF THE PRESIDENT, POWER POINT SLIDE #105. AVAILABLE WWW.WHITEHOUSEDRUGPOLICY.GOV

Five Years After Treatment

USERS ANY OF ILLICIT DRUGS REDUCED BY 21%	NUMBERS ENGAGING IN ILLEGAL ACTIVITY SIGNIFICANTLY REDUCED
COCAINE USERS BY 45%	56% FEWER STEALING CARS
MARIJUANA USERS BY 28%	38% FEWER BREAKING AND ENTERING
CRACK USERS BY 17%	30% FEWER SELLING DRUGS
HEROIN USERS BY 14%	23% FEWER VICTIMIZING OTHERS
38% FEWER INJECTING DRUGS	34% FEWER HOMELESS

SOURCE: OFFICE OF NATIONAL DRUG CONTROL POLICY: "DRUG ABUSE IN AMERICA."
WASHINGTON, DC: EXECUTIVE OFFICE OF THE PRESIDENT, POWER POINT SLIDE #106. AVAILABLE WWW.WHITEHOUSEDRUGPOLICY.GOV

protocols for the administration of scientifically-based screenings and assessments. Without a proper diagnosis, treatment is compromised.

Inadequate funding presents an array of problems for state and county governments — problems that are likely to persist until economic conditions improve. This situation, however, presents an opportunity to ask government to reassess priorities and create a new and sustainable funding source specifically directed to adolescent substance abuse treatment. The fifth policy recommendation does just that. Currently the state does not have a single funding stream dedicated to adolescent care, yet many opportunities exist to create one. Other states have allocated funds from vanity license plates, marriage licenses, alcohol taxes and lottery winnings to fund adolescent programs. The future well-being of California rests

on the shoulders of today's adolescents. A sustained funding source to help prevent and treat adolescent substance abuse disorders would be money well spent.

The private sector can play an important role in improving access to treatment for California's youth, primarily through achieving parity for adolescent substance abuse treatment in health insurance coverage. The sixth policy recommendation calls upon the state to mandate that private insurance plans offer substance abuse and mental health coverage equal to coverage that is provided for medical disorders and diseases. Such coverage would cost consumers only \$5 per year, while the benefits would be enormous. Parity would reduce pressure on the state budget, and the burden to citizens and businesses. With parity, many more adolescents have access to the treatment they need at a minimal cost while saving lives and dollars.

In order to ensure that funding is well-spent, the state needs an accurate measurement and evaluation system to track and monitor the effectiveness of treatment programs. To date, the treatment community has not agreed upon a standardized set of outcome measures, and it is severely limited in its ability to collect and share data on the clients it serves. In response to a federal mandate, California is in the process of developing a database to measure client outcomes. Known as Cal-OMS, this database will collect information on all adults in federally funded drug and

health issue. The eighth and final policy recommendation proposes a public awareness campaign to draw attention to adolescent substance abuse as a serious public health problem with wide-ranging social consequences. Everyone who interacts with youth should be aware of the risk factors that tend to predispose a youth to substance abuse, while recognizing and encouraging the protective factors that prevent youth from abusing drugs and alcohol. Rather than stigmatize the youth who comes forward for treatment, we must address his or her problems

Although research on the effectiveness of adolescent substance abuse treatment is a relatively new field, there is significant evidence that treatment is both medically effective and cost-effective. Studies indicate that treatment reduces both drug use and crime by 40% to 60%. According to several conservative estimates, every \$1 invested in treatment yields a return of between \$4-7 in reduced crime, criminal justice costs and theft. When health care savings are included, total savings can exceed costs by a ratio of 12:1.

PHYSICIAN LEADERSHIP ON NATIONAL DRUG POLICY, ADOLESCENT SUBSTANCE ABUSE:
A PUBLIC HEALTH PRIORITY, CENTER FOR ALCOHOL AND ADDICTION STUDIES, BROWN UNIVERSITY

alcohol programs in the state to facilitate program evaluation and treatment effectiveness. Although it does not contain fields of specific relevance to adolescents, it provides the only current opportunity for the state to measure the outcomes of adolescents in treatment. The seventh policy recommendation calls for adding adolescent data to Cal-OMS. This would be an important first step in ensuring that the programs to which youth are referred are effective.

One of the primary obstacles to gaining more support for adolescent treatment funding is the underlying issue of stigma. Unfortunately, the stigma attached to substance abuse inhibits many from taking action. Substance abuse is often viewed as an act of moral weakness rather than a disease that progresses from voluntary user to involuntary addict. It is critical that policy makers and the public understand the nature of substance abuse as a public

with compassion and understanding, knowing where in the community to refer the youth for help.

Research shows that treating an adolescent costs considerably less than incarcerating a youth. Drug use and criminal activity decrease for virtually all who enter treatment — with increasingly better results the longer their stay in treatment. Those who receive treatment show an increase in employment, improved physical health, and improved social and interpersonal skills. It is critical for California to adopt a more cost-effective and medically effective approach to adolescent substance abuse. It is time now for the state and counties to bring their resources to the table — foremost among them, funding and collaboration — to develop an integrated continuum of care for youth through the most intelligent and effective means possible.

THE NEED TO INVEST IN ADOLESCENT SUBSTANCE ABUSE TREATMENT



All segments of society are affected, as no population group is immune to substance abuse and its effects. Men and women — of all ages, racial and ethnic groups and levels of education — drink, smoke and use illicit drugs.¹

Adolescence is a critical juncture on the journey to adulthood, a time when young people test the rules and limits with which they were raised. Many experiment with alcohol and other drugs. For some, this initial experimentation advances to regular use and ultimately escalates into abuse and dependence, with serious consequences not only for the adolescent, but for families and communities as well.

Too often we allow young people to “fail” in this manner and then punish them for their failure. The number one source of referrals to adolescent drug treatment programs in the United States is the juvenile justice system.² The vast majority of adolescents who receive substance abuse treatment have already been involved with the criminal justice system before it has been determined that they need substance abuse treatment.³ For the good of society and the health of our communities, it is critical to respond to the silent cries for help from youth before their actions escalate into criminal behavior and their future is forever marked by their involvement with drugs and the juvenile justice system.

The most recent findings of Monitoring the Future, an ongoing study of the behaviors, attitudes and

values of 8th, 10th and 12th graders in America, show a slowing of declines in alcohol and illicit drug use (which peaked in 1996) among 10th and 12th graders, and a halt of declines in 8th graders’ use of illicit substances other than marijuana.⁴

Lloyd Johnston, principal investigator of the Monitoring the Future study, observes: “Eighth-graders have been the harbingers of change observed later in the upper grades. The fact that they are no longer showing declines in their use of a number of drugs could mean that the declines ... observed in the upper grades also will come to an end soon. One concept ... to the understanding of drug epidemics is that of ‘generational forgetting’. Even though one generation ... may come to appreciate the hazards of a drug, those young people who follow after them may not possess that knowledge. It is possible that what we are observing with today’s eighth-graders is an early signal that generational forgetting is about to take place again, as it did in the early 1990s.”⁵

Substance abuse affects youth across all social, economic and ethnic groups. The National Institute on Drug Abuse has highlighted data demonstrating that,

contrary to stereotypes, overall rates of drug abuse among racial and ethnic minorities are similar to the general population.⁶

The process of developing a problem with substance abuse or addiction is influenced by many factors, including: genetics; society, family and peer influences; pre-existing mental health disorders; and the addictive properties of the substance being used. Research has shown that, for most children, the vulnerable periods for drug experimentation and use are periods of transition from one developmental stage to another. For example, when children advance from elementary school to middle school or junior high, they face new social challenges, such as learning to get along with a wider group of peers. It is at this stage of early adolescence, generally between the ages of 12 and 13, that children are likely to encounter drug use for the first time.⁷ Research shows that young people who

begin drinking before age 15 are four times more likely to develop alcohol dependence than those who begin drinking at age 21.⁸ And studies suggest that the younger an individual is at the onset of substance use, the greater the likelihood that a substance abuse disorder will develop and continue into adulthood.

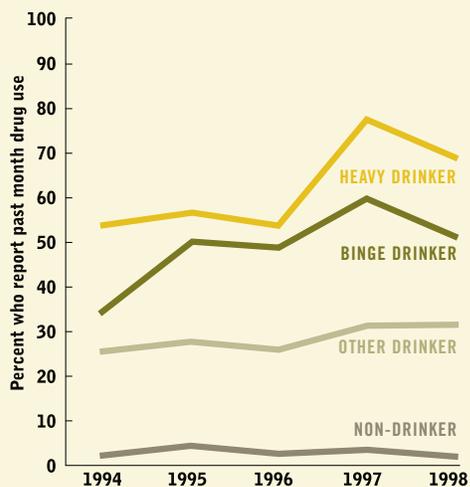
Upon entering high school, many young people face additional social, psychological and educational challenges. These challenges can lead to increased use and abuse of alcohol, tobacco and other drugs. In fact, between the ages of 12 to 20, the rates of past-month use more than double for alcohol and tobacco, and more than triple for marijuana.⁹ More than 50% of 12th graders have tried an illicit drug, and one in four is a current user.¹⁰ When adults go on to college, marry or enter the workforce, they again face risks from alcohol and other drug abuse in their new adult environments. Young adults (ages 18 – 25) are the group most likely to engage in heavy drinking, smoke cigarettes and use illicit drugs.

The risks posed by alcohol and drug use are significant at every transition from late childhood through young adulthood, but they can be mitigated through prevention and early intervention efforts at each stage of a youth's development.¹¹

Substance abuse wreaks a terrible toll on adolescents. Research shows that 70% of all deaths among youth ages 15-24 can be attributed to three causes: unintended injuries, homicide and suicide.¹² The single common denominator among all three causes is the use of alcohol and other drugs. Adolescent substance abuse is associated with motor vehicle crashes, sexual behavior resulting in unwanted or unplanned pregnancies or high-risk HIV infection, and involvement in violence and crime, according to the American Academy of Pediatrics. In addition, there is a strong correlation between adolescent alcohol use and many emotional and

Past Month Illicit Drug Use By Intensity Of Alcohol Use

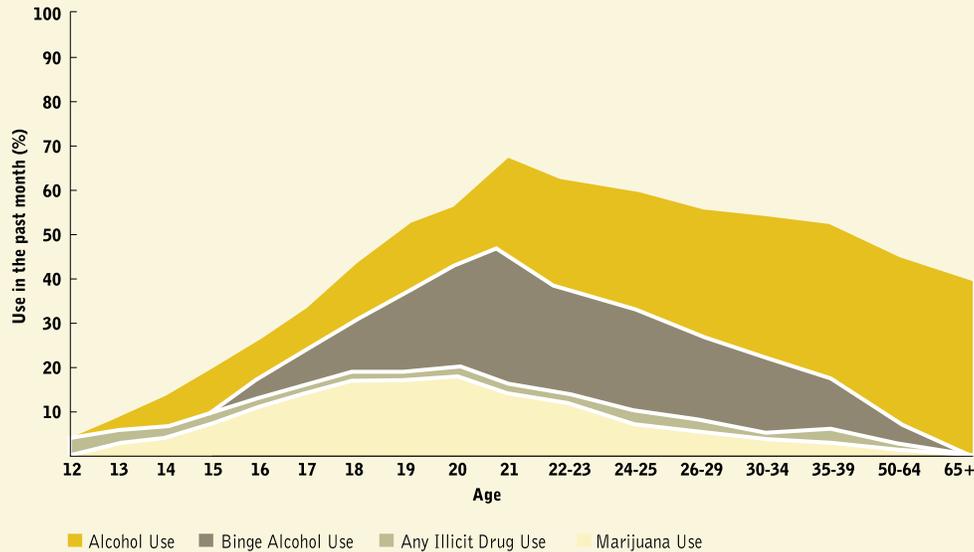
The intensity of alcohol use is directly related to the use of illicit drugs. On average, heavy drinkers and binge drinkers are 10 times more likely than non-drinkers to use illicit drugs. Alcohol use by adolescents is not "harmless" experimentation.



SOURCE: NATIONAL HOUSEHOLD SURVEY ON DRUG ABUSE, 1998

Changes In Past Month Use Of Substance By Age

Substance abuse among adolescents commonly begins at the age of 12 or 13, and typically progresses from the use of legal substances such as tobacco and alcohol to the use of illicit substances. It is important to deal with drug and alcohol use during early adolescence, in order to avoid its escalation to abuse and dependence.



SOURCE: ADAPTED FROM DENNIS, ML. "TREATMENT RESEARCH ON ADOLESCENTS DRUG AND ALCOHOL ABUSE: DESPITE PROGRESS, MANY CHALLENGES REMAIN (INVITED COMMENTARY)." CONNECTION. WASHINGTON, DC: ACADEMY FOR HEALTH SERVICES RESEARCH AND HEALTH POLICY. MAY 2002

behavioral problems including depression, intentional self-harm, aggressive behaviors, and delinquent behaviors such as fighting, stealing and truancy.¹³ As a result, many adolescents with substance abuse problems become involved with the juvenile justice system. Recent studies show that as many as four out of five teens in the juvenile justice system have drug or alcohol problems, yet fewer than 20% have access to substance abuse treatment programs.¹⁴ Another report suggests that each year more than 670,000 young people who are involved with the juvenile justice system meet the diagnostic criteria for one or more alcohol, drug or mental disorders requiring treatment.¹⁵ While the research on adolescent treatment in juvenile justice populations is limited, there is evidence that substance abuse among juvenile offenders can be effectively treated. One study reported a 74% rate of abstinence from substance use among juvenile offenders who completed treatment.¹⁶ Compared to the cost of incarceration, treatment is clearly a more economical alternative.

Alcohol and drug treatment for youth is at a turning point, both in California and in the nation as a whole. Treatment approaches are evolving but more and better services, particularly for adolescents, are needed. Initiatives to improve treatment effectiveness and build collaboration between researchers, providers and government agencies are being developed, but much more remains to be done. The treatment system remains in its infancy. Many existing pro-

Adolescent/Young Adult Mortality

Alcohol is the leading factor in the top three causes of adolescent deaths. For adolescents under 21, it is responsible for more than half of the deaths resulting from automotive accidents.

	RATE PER 100,000	(%) RELATED TO ALCOHOL
ACCIDENTS	51.2	40
HOMICIDE	14.2	30
SUICIDE	13.1	20
AUTOMOTIVE	39	45

*Automotive deaths under age 21 years 51%

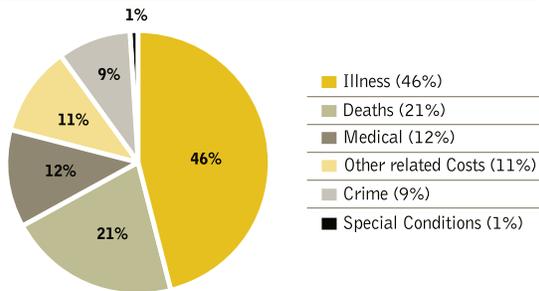
SOURCE: ADAPTED FROM ADGER, JR., H. "SUBSTANCE ABUSE: THE NATURE AND SPECIAL NEEDS OF ADOLESCENTS." ADOLESCENT SUBSTANCE ABUSE AND MENTAL HEALTH: A PUBLIC PRIORITY. JULY 18, 2003

Costs Of Substance Abuse

Substance abuse exacts a staggering cost on our national economy. Alcohol and drug abuse cost the nation more than \$275 billion a year in health care costs, crime and related expenses.

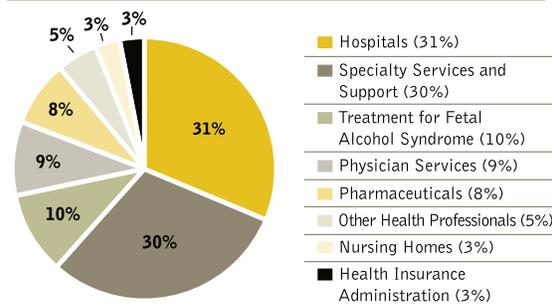
Economic Costs Of Substance Abuse Are High, 1995

ALCOHOL ABUSE \$166.5 BILLION

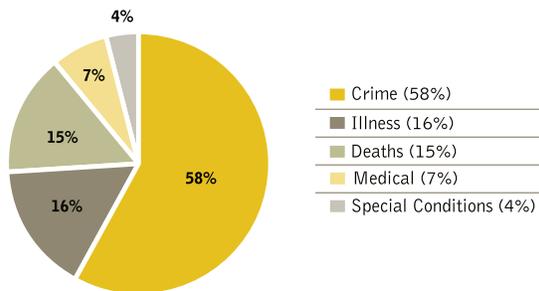


Healthcare Costs Of Substance Abuse Top \$114 Billion, 1995

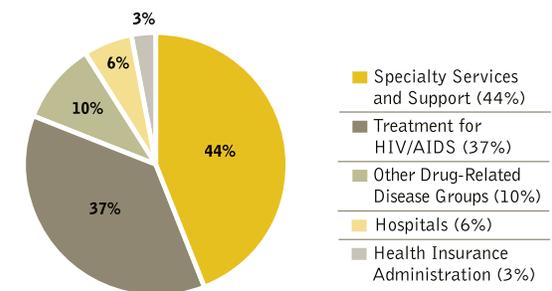
ALCOHOL ABUSE \$22.5 BILLION



DRUG ABUSE \$109.9 BILLION



DRUG ABUSE \$11.9 BILLION



SOURCE: ADAPTED FROM ROBERT WOOD JOHNSON FOUNDATION. SUBSTANCE ABUSE: THE NATION'S NUMBER ONE HEALTH PROBLEM. KEY INDICATORS FOR POLICY. UPDATE. FEBRUARY 2001. AVAILABLE WWW.RWJF.ORG

grams fail to effectively address the specific needs of youth and are unable to provide an appropriate level of treatment that supports relapse prevention and aftercare, which are critical to the long-term success of both treatment and the individual.

Policy makers, researchers, state agencies and providers must work together to address the needs of all adolescents, helping them make healthy choices on the road to adulthood. Research shows that every dollar invested in treatment yields \$7 in savings related to crime alone. When health care costs are factored into the equation, the savings relating to crime alone approach \$12 for every \$1 invested in treatment.¹⁷ In today's budget climate, these statistics are more relevant than ever. We cannot afford *not* to invest in youth.

¹ Robert Wood Johnson Foundation. Substance abuse: The nation's number one health problem. Key indicators for policy. Update. February 2001. Princeton, NJ. (Available at www.rwjf.org)

² Dennis, M.L., Dawud-Noursi, S., Muck, R. and McDermeit, M. The need for developing and evaluating adolescent treatment models. In S.J. Stevens and A.R. Morral (Eds.), *Adolescent Substance Abuse Treatment in the United States: Exemplary Models from a National Evaluation Study*. 2002. Binghamton, NY: Haworth Press.

³ Robert Wood Johnson Foundation. (n.d.) Reclaiming Futures: Quick Facts. Retrieved February 2004. (Available at www.reclaimingfutures.org/quickfacts.asp)

⁴ Johnston, L.D., O'Malley, P.M. and Bachman, J.G. Monitoring the Future Study. 2003 data from in-school surveys of 8th, 10th and 12th grade students. Ann Arbor, MI: University of Michigan. 2003. (Available at <http://www.monitoringthefuture.org/data/03data.html#2003data-drugs>)

⁵ News and Information Services. Press release. December 19, 2003. Ann Arbor, MI: University of Michigan. (Available at www.monitoringthefuture.org/pressreleases/03drugpr.pdf)

⁶ National Institute on Drug Abuse. Monitoring the Future. High school and youth trends. *NIDA InfoFacts: Science-based facts on drug abuse and addiction*. 2003. Retrieved February 2004. (Available at www.drugabuse.gov/Infofax/HSYouthtrends.html)

⁷ American Academy of Pediatrics. Practicing adolescent medicine: Priority health behaviors in adolescents: Health promotion in the clinical setting. *Adolescent Health Update*. 3(2). 1991. (Available at www.aap.org)

⁸ Grant, B., Dawson, D. Age of onset of drug use and its association with DSM-IV drug abuse and dependence: Results from the national longitudinal alcohol epidemiologic survey. *Journal of Substance Abuse*, Volume 10, Issue 2. 1998.

⁹ Dennis, M.L., Dawud-Noursi, S., Muck, R. and McDermeit, M. The need for developing and evaluating adolescent treatment models. In S.J. Stevens and A.R. Morral (Eds.), *Adolescent Substance Abuse Treatment in the United States: Exemplary Models from a National Evaluation Study*. 2002. Binghamton, NY: Haworth Press.

¹⁰ Adger, Jr., H. Substance abuse: The nature and special needs of adolescents. Adolescent Substance Abuse and Mental Health: A Public Health Priority. Presentation. Physician Leadership on National Drug Policy. July 18, 2003.

¹¹ National Institute on Drug Abuse. "Prevention Brochure." (Available at www.nida.nih.gov/prevention/PREVOPEN.htm)

¹² Adger, Jr., H. Substance abuse: The nature and special needs of adolescents. Adolescent Substance Abuse and Mental Health: A Public Health Priority. Presentation. Physician Leadership on National Drug Policy. July 18, 2003.

¹³ Greenblatt J.C. Patterns of alcohol use among adolescents and associations with emotional and behavioral problems. *OAS Working Paper*. Rockville, MD: Office of Applied Studies. Substance Abuse and Mental Health Services Administration. March 2000. (Available at www.health.org/govstudy/adolemotion/)

¹⁴ Robert Wood Johnson Foundation. (n.d.) Reclaiming Futures: The problem: Teens in trouble. Lack of treatment. The cost. Retrieved February 2004. (Available at www.reclaimingfutures.org)

¹⁵ Teplin, L.A. Assessing alcohol, drug and mental disorders in juvenile detainees. *OJJDP Fact Sheet #02*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention. January 2001. (Available at www.ncjrs.org/pdffiles1/ojjdp/fs200102.pdf)

¹⁶ Rutherford, B., Banta-Green, C. Effectiveness standards for the treatment of chemical dependency in juvenile offenders: A review of the literature. *ADAI Technical Report 98-01*. Seattle, WA: Alcohol and Drug Abuse Institute, University of Washington. January 1998. (Available at depts.washington.edu/adai/pubs/tr/9801/title.htm)

¹⁷ National Institute on Drug Abuse. Principles of drug addiction treatment: A research-based guide (NIH Publication No. 99-4180). Washington, DC. 1999.