Community Prevention Initiative (CPI)



Effective Substance Abuse Prevention:

Why it matters, what works, and what the experts see for the future

By Beth Berk

Introduction

Substance abuse is a pervasive problem in the United States—cutting across racial, socioeconomic, geographic and generational lines.¹ Its effects are straining the resources of the health care and judicial systems, and delivering a regular dose of disturbing headlines. Drug deaths now outnumber traffic-related deaths in the U.S. for the first time since the government started tracking drug-induced deaths in 1979.² The number of U.S. babies born with opiate drug withdrawal has tripled in the past decade.³ There are approximately 80,000 deaths attributed to excessive alcohol use each year in the United States, with the Centers for Disease Control and Prevention (CDC) estimating 2.3 million years of potential life lost.⁴

The need for substance abuse prevention is clear. Yet many in the prevention field continue to face challenges as they advocate for prevention's benefits. This paper will arm prevention planners and practitioners with clear information to help make prevention a priority. It attempts to take the pulse of prevention by looking at the more effective strategies within the substance abuse prevention field, providing tips on selecting the most effective interventions, and discussing the future of substance abuse prevention as seen by leaders in the field.⁵

Background

Millions of Americans suffer from substance abuse, which includes underage drinking, alcohol dependency, non-medical use of prescription drugs,



abuse of over-the-counter medications, and illicit drug use. This abuse touches all aspects of our communities. Illicit drug use alone contributes to an estimated \$193 billion in crime, health, and lost productivity costs.⁶ Prescription drug abuse is the nation's fastest-growing drug problem and has been classified as an epidemic by the Centers for Disease Control and Prevention. Among young people, overall alcohol use has declined over the past three decades. However, alcohol is still the most accessible substance and binge drinking rates are still alarmingly high.⁷

How big a problem is substance abuse in the United States? — see next page.

How big a problem is substance abuse in the United States?

- An estimated 10 million people aged 12 to 20 report drinking alcohol during the past month.¹ To put that in perspective, there are more Americans who have engaged in underage drinking than the number of people who live in the state of Michigan.²
- Approximately 23 million Americans—roughly the population of Australia—are current illicit drug users.³⁻⁴ Marijuana use and non-medical use of prescription medications are the most common types of drug use in America.
- Almost 18 million Americans are classified with alcohol dependence or abuse.⁵
 - Heavy alcohol use can cause serious damage to the body and affects the liver, nervous system, muscles, lungs, and heart.⁶
 - Alcohol is a factor in approximately 41 percent of deaths from motor vehicle crashes.⁷

SOURCE: SAMHSA

1. Substance Abuse and Mental Health Services Administration (SAMHSA). (2011). Results from the 2010 National Survey on Drug Use and Health: Vol. I. Summary of national findings, (Center for Behavioral Health Statistics and Quality, NSDUH Series H 41, HHS Publication No. SMA 11 4658). Rockville, MD: SAMHSA.

2.Census Bureau, U.S. Department of Commerce. State and County Quickfacts. Retrieved September 12, 2012, from http://quickfacts.census.gov/qfd/states/26000.html

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6.U.S. Centers for Disease Control and Prevention (CDC). (2010). Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion. Retrieved December 20, 2011, from http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm; National Institute on Alcohol Abuse and Alcoholism. (2010). Beyond Hangovers: Understanding Alcohol's Impact on Your Health. Retrieved December 20, 2011, from http://pubs.niaaa.nih.gov/publications/Hangovers/beyondHangovers.pdf

7.National Highway Traffic Safety Administration. (2010). Fatality Analysis Reporting System (FARS) Encyclopedia. Retrieved December 20, 2011, from http://www-fars.nhtsa.dot.gov/Main/index.aspx

In this environment, there is no doubt that substance abuse prevention matters. According to the Office of National Drug Control Policy (ONDCP), prevention strategies targeting the root of the problem are essential to curb drug use and help people lead healthier lives. The ONDCP Director says early intervention is particularly important. Youth substance abuse has a direct negative impact on the user and their community. Early intervention helps prevent substance abuse and reduce the negative consequences of addiction before they occur.8 Prevention also

makes economic sense. Each dollar invested in an evidence-based prevention program can reduce costs related to substance use disorders by an average of \$18.9

Over the past two decades, a solid research base has been established to support the effectiveness of substance abuse prevention. Many studies show that prevention programs that are based on a strong research design will provide significant deterrence from the use of alcohol and other drugs. A broad scale study of

the worldwide application of prevention science in adolescent health, published in The Lancet, found that there is sufficient evidence from controlled trials to confirm that carefully designed preventive interventions can improve adolescent health and decrease problem behaviors, including the use of alcohol, tobacco, and other drugs. The researchers surveyed broad outcomes by assessing recent reviews and doing targeted searches of controlled prevention trials.10 On a smaller scale, an evaluation in California of the effects of youth prevention programming provided to grantees under the Safe and Drug-Free Schools and Communities (SDFSC) Governor's Program found decreases in rates of substance use in all categories of substance use for youth who had been exposed to prevention programming.11

Such studies reinforce the idea that prevention is effective. Right now, there is a renewed commitment both nationwide and within California to focus on prevention:

- October, 2012 marked the second annual National Substance Abuse Prevention Month, complete with a proclamation from President Barack Obama, who called upon "all Americans to engage in appropriate programs and activities to promote comprehensive substance abuse prevention efforts within their communities."12
- The Obama administration also created the first National Prevention Council through the Affordable Care Act. Council members are cabinet secretaries, chairs, directors, or administrators of federal departments. Such high profile leadership demonstrates an unprecedented commitment to prevention and wellness.¹³
- The Substance Abuse and Mental Health Services Administration's (SAMHSA) Strategic Initiatives for 2011-2014 lists prevention of substance abuse and mental illness through community action as its first

Initiative. SAMHSA states that much of the strong evidence in prevention has not been moved into practice, and our nation lacks a consistent infrastructure for the prevention of substance abuse and mental illness. Through the Initiative, SAMHSA plans to take advantage of the opportunities presented by the Affordable Care Act and the growing evidence base behind prevention.¹⁴

 In California, the Department of Alcohol and Drug Programs has shown leadership in looking at cross-system prevention efforts. They have, through the Community Prevention Initiative, published several Power of Prevention documents—each featuring the linkages between substance abuse prevention and related fields/ issues. Also, they will be hosting a second prevention symposium in 2013 to examine opportunities for more cross-system collaboration with leaders around the state.

In light of the above commitments to prevention, there is an increased need to understand what works. This paper will outline effective strategies within the substance abuse prevention field. It includes interviews with prevention researchers in California, selected because of their long-standing involvement in the field. Their work represents the variety of strategies in prevention—from developing policies that affect entire communities to targeting individuals who are at greatest risk of substance abuse. Many prevention experts say the time has come to hone strategies and maximize impact.

The Institute of Medicine defines three broad types of prevention interventions
— see next page.

I. Making It Work Better maximizing the effectiveness of prevention

The substance abuse prevention field is now at a crossroads. Healthcare reform has opened a door of opportunity for governments and communities to implement effective strategies to combat substance abuse problems. The key is finding the right individual, family, school, and community-level interventions. Both the research and leading experts in the field emphasize the importance of a comprehensive approach—finding a balance of prevention strategies in order to maximize impact. According to SAMHSA,

preventive interventions are most effective when they are appropriately matched to their target population's level of risk: universal, selective and indicated.

Decision makers should carefully consider their goals for substance abuse prevention efforts, ensuring that they are balanced and able to produce changes for specific at-risk groups, as well as larger and more general populations. That focus plays a critical role in considering the relative merits and appropriate mix of universal, selective, and indicated prevention strategies.

The Institute of Medicine defines three broad types of prevention interventions:

1. Universal preventive interventions take the broadest approach, targeting "the general public or a whole population that has not been identified on the basis of individual risk" (O'Connell, 2009). Universal prevention interventions might target schools, whole communities, or workplaces.

Examples: community policies that promote access to early childhood education, implementation or enforcement of anti-bullying policies in schools, education for physicians on prescription drug misuse and preventive prescribing practices, social and decision-making skills training for all sixth graders in a particular school system.

2. Selective preventive interventions target "individuals or a population sub-group whose risk of developing mental disorders [or substance abuse disorders] is significantly higher than average", prior to the diagnosis of a disorder (O'Connell, 2009). Selective interventions target biological, psychological, or social risk factors that are more prominent among high-risk groups than among the wider population.

Examples: prevention education and peer support groups that target groups such as children of substance abusing parents, or children in foster care.

3. Indicated preventive interventions target "high-risk individuals who are identified as having minimal but detectable signs or symptoms foreshadowing mental, emotional, or behavioral disorder" prior to the diagnosis of a disorder (O'Connell, 2009). Interventions focus on the immediate risk and protective factors present in the environments surrounding individuals.

Examples: Screening and brief intervention in a variety of settings such as in schools (often as part of a Student Assistance Program), emergency departments and in community based programs.

O'Connell, M. E., Boat, T., & Warner, K. E. (Eds.). (2009). Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. National Research Council and Institute of Medicine of the National Academies. Washington, D.C.: The National Academies Press.

Adapted from the Substance Abuse and Mental Health Services Administration(SAMHSA) publication: Prevention Training and Technical Assistance available at: http://captus.samhsa.gov

Universal

Universal prevention targets the general public or a whole population that has not been identified on the basis of individual risk. Policies, ordinances. and law enforcement patterns are often a component of the universal prevention category. Robert Saltz, Ph.D., is a Senior Research Scientist at the Prevention Research Center in Berkeley, whose work has centered on the ways in which drinking contexts may influence the risk of subsequent injury or death. His approach involves looking at the times and places where drinking occurs to reduce the level of harm that it can cause. The classic example is drunk driving prevention. Saltz says the prevalence of drunk driving has decreased significantly in the last 30 years, and not just by changing individual drinker's attitudes. He also credits much more consistent and effective enforcement of driving laws.

Such policy-related universal prevention is part of large base of environmental protection strategies. Environmental strategies have less



prominence in national registries than individuallevel approaches. However, many environmental strategies have also been well-tested and have passed rigorous standards to be considered effective.¹⁶

The CDC publishes *The Community Guide*,¹⁷ a web-accessible guide to the effectiveness of many environmental and policy-level prevention strategies, including those that focus on excessive alcohol consumption (defined by the CDC as heavy drinking, binge drinking, or any drinking by pregnant women or underage youth). The independent task force that creates The Guide uses a rigorous and systematic scientific review process of the research literature, and provides clear evidence of the effectiveness of a variety of strategies to reduce alcohol abuse at the population level.¹⁸

Because alcohol is by far the most abused substance by youth, prevention efforts targeting underage drinking are dominant in universal prevention. prevention Such could also subsequently protect against abuse of other substances. A recent study found that alcohol is much more of a "gateway drug" than marijuana, leading more adolescents to using more serious substances.19 Saltz says raising the drinking age to prevent underage drinking is one of the best examples of effective prevention and that it is often overlooked. The strategy is outlined in the book, While We Were Sleeping: Success Stories in Injury and Violence Prevention.20 "They point out that this has been probably one of the greatest achievements in public health moving that law up—and almost no one realizes how significant that's been in saving lives," Saltz said. "Once you start getting into some of the other strategies (besides increasing the drinking age), there's just naturally less research done on them," he said. "So you're faced with a dilemma-kind of like, 'well this looks like it's very effective, but there've only been three studies.' Do you want to put your faith in it or not?" The field continues to need to expand the evidence base for prevention, especially in the area of universally applied strategies.

Selected

Selected prevention targets individuals or a population sub-group who haven't been diagnosed with substance abuse disorders, but whose risk of developing them is significantly higher than average. Fred Springer, Ph.D., was the principal investigator of a study funded by the Center for Substance Abuse Prevention (CSAP), which evaluated 48 prevention efforts.²¹ "We found that the programs that were most effective were programs that used reflective interventions. They are interventions that get the kids into a variety of techniques such as role playing, and videotaping and reviewing behaviors that take place in these role play situations." Springer said the successful programs also had well-facilitated discussion groups.

Three other factors were found to be key to effective prevention for this population: 1) cognitive behavioral intervention that teaches skills in context; 2) students' ability to feel a connection to their school; and 3) the amount of time the students spent in the program. At least 4 ½ weeks was the minimum for success, although some programs went as long as a semester. Springer says school connectedness has been found to be a key factor in all kinds of prevention—from substance abuse to bullying. From his experience, better programs actually engage youth. For example, a meta-analytic study of 120 school-based drug prevention programs found interactive programs to be significantly superior to non-interactive programs in their ability to impact drug use behaviors, including the use of alcohol and tobacco.²² Springer also says there should be more indicated and selective kinds of interventions that target the "really harmful behaviors" that youth participate in, which are associated with a greater risk of substance abuse.



Indicated

Indicated prevention efforts focus on those individuals who are already exhibiting risk and substance use/abuse. One example is very young drinkers, who start before they are 14 years old (referred to as "early onset"). Research shows those young drinkers have a particularly bad prognosis. A ten-year prospective study of public health problems associated with early drinking, published in 2003,23 found that early drinkers were more likely than non-drinkers to report academic problems, substance use, and delinquent behavior in middle and high school. By young adulthood, early alcohol use was associated with employment problems, other substance abuse, and criminal and violent behavior.

Joël Phillips, founder and President of Evaluation Management & Training (EMT) Associates, Inc. and Executive Director of the Center for Applied Research Solutions (CARS), has been involved with research and evaluation projects concerning prevention for decades. When asked about effective prevention, he says the evidence is clear that early onset drinking should be a major focus of prevention. A 2006 national survey, published in the Archives of Pediatrics & Adolescent Medicine²⁴, looked at more than 43,000 adults. Forty-seven percent of those who began drinking alcohol before age 14 became alcohol dependent at some point in their lives,

compared to 9 percent of those who waited until at least age 21 to drink. "Why aren't we doing more to identify those youth and get them the proper interventions that, frankly, would make a huge difference in their lives?" he asked.

The other area that both Phillips and Springer agree needs immediate attention is the high level of adolescent "binge" drinking. A 2006 article in the New York Times²⁵ documents that excessive drinking of alcohol in adolescence causes more damage to developing brains than previously thought. "For people who say it's just a rite of passage—it may have been. But now we know a lot more, and I think we should act on our knowledge," Phillips said.

One expert who has spent decades evaluating school and community programs for at-risk youth says efforts should focus more on harm reduction. Rodney Skager, Ph.D., Professor Emeritus at UCLA's Graduate School of Education and Information Studies, believes a certain amount of experimentation with drugs and alcohol is going to go on indefinitely. "Prevention shouldn't be naïve," he said. "It should be realistic in its

What are Student Assistance Programs (SAPs)?

SAPs are a school-based approach to providing focused services to students needing interventions for substance abuse, mental health, academic, emotional, or social issues. They are a process – not a curriculum or treatment center – that connects education, programs, and services within and across school and community systems to create a network of supports to help students.

As a process, SAPs identify students as troubled or in need, assess their needs, and provide them with support and referral to appropriate resources. The overarching goal of SAPs is to remove barriers to education so that a student may achieve academically.

SOURCE: The California SAP Resource Center http://casapresources.org/home.php

approach." Skager calls substance use and abuse a "permanent phenomenon." He sees the best path as identifying youth who are at risk for harm, and who need guidance and interventions. He would like to see a student assistance program (SAP) in every school, with a counselor who can intervene early with prevention services and refer them for other help, and/or assessment for treatment, if needed. "Using a course to teach kids about drugs is not enough," Skager said. "You need to have interaction. I've seen cases where some kids (in group counseling sessions) would talk about their use and some others would say 'why are you doing that?'—expressing social disapproval or personal concern." He says that kind of peer counseling—with trust and an open forum—can help bring about positive change.

II. The Importance of Choosing
Wisely—selecting the most effective
interventions given your resources and
the needs of your community/school/
population

The benefits and limitations of registries

Prevention providers who are looking for successful programs often turn to registries. The National Institute on Drug Abuse (NIDA) provides a researched-based guide of effective programs called "Preventing Drug Use Among Children and Adolescents," commonly known as the Red Book.26 The book has examples of research-based programs that feature a variety of strategies proven to be effective, including those for universal, selective, and indicated populations. It also contains a guide to additional programs in its selected resources section. Another popular resource is SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP). The NREPP registry web site states that it is a voluntary, self-nominating system in which intervention developers elect to participate. That statement encompasses the difficulty for any prevention provider relying on a

registry: they are helpful, but they are not able to inventory all potentially effective interventions.

Experts caution there will always be some interventions that are not submitted to NREPP and other registries, and not all those which are submitted are reviewed. Saltz says registries often put an enormous burden on the developer of a strategy to document the effectiveness of their intervention. "That's fine if you have a program that you are promoting or that is a commercial product, sold to school districts for instance," he said. "But sometimes the registries miss some key strategies—on our side of things, environmental strategies—that could be effective but nobody is going to profit from it, so they are not motivated to write up (the) program." approaches—for Environmental example, the use of a policy or system change—do not necessarily have a developer or one entity that would usher it through the scientific requirements necessary to meet registry standards of review.

The CDC lists 11 registries, including NREPP, in its *Guide to the Continuum of Evidence of Effectiveness*. In this guidance document, the CDC focuses on what the Best Available Research Evidence means in the field of violence prevention. This field is closely associated with substance abuse prevention and many effective strategies target violence and substance abuse at the same time. The *Continuum* also serves to provide common language for researchers, practitioners, and policy-makers in discussing evidence-based decision making.

The role of evidence in selecting a prevention program

The Best Available Research Evidence enables researchers, practitioners, and policy-makers to determine whether or not a prevention program, practice, or policy is actually achieving the intended outcomes. The more rigorous a study's research design, (e.g., randomized control trials, quasi-experimental designs), the more

Registries Relevant to Substance Abuse Prevention

The CDC conducted an examination of existing evidence registries and standards for classification of evidence from the disciplines of psychology, epidemiology, human services, policy, medicine, child welfare, violence, juvenile justice, substance abuse, education, etc. More than 42 sources were considered in the development of the CDC's Continuum of Evidence of Effectiveness, including:

- National Registry of Evidence-Based Programs and Practices
- Blueprints for Violence Prevention
- Community-Based Child Abuse Prevention Programming
- Kauffman Best Practices Project
- Handbook of Injury and Violence Prevention
- Guide to Community Preventive Services
- California Evidence-Based Clearinghouse
- What Works Clearinghouse
- Find Youth Info
- Promising Practices Network for Children, Families, and Communities
- Violence Prevention: the Evidence

SOURCE: http://www.cdc.gov/ViolencePrevention/pdf/ Understanding_Evidence-a.pdf

compelling the research evidence. The Best Available Research Evidence is widely accepted as the most commonly used type of evidence in fields ranging from medicine to psychology.

Increasingly, other forms of evidence related to expertise and context have been recognized as being crucial to the success of prevention efforts for many behavioral health problems. The Evidence Project—a project of the Centers for Disease Control and Prevention's Division of Violence Prevention—proposes a comprehensive framework for understanding evidence and evidence-based decision making. It maintains that evidence-based decision

CDC's Framework for Evidence

The CDC's Evidence Project's comprehensive framework defines evidence as information or facts that are systematically obtained (i.e., obtained in a manner that is replicable, observable, credible and verifiable) for use in making decisions. This framework incorporates three types of evidence for consideration in decision-making:

Best Available Research Evidence – is information derived from scientific inquiry that assists in determining whether or not a prevention program, practice, or policy is actually achieving its intended outcomes. Meaning, did it do what it was supposed to do? The more rigorous the evaluation in its research design, (e.g., randomized control trials, quasi-experimental designs with matched comparison groups), its implementation (e.g., fidelity), and the extent to which it has been replicated in different settings and with different populations, the more compelling the research evidence, indicating whether or not a program, practice, or policy is effectively preventing the problem. Best available research evidence can also help to determine whether or not a prevention strategy is harmful.

Contextual Evidence - is a collection of measurable factors in the community that may impact the success of a prevention strategy (e.g., community history, organizational capacity, social norms, etc.). The role that contextual evidence plays in the evidence-based decision making process is to provide information to help determine whether a prevention strategy is likely to be acceptable, feasible, and useful in a local setting. Contextual evidence can be gathered from variety of local data sources and offers a "snapshot" of measurable community characteristics that may impact a particular decision. Some examples of data sources and methods for collecting contextual evidence include: census data, local administrative data (hospital, school, and law enforcement), community needs/assets assessments, surveys, and focus groups/interviews.

Experiential Evidence - is the collective experience and expertise of those who have practiced or lived in a particular setting. It also includes the knowledge of subject matter experts. These insights, understandings, skills, and expertise are accumulated over time and are often referred to as intuitive or tacit knowledge. Experiential evidence is systematically gathered from multiple stakeholders who are familiar with a variety of key aspects about populations in specific settings and who have knowledge about the community in which a prevention strategy is to be implemented (i.e., knowledge about what has/has not worked previously in a specific setting with particular populations; insight on potential implementation challenges; insight regarding the needs and challenges of the community and those who live in it). Experiential evidence provides distinctive guidance in the form of real world experience. Some examples of data sources and methods for eliciting experiential evidence include: reflective questions, communities of practice, expert panels, team decision making, and other consensus processes.

SOURCE: http://www.cdc.gov/ViolencePrevention/pdf/EvidenceProjectOverview-a.pdf

making occurs when the best available research evidence is combined with the contextual and experiential evidence from community data and field-based expertise. The Evidence Project is in the process of developing interactive tools for practitioners and policy makers to support the integration of all three forms of evidence in prevention decisions. These interactive tools will be made available in the spring/ summer of 2013.²⁷

Who Implements Makes a Difference

Just as school curriculum is dependent on effective teachers, prevention programs are dependent on the people who deliver them. Jim Kooler, Dr.PH, administers the California Friday Night Live Partnership, which provides mentoring, support, and anti-drunk driving programs for youth throughout the state. He suggests that anyone trying to implement or select an evidence-based program carefully consider not only the target audience, but also

the body or mind with soundness and vigor, the or the state of being propreservation from injury prevention /pri'ven J preventing; effectual him stay away from dangerouthe identification, assess prioritization of risks, preservation of risks, preservation assess.

the person who is going to deliver that program. "You can put a really wonderful set of tools that have been tested and shown to be effective in the hands of someone who is not enthusiastic and doesn't really care, and you're probably not going to get very good results," he said. "If you find someone who is passionate about making a difference and you give them some mediocre tools, because of the relationship that they will develop with their target audience, they can get some good results. So it's very challenging to have definitive science that this is going to work or not work because we're dealing with people." Kooler says that awareness of the human element that factors into effective prevention is important for success.

III. The Future of Substance Abuse Prevention—as viewed from leaders in the field

Prevention experts across the spectrum of strategies agree that the future of prevention must focus on education and collaboration. Education includes additional research to advance policy and intervention efforts. It also involves educating communities and policymakers regarding the importance and effectiveness of prevention. Collaboration means not only developing a comprehensive approach across the spectrum of prevention strategies,

but also recognizing that substance abuse prevention is intrinsically tied to other outcomes, including mental health, academic success, and violence prevention. Collaboration within and among the healthcare, education, and judicial systems is needed for success.

In the study of the worldwide application of prevention science in adolescent health,28 published The Lancet, international researchers recognized that effective prevention interventions face common barriers: restricted government financing, lack of prevention training in professional communities, and restricted knowledge or support for prevention in the general public. The study calls for "user-friendly" packaging of research findings and a broad dissemination of information on prevention, its efficacy, and the ability to save money as well as lives. The goal is to increase the importance of preventive programs in the minds of parents, communities, professionals, and policy makers. Although this study specifically addresses adolescents, the results are informative to prevention more broadly. Recommendations in the study include:

- Developing recognition by government officials of the importance of tested, effective prevention strategies that have the potential to reduce health spending and social costs. This includes support for a widespread prevention delivery system and moving prevention spending from shortterm discretionary grants to stable funding streams.
- Including prevention science and evidencebased practice in basic and continuing education programs for professionals such as teachers, and increasing local community capacity to assess needs and identify priority problems. This includes development of monitoring systems that identify community levels of risk, protection, and behavior problems; and constructing a database of community monitoring methods.



When asked about their hopes for the future of substance abuse prevention, California experts agree that more research is needed to advance policy and intervention efforts. From his standpoint as an environmental prevention researcher, Saltz says his hopes for the future include a public willingness to allow studies on what works in an environmental context. "What I would love to see is a society that will let us test different things," he said. "What if bars actually did succeed at not serving people who were drunk? ... You often can't get that level of cooperation from a place that might lose customers to other businesses. That's why we don't have a lot of research in that area."

With alcohol as the drug of choice for young people, Kooler says any prevention efforts will have to both change the environment and address an individual teen's behavior. "When we talk about substance abuse prevention and we talk about alcohol, you have to talk about the marketing tactics that are targeted towards young people," Kooler said. "But if you want to talk about changing their behavior, you're not going to change their behavior by talking about what alcohol does to your body. You've got to talk about the bigger context of where do you want to go in your life and will the combination of alcohol and these things that you want get you where you want to go?" Kooler says there's a whole body of research around mentoring, for example, that shows the effectiveness of putting caring adults in the lives of young people. There are proven positive effects, one of which is in the area of substance abuse. One example of such research is a study of the effects of the Big Brothers Big Sisters mentoring programs in Philadelphia.²⁹ It found that children who met with their mentor about three times a month for a year were 46% less likely to begin using illegal drugs and 27% less likely to begin using alcohol than their peers who did not have mentors. The mentors also had a positive impact on school performance and social skills.

Kooler recommends that every teen surrounded by some kind of "personal support network." He says programs that support the whole person are key in substance abuse prevention. "In the world of prevention, we end up addressing the 'drug-of-the-month'... we have this revolving substance issue and we fail to get to some of the underlying causes," he said. When asked about the future, Kooler envisions a bridge across the fields of substance abuse, mental health, physical fitness, and nutrition. "My greatest hope is that we would move beyond some of the symptoms and substances, into the true substance of what is it that makes young people, and adults, feel disconnected and need to do something to feel different. What can we do to help them live happier, healthier lives?"





Several experts would like to see more outreach in schools—from middle school to college. Springer says some of the most effective programs in prevention never mention alcohol or drugs, and look to build individual and community assets that provide a buffer against risk factors. They involve youth in reflective exercises, community projects, and promote their connection to school. "The school is the place the kids are. It's the place we need to keep them so they get the tools they need to have a shot at life." he said. "That's the future of prevention. It is to make the most fundamental institution that we've got for our children into a more nurturing place that has the ability to assess and address behavioral problems as they emerge."

Skager would like to see more counseling and student assistance programs "in every school." Phillips says a particular type of counseling, called Brief Intervention, has proven effective and should be expanded in the school environment. In Brief Intervention, kids who've been identified as having an alcohol or drug problem that is short of needing a treatment facility can go into a one-on-one session with a person trained in motivational interviewing and cognitive behavioral therapy. "They have the child reflect

on what the benefits were to using the substance and the consequences associated with that use. They negotiate an arrangement where the youth promises to either abate the usage pattern or stop altogether," Phillips said. "That works... it's sort of a follow up to the student assistance program. They were huge back in the 1980s and then we dropped them. Those were incredibly important (programs) to students in schools."

Saltz says that, unfortunately, prevention can be a hard sell to school districts and communities that are facing tight budgets. He says there are many effective strategies to prevent substance abuse, it's just a matter of picking the mix of strategies that will give the biggest bang for the buck. "The people doing research know that things work, it's just incremental," he said.

Picking the right mix of strategies—striking the right balance—is the key to maximizing the impact of substance abuse prevention in the future. After decades of research, many evidence-based strategies have been proven effective. Communities are now recognizing that investments in prevention are cost-effective. New understanding of prevention is leading to a collaboration across systems—a collaboration which is mindful of how interventions impact outcomes not only in the substance abuse field. but also the fields of healthcare, mental health, violence prevention and academic achievement. Substance abuse prevention has been called one of the best investments we can make in our country's future. 30 Safe and healthy communities will depend on it.

End Notes

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- ² Lisa Girion, Scott Glover and Doug Smith, "Drug Deaths Now Outnumber Traffic Fatalities in U.S., Data Show," *Los Angeles Times*, Sept. 17, 2011.
- ³ The Associated Press, "Painkiller Addiction Becoming More Common in Infants, Study Shows," The Christian Science Monitor, May 1, 2012.
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