

Substance Abuse Prevention: Benefits Outweigh Costs *Spreading the Message Where It Counts*

By Stephen Hahn-Smith

It is hard to refute the value of prevention, yet all too often investments in prevention fail to keep up with the need for services. This is especially true in lean economic times, when resources are scarce and competition tough. Prevention programs—addressing a range of social issues from teen pregnancy to elder abuse—have suffered enormous losses in this latest recession. When budgets are tight, priorities shift to short-term, crisis solutions, which do little to address core causes and leave problems to persist. Many social science fields embrace taking the long view when addressing problems, seeing prevention as the cornerstone of effective problem solving. This *Prevention Tactics* publication will focus on the cost benefits of substance abuse prevention and how to support these essential efforts in our governments, schools, and communities.

Substance Abuse, not an Isolated Problem

Many worthy investments aim to prevent social ills. For example, in youth development—an area that complements substance abuse prevention efforts—there are a number of programs that yield positive results. These interventions include: mentoring, teaching of lifeskills, educating parents, and support for positive social development, all of which have shown measurable benefits that outweigh costs.ⁱ These efforts may have a primary outcome related to youth development, but they also stand to prevent and/or mitigate substance abuse. Conversely, when a program's primary goal is to prevent substance abuse there is often a ripple effect that favorably influences other social goals. Programs and policies that help prevent addiction have also been found to improve quality of life for individuals, families and communities.

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Tactics (Tak'tiks) n. 1. a plan for promoting a desired end. 2. the art of the possible.



The positive outcomes from successful substance abuse prevention efforts are many. A combination of both direct and indirect benefits include: less need for treatment of substance addiction and dependence, reduced crime and delinquencyⁱⁱ, fewer incidents of family violence, improved school attendance and academic achievement,ⁱⁱⁱ and better health outcomes.^{iv} Substance abuse impacts one's ability to function constructively and is a significant impediment to gainful employment and financial self-sufficiency. This connection to broader outcomes has spurred policy development and large-scale government funding, but mostly in the realm of substance abuse treatment, not prevention. For example, the addition of substance abuse assessment and treatment services to welfare reform in 1996 was prompted by policymakers concerns that addiction would keep welfare recipients from working.

Early Use and an Increased Potential for Future Dependence

Rates of alcohol and drug use among California's youth are troubling. Data from the California Health Kids Survey (CHKS, 2007-2009) indicates that 36 percent of 11th graders drank alcohol at least once over the past month, with 22 percent engaging in heavy, episodic (binge) drinking. Marijuana use was only slightly lower than binge drinking rates with roughly 6 percent of 7th graders, 13 percent of 9th graders, and 19 percent of 11th graders reporting they had smoked marijuana in the past month.



Perhaps what is most alarming about the high prevalence of early alcohol and drug usage among California youth is the strong relation to future abuse. Age of initiation has a strong negative correlation with problem use in future years. Over half of the individuals in alcohol and drug treatment services initiated substance use before the age of 18.^{iv} Less than 30 percent of individuals in treatment for alcohol or drug dependence initiated use after they turned 20 years old. Adolescents who begin drinking before the age of 15 are four times more likely to develop alcohol dependence. Each additional year of delayed drinking onset reduces the probability of alcohol dependence by 14 percent.^v Research from SAMHSA (2002) indicates that children who first smoke marijuana younger than 14 years old are more than five times as likely to abuse drugs when becoming adults, compared to those who first use marijuana at 18 years of age. The relationship between early initiation and later abuse makes a strong case for prevention efforts.

What Works in Substance Abuse Prevention

Research has shown that a broad array of evidence-based programs can effectively prevent substance abuse, promote mental health, and prevent related health and social problems by reducing risk factors and increasing protective factors. Currently, SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP) (www.nrepp.samhsa.gov) identifies over 100 interventions that work. For instance, in one study, an evidence-based program called Project ALERT was used with 7th graders. Project ALERT reduced participants' likelihood of marijuana use by the time they were in 8th grade by nearly 50 percent, and there was a reduced likelihood of alcohol use of 24 percent. In another study that used Life Skills Training

(LST) with middle school students, the effects of the program were measured 6 years after the training to understand the long-term effects of the prevention program. At follow-up, findings concluded there were significantly lower rates than control groups on nearly every measure of tobacco, alcohol, marijuana, and polydrug use. These are just two examples of evidence-based programs that have empirical support for success. Other Tactics articles have covered the process of selecting EBP's for programming purposes (<http://www.ca-cpi.org>; e.g., Volume 9-6, 2010).

Return on Investment: Prevention's Worth

Prevention's worth has been measured in numerous ways, some more direct than others. A detailed account of the economic benefits is outlined in the table on page 3.^{vi}

Direct benefits are the most transparent in terms of the link between prevention investment and benefits. For example, if someone was prevented from using substances, then they would not need treatment services in the future, and they would not need to go to the hospital for drug or alcohol abuse. Other benefits are more **indirect** and less visible, such as higher levels of productivity associated with non-substance abusers. Workers are more likely to advance their careers, more likely to keep a stable job, have higher employment rates, etc. Other **related benefits** include lower crime rates and motor vehicle accident rates. The **intangible** gains are difficult to put in monetary terms, but are equally important on an individual and familial level and, due to their nature, have a high spill-over effect in many other areas.

Though substance abuse prevention's benefits are wide in reach, research is limited. A few studies have examined long-term effects. Given current research, most well-designed studies that have examined programs implemented with fidelity show a high cost-benefit ratio. Multiple studies indicate that \$1 spent on prevention can result in roughly \$10 in long-term savings.^{vii}

Classification of Benefits for Economic Evaluation		
TYPES OF BENEFITS	DEFINITION	EXAMPLES
Direct	Result directly from prevention itself	Prevented expenditure on drug abuse treatment, prevented expenditure on drug abuse-related emergency room visits
Indirect	Value of increased productivity	Increased wages, improved job stability, fewer unemployment episodes
Other related	Non-health-related effects of preventing condition	Lower rates of violent crime, prevented DUI injuries to others
Intangible	Difficult to describe and/or value in monetary terms	Improved self-esteem, sense of well-being, better family interaction, reduced physical pain

Cost of Substance Abuse Spreads Across Many Areas

A staggering amount of federal, state, and local resources go toward addressing problems that are a consequence of substance abuse, yet only a tiny fraction of all spending goes toward preventing the problem from happening in the first place.

A recent report by The National Center on Addiction and Substance Abuse (CASA; May, 2009) indicates that federal, state, and local governments spent at least \$467.7 billion in 2005 as a result of substance abuse and addiction: \$238.2 billion federal; \$135.8 billion state; and \$93.8 billion local. For every dollar federal and state governments spent on substance abuse and addiction in 2005, only 1.9 cents was spent on prevention and treatment, and less than one-fourth of that 1.9 cents went to prevention. For every dollar federal and state governments spent to prevent and treat substance abuse and addiction, another \$59.83 in public programs was spent addressing consequences, including health costs, justice related costs, child and family assistance, costs to the education system, costs for mental health and disabilities, and public safety costs. The pie chart shows the disproportionate spending that primarily goes toward the public expense of substance abuse and addiction, rather than attempting to prevent the problem in the first place.

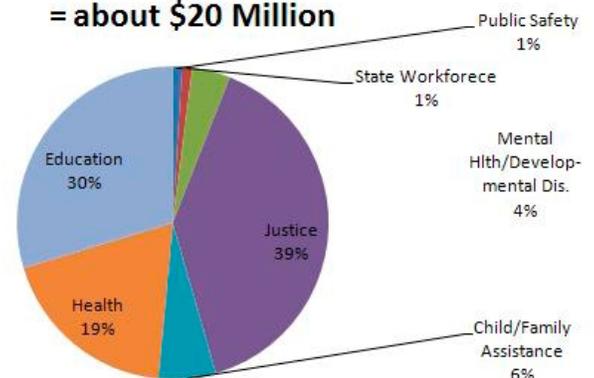
Using 2005 data, the CASA study calculates that California spent roughly \$19.5 billion on substance use and addiction related costs relative to the total state budget of \$102 billion, equal to about 20 percent of the budget. The report determined that a California resident's share was \$545 per capita for

state spending on the myriad effects of substance abuse and addiction. The costs permeate through many sectors of state spending, including:

- The justice system - \$7.7 billion (e.g., corrections, juvenile justice);
- schools - \$5.9 billion (e.g., disruptive behavior, missed classes);
- health - \$3.7 billion (e.g., hospitalizations);
- child/family assistance - \$1.1 billion (e.g., for child neglect/abuse, foster care services);
- regulation, interdiction and workforce expenditures total 2.5 percent.

In 2005, only \$339 million of California's spending went to prevention and treatment services, and less than one-third of this amount was dedicated to prevention services.

CA Budget Categories: Spending on Consequences of Substance Abuse = about \$20 Million



Substance Abuse's Image Problem Spills over to Prevention

There are many reasons why prevention gets less attention than it deserves. In most cases, the benefits from prevention efforts are recouped in later years, and most budgetary and political cycles are based on the short term. This puts prevention spending at a clear disadvantage as elected officials tend to favor programs that yield quick results. The typical annual budget cycle means funding is never a sure thing from year to year, and programs often need to prove their worth before they've had a chance to show their strongest results. A recent report by the RAND Institute highlights several reasons why, in their words, there have not been "course corrections" to determine a more rational policy direction, including:

- A strong enforcement lobby;
- Politicians don't want to be perceived as being weak on crime, and therefore emphasize punishment over prevention;
- The perception that substance abuse is a moral failing and deserving of punishment, and not a health problem deserving of treatment;
- The visible and immediate effects of incarceration versus long-term benefits of prevention or treatment; and
- The general stigma associated with substance abusers and addicts.^{viii}

The public misunderstanding and over-simplification of substance abuse perpetuates stigma that extends beyond the person abusing drugs and alcohol. The policies and efforts aimed to address and prevent substance abuse are impacted by this perception as well. All the factors noted above have strong implications for policy development, and they make substance abuse prevention a tough sell, even when the dollars point heavily in favor of increasing resources toward prevention.

Cost Benefit studies indicate that \$1 spent on substance abuse prevention can result in \$10 of long-term savings.

Hope that a Rising Tide in Prevention will Raise all Boats

Recent policy and legislation appear to be shifting the tide in a direction that prioritizes prevention.

For every dollar federal and state governments spent on substance abuse and addiction in 2005, slightly less than two cents was spent on prevention and treatment, with less than one-fourth of that two cents going to prevention.

National Healthcare Reform (Patient Protection and Affordable Care Act of 2010) has prioritized prevention in the clinical and health community settings. In the midst of national healthcare reform efforts, SAMHSA formed a framework that addresses many issues related specifically to substance abuse. In a document entitled "Core Consensus Principles for Reform from the Mental Health and Substance Abuse Community" (SAMHSA, May 26, 2009) a broad framework with nine key principles for putting substance abuse and mental health on equal footing with other areas in health is presented (see chart on page 5).

Sharing the value of substance abuse prevention: How to spread the work in our governments, schools and communities:

- Call on legislators and other policy makers to plan for the long-term, and educate them on how many of prevention's greatest rewards often come years later.
- When operating substance abuse prevention programs, ensure that data collection, when possible, includes findings that support related health and social outcomes.
- Understand and convey the cost-benefits of prevention programming in summary reports, and reports to funders and the community.
- Coordinate with those organizations and departments that focus on social and health issues that are impacted by substance abuse. Seek to collaborate on programs and activities that bolster substance abuse prevention goals, as well as goals related to reducing the particular area of concern of the collaborating agency.
- Become familiar with new legislation that addresses substance abuse prevention, in particular: the Mental Health Services Act, Healthcare Reform (ACA), and the Mental Health Parity and Addiction Equity Act of 2008. Understand the role of substance abuse prevention in relation to the implementation of these laws, and the program and funding opportunities that result in your community.

**Ensuring U.S. Health Reform Includes Prevention and Treatment of Mental and Substance Use Disorders—
A Framework for Discussion Synopsis of Core Consensus Principles**

Principle 1	Articulate a National Health and Wellness Plan for all Americans.
Principle 2	Legislate universal coverage of health insurance with full parity.
Principle 3	Achieve improved health and long-term fiscal sustainability.
Principle 4	Eradicate fragmentation by requiring coordination and integration of care for physical, mental, and substance use conditions.
Principle 5	Provide for a full range of prevention, early intervention, treatment, and recovery services that embody a whole-health approach.
Principle 6	Implement National standards for clinical and quality outcomes tied to reimbursement and accountability.
Principle 7	Adopt and fully utilize health information technology (HIT).
Principle 8	Invest in the prevention, treatment, and recovery support workforce.
Principle 9	Ensure a safety net for people with the most serious and disabling mental and substance use disorders.

- Ensure politicians understand the costs associated with criminalizing drug use, as compared to preventing it in the first place.
- Help reduce the stigma that surrounds substance abuse. Take the opportunity to redefine the issue in a way that does not shame the user and that considers the social and physical contexts that contribute to use. Ensure that substance abuse is not viewed as a moral failing deserving of punishment, but rather a health problem for which treatment and recovery are possible, and that **can be prevented**.
- When working with schools, it may be best to describe substance abuse prevention and early intervention programming to parents and student in terms that do not carry stigma, such as youth development, character building, or teaching of life skills. Many evidence-based substance abuse programs also have positive impacts on students’ academic achievement and school attendance, as well as for school climate outcomes such as violence and bullying.

Summary

The public is fully capable of accepting prevention efforts if there is a clear link to the value of prevention programs and policies. For instance, vaccine programs and anti-cholesterol programs are widely accepted in terms of preventing later long-term health problems. Probably the best example of a highly successful, behaviorally-oriented prevention program that works is the anti-tobacco Truth campaign (see sidebar on next page). This document presents a multi-pronged approach to advocating for the inclusion, expansion and recognition of policies, programs and practices that effectively reduce substance abuse. There are many fronts to address when looking to expand substance abuse prevention’s reach; there are political factors, image issues, and challenges in framing the problem. It is also important, when possible, to identify related health and social outcomes for substance abuse prevention efforts. As new policies begin to take shape, those who advocate substance abuse prevention can be better equipped to show the power of prevention.

Tobacco Prevention Efforts: A Model of Policy and Marketing

The “Truth” campaign, from the American Legacy Foundation, was formed in 1998 as part of the Master Settlement Agreement with tobacco firms. The campaign targets Americans under the age of 30, highlighting the dangers of tobacco through a variety of mechanisms, including television, print, and online content, grassroots efforts, as well as public events and demonstrations. The campaign has been successful. Between 2000 and 2002, the Truth campaign has been credited with reducing the number of children and teen smokers by 300,000.^{ix} A recent study published in the



American Journal of Preventive Medicine indicated the Truth campaign recouped costs and averted \$1.9 billion in spending.^x According to the National Youth Risk Behavior Survey (YRBS) by the CDC, past month cigarette use dropped from 34.8 percent of youth in 1999 to 20 percent in 2007. Although there is still considerable room for further reducing tobacco use rates, the anti-tobacco campaigns have been successful.

Along with the anti-tobacco messaging of the Truth campaign, many states increased their tobacco tax, a tactic that is highly effective at reducing use, especially for youth. State tobacco taxes range from \$.30 a pack in Virginia to \$3.95 a pack in Rhode Island. California has a \$.87 cent tax on a pack of cigarettes and ranks 33rd across the Nation.^{xi} California also has not increased its excise tax on cigarettes since before 1999, one of only 3 states not to do so. Californian’s passed Proposition 10 in 1998, which added a \$.50 tax on each pack of cigarettes with the revenue going toward early childhood development and school readiness. Proposition 10 generates roughly \$590 million annually.

Taxing Alcohol in California

California has some of the lowest excise tax rates for beer, wine, and spirits compared to other states. For instance, table wine is taxed at \$.20 per gallon, which is the second lowest in the Nation. Tax rates have not kept pace with inflation; consequently, there has been a 45 percent decrease in the real value of state alcohol taxes. According to CASA, altering tax rates has been a successful substance abuse prevention strategy used by other states. Higher tax rates have been shown to reduce demand, while at the same time generating needed revenue to go towards prevention activities. CASA estimates that a \$.25 tax per drink on all alcohol, including beer, wine, and distilled spirits would generate as much as \$3 billion per year. A tax increase of as little as \$.05 per drink on all alcohol including beer, wine, and distilled spirits can generate approximately \$585 million per year.^{xii}

Resources

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Author: Stephen Hahn-Smith
Editor: Terese Voge

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We welcome readers' comments on topics presented.

Call us at 707.568.3800

Fax us at 707.568.3810

or send an **email** to
cpiinfo@cars-rp.org

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