

Sonoma County



Strategic Plan for Alcohol and Other Drug Use Prevention 2011-2015

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Sonoma County Department of Health Services
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Healthy Communities Section

☞ Preface ☞

The History and Future Directions of Alcohol And Other Drug Prevention in Sonoma County

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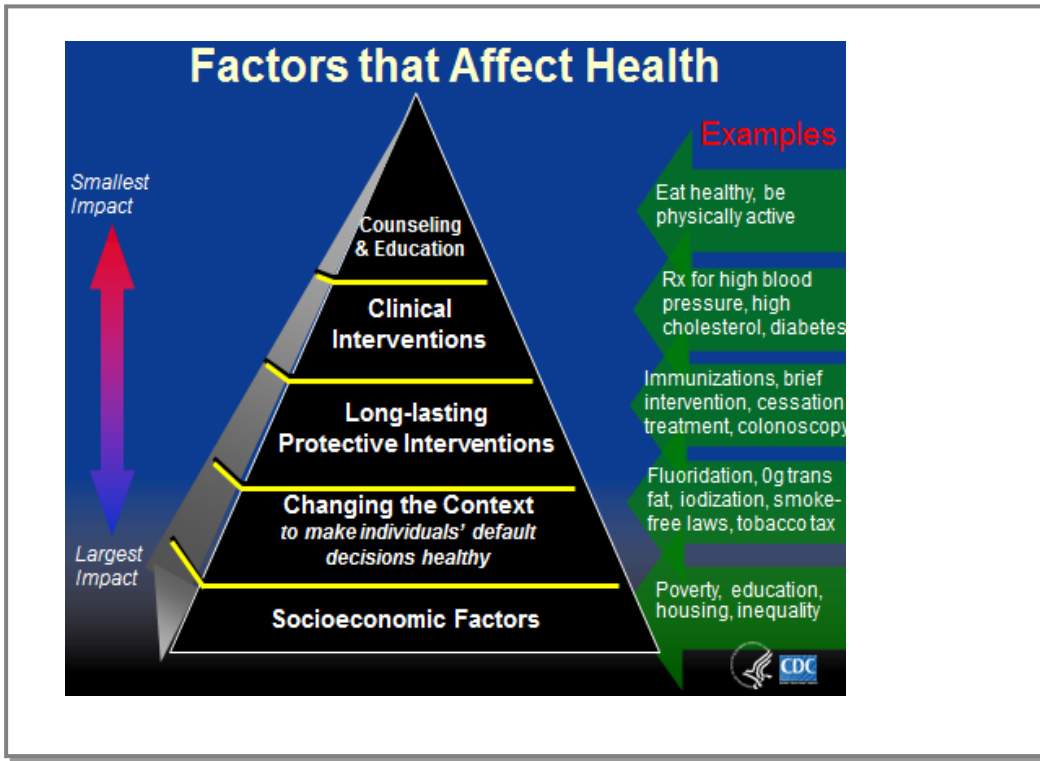
In late 2005 Sonoma County Department of Health Services, Prevention and Planning Division -- Alcohol and Other Drug Prevention Program initiated the development of a new three year alcohol and other drug prevention strategic plan. Consistent with the Substance Abuse and Mental Health Services Administrations (SAMHSA) Strategic Prevention Framework (SPF) process, the first phase of work was to conduct a comprehensive community assessment collecting needs and resource data describing the alcohol and other drug (AOD) issues across the county.

At the same time, both SAMHSA and the California Department of Alcohol and Drug Programs were strongly encouraging communities to implement evidence-based alcohol and other drug prevention strategies that had the potential to positively impact large numbers of people at the community level. Broadly speaking these strategies, often called "environmental strategies" or "population-level strategies", include the implementation of *policy, enforcement and media advocacy*. Community Anti-Drug Coalitions of America (CADCA) describes environmental strategies as those that are: *Grounded in the field of public health, which emphasizes the broader physical, social, cultural and institutional forces that contribute to the problems that coalitions address, environmental strategies offer well-accepted prevention approaches that coalitions use to change the context (environment) in which substance use and abuse occur.*¹

Environmental strategies compliment traditional prevention approaches which focus on increasing knowledge and building skills in individuals. Generally individual strategies tend to have less reach and focus on changing behaviors of people in smaller numbers such as classroom and parent groups. Research suggests that individual strategies have less power to reduce the rates of AOD problems occurring at the community level than do environmental strategies.

¹ Community Anti-Drug Coalitions of America, *The Coalition Impact: Environmental Prevention Strategies*; the National Coalition Institute, Alexandria Virginia, 2008.

The graphic to the right makes this point. CDC has identified that one of the factors strongly impacting public health is “Changing the Context...to make individuals’ default decisions healthy²”. Modifying the community context in which AOD problems occur is one of the most powerful levels at which communities can intervene to reduce rates of problems for individuals.



Public health problems require public health solutions. The federal and state emphasis on population level change, as well as the ever-growing evidence base on the efficacy of environmental strategies, contributed to the Prevention and Planning Division deciding to restructure the AOD prevention strategic approach for Sonoma County. In FY 2007 – 2008 a new Request for Proposals was issued in which available AOD prevention dollars would be awarded to non-profits and other eligible organizations to support the development of community coalitions to implement a range of environmental strategies, all of which would be expected to align with the newly completed Sonoma County Department of Health Services, *Sonoma County Alcohol and Other Drug Prevention Framework: Strategic Plan for Alcohol and Other Drug*

² *Effectiveness of Limiting Alcohol Outlet Density for Reducing Excessive Alcohol Consumption and Related Harms*: Centers for Disease Control, Presentation by Robert Brewer and Michael Sparks. 8/24/2010.

Prevention 2007-2010. At that time the RFP identified three key AOD problems in Sonoma County:

- Underage Drinking and Related Problems;
- High-Risk Adult Drinking and Related Problems; and
- Methamphetamine Use and Related Problems.

These three problem areas became the focus of the scope of work for the County Health Department and funded organizations.

With the Board of Supervisor adoption of the 2007 – 2010 Strategic Plan, a new prevention direction was ushered in. The new direction focused on using County dollars to implement population-level evidence-based prevention strategies that have the power to impact major community alcohol and other drug problems and which require the community as a whole to both participate in defining the problems and work toward their solutions. While more traditional prevention strategies remained part of the strategic plan, the focus of the County's alcohol tobacco and other drug prevention role moved to one grounded in support of strong community-driven health policy.

During the 2007 - 2010 timeframe, new coalitions were funded and formed in Windsor, Healdsburg, Sonoma, Santa Rosa, and the River Area. Two additional existing coalitions in Petaluma and Rohnert Park/Cotati/SSU also received support. Many of the organizations receiving funding had a history of providing more traditional prevention programs and strategies but were willing to stretch their organizational model to incorporate a new way of working; one that emphasized community mobilizing and policy implementation over provision of education and classroom based skills building. This work met with varying levels of success, with some communities more ready than others to engage in prevention activities requiring active community participation. As a result, in 2010 – 2011 only three of the original coalitions continued. However, both Sebastopol and Cloverdale formed new coalitions that remain active to this day.

The new five year AOD prevention Strategic Plan, to which this preface is attached, details an emerging framework in which the lessons from the first three years using a new AOD public health approach have been embraced and appropriate course corrections made. In the new framework it is recognized that in some locations in the County, community coalitions may not be the appropriate vehicle to implement environmental strategies. It may be more in keeping with some communities' way of operating to form "as needed" task

groups to move specific strategies forward. Also, over the past three – four years the Health Department has actively participated in helping to implement the work of the 2007 – 2010 Strategic Plan moving the center of gravity for some of the work in-house. So, while community coalitions are a powerful vehicle for community change and will continue to play a central role in the prevention work over the next five years, they are not the only vehicle to move the work forward. As communities evolve, non-profits shift focus and change staff; new AOD problems emerge, and creative and nimble responses to pressing AOD issues are the order of the day if problem rates are to be reduced across the County.

This new Strategic Plan reflects a focus on the emerging problems of the growing availability of marijuana and the corresponding normalization of its use, as well as the increasing access youth have to prescription drugs while keeping the problem of underage and high-risk adult drinking front and center. It also forecasts the implementation of a range of strategies both environmental and more individually focused. In this way the County has built a balanced approach that incorporates the best of environmental and individual strategies while keeping the emphasis on using strategies that research suggest actually work.

The clarity of focus and commitment to using best practice is a goal for many counties across the state. In part because of the Health Department's vision in 2005 – 2006 to shift more County resources into evidence-based environmental strategies and willingness of the Board of Supervisors to support the change in direction, the goal has been realized here. And while on-going strategy implementation challenges exist and AOD problems constantly change, this plan establishes a firm foundation to address problems now and in the future.

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I. INTRODUCTION

PLANNING OVERVIEW

Substance Abuse Prevention and Treatment (SAPT) Federal Block Grant funds are awarded to counties by the California Department of Alcohol and Drug Programs (CADP) to plan, implement, and evaluate activities to prevent and treat substance abuse. Twenty percent (20%) of the State's SAPT Block Grant funds must be spent on primary prevention. The Department of Health Services (DHS) administers SAPT funds for alcohol and other drug (AOD) primary prevention services in Sonoma County. The Department of Health Services also receives Office of National Drug Control Policy (ONDCP) Drug Free Communities (DFC) Support Program dollars managed through the Substance Abuse and Mental Health Services Administration (SAMHSA). The primary purpose of the DFC program is to: strengthen collaboration among community entities; and reduce substance use among youth.

Both the CADP and ONDCP/SAMHSA require that counties use the Strategic Prevention Framework (SPF) to design their local alcohol and other drug prevention plan. The SPF is a planning and program design tool developed by the federal Substance Abuse and Mental Health Services Administration (SAMHSA) to enable counties to build the infrastructure necessary for effective and sustainable prevention through a community-based approach. The collaborative nature of this process is intended to develop a common understanding of needs and resources with respect to AOD-related problems, and to set the stage for selecting appropriate and evidence-based prevention strategies.

In July 2005, DHS Prevention and Planning Division (now Healthy Communities Section) implemented the SPF in Sonoma County, through a year-long community planning process. The result of this effort was a comprehensive and community-based alcohol and other drug-related prevention framework to guide program planning and service delivery for the next several years. DHS Healthy Communities Section has once more facilitated the SPF planning process in order to update the local Alcohol and Other Drug Prevention Plan. Over the course of 12 months, the department has enlisted community participation in assessing Sonoma County's AOD-related problems, identifying factors that contribute to these problems, establishing prevention goals and objectives, and selecting prevention strategies.

Guiding Principles for Prevention

The following principles were adopted from the California Department of Alcohol and Drug Program's Strategic Prevention Plan.³ These principles guided the development of the AOD Prevention Plan for Sonoma County. They are also intended as a guide to those involved in both in the development and implementation of prevention strategies at all levels within the community.

Prevention fosters safe and healthy environments for individuals, families and communities. To create safe and healthy environments, prevention must reduce adverse personal, social, health, and economic consequences by addressing problematic alcohol, tobacco and other drug (ATOD) availability, manufacture, distribution, promotions, sales, and use. By leveraging resources, prevention programs will achieve maximum impact.

The entire community shares responsibility for prevention. All sectors, including youth, must challenge ATOD standards, norms, and values to continually improve the quality of life within the community. "Community" includes organizations, institutions, ethnic and racial communities, tribal communities and governments, residents and faith communities. Community also includes associations/affinity groups based on age, social status and occupation, professional affiliation, political or social interest, sexual orientation, and affiliations determined by geographic boundaries.

Prevention engages individuals, organizations and groups at all levels of the prevention system. This includes those who work directly or indirectly in the prevention system who share a common goal of ATOD prevention (e.g., law enforcement, fire departments, emergency medical technicians, health professionals, hospitals, teachers, employers, community members).

Prevention utilizes the full range of cultural and ethnic wealth within communities. By employing ethnic and cultural experience and leadership within a community, prevention can reduce problematic availability, manufacturing, distribution, promotion, sales, and use of alcohol, tobacco and other drugs.

Effective prevention programs are thoughtfully planned and delivered. To create successful prevention programs, one must utilize data to assess needs, prioritize and commit to the purpose, establish actions and measurements, use proven prevention action, evaluate measured results to improve prevention

³ California Department of Alcohol and Drug Programs, Prevention Strategic Plan, October 2002

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outcomes, and use a competent, culturally proficient and properly trained workforce.

The Strategic Planning Framework

The Strategic Prevention Framework (SPF), developed by the Substance Abuse and Mental Health Administration (SAMHSA), was designed to assist coalitions in developing the infrastructure needed for community-based, public health approaches leading to effective and sustainable reductions in AOD problems. The following five steps of the SPF provide a systematic approach to evidence based outcome oriented prevention planning:

1. **Assessment:** Profile population needs, resources, and readiness to address problems and gaps in service delivery.
2. **Capacity:** Mobilize and/or build financial and organizational resource capacity to address need; convene partnerships/coalitions; assess readiness; and improve cultural competency.
3. **Planning:** Develop a comprehensive strategic plan.
4. **Implementation:** Implement evidence-based programs and infrastructure activities.
5. **Evaluation:** Monitor and measure process and outcome data of implemented programs, policies, and practices for effectiveness and sustainability to continuously refine and improve prevention services, effectively apply resources, and appropriately develop the work force.



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The SPF creates a significant change in the way counties do prevention planning by requiring counties to develop specific countywide goals and objectives based on findings from the assessment process, and by using selected goals and objectives in planning prevention programs that use SAPT block grant primary prevention funds.

Throughout all five steps, implementers of the SPF must address issues of sustainability and cultural competence.

Sustainability

Sustainability refers to the process through which a prevention system becomes a norm and is integrated into ongoing operations. Sustainability is vital to ensuring that prevention values and processes are firmly established, that partnerships are strengthened, and that financial and other resources are secured over the long term.

Cultural Competence

Cultural competence is the process of communicating with audiences from diverse geographic, ethnic, racial, cultural, economic, social, and linguistic backgrounds. Becoming culturally competent is a dynamic process that requires cultural knowledge and skill development at all service levels, including policymaking, administration, and practice.

II. ASSESSMENT

The assessment process involves systematically collecting and analyzing data to define alcohol and other drug (AOD) problems within a specific geographic area and profiling community needs, resources, and readiness to address needs and gaps in service. The Department of Health Services Prevention and Planning Division began work in May 2010 to conduct a community assessment of the nature and scope of AOD-related problems in Sonoma County. This process involved multiple steps:

Collection of County and State archival or secondary data to assess trends over time (e.g. California Health Interview Survey, California Healthy Kids Survey, arrests, treatment, DUI, alcohol related traffic crashes, off-sale and on-sale alcohol outlets and disciplinary actions against problem outlets, state and national surveys).

Collection of primary data (e.g. Place of Last Drink Survey, focus groups with youth and adults, California Healthy Kids survey, key informant interviews).

Presentation of data findings to community forums for feedback (e.g., Sonoma County Prevention Partnership, Alcohol and Other Drug Advisory Board, Student Assistance Program Coalition, police, providers)

As a result of the data gathering and analysis process, the problem areas identified as top level priorities over the next 5 years were:

- Underage Alcohol Use and Related Problems
- High-Risk Adult Alcohol Use and Related Problems
- Marijuana Use and Related Problems

In addition, the issue of prescription drug abuse was identified as a topic for further research and assessment.

These problem areas are discussed in greater detail in the following chapters, including overviews of the problems, key findings on the extent of these problems in Sonoma County, and contributing community factors.

Assessment of Local Capacity to Address Needs

For many years, prevention strategies have been an important part of comprehensive efforts to reduce the harmful use of alcohol tobacco and other drugs and related problems. The strategies most often used have been those that target

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individuals for intervention and are designed to influence a person's attitudes, knowledge, skills, and behavior. Environmental prevention strategies are focused on changing aspects of the environment that contribute to the use of alcohol and other drugs. Specifically, environmental strategies aim to decrease the social and health consequences of substance abuse by limiting access to and availability of substances, and changing social norms that are accepting and permissive of substance abuse. They can change public laws, policies and practices to create environments that decrease the probability of substance abuse. The most effective prevention plans will use both environmental and individual substance abuse prevention strategies.

Broadly defined, individual strategies are short-term actions focused on changing individual behavior, while environmental strategies involve longer-term, potentially permanent changes that have a broader reach (e.g., policies and laws that affect all members of society). The most effective prevention plans will use both environmental and individual substance abuse prevention strategies.

A review of existing AOD prevention programs reveals that the majority of existing community and agency based programs and services in Sonoma County continue to focus on individual-level strategies (see Appendix 2 for current programs and services that target alcohol and other drug prevention). Schools, community-based organizations, cities, and county departments offer a range of group and individual educational services. These strategies provide information, skills training, and opportunities for personal development through a variety of programs, including school-based curricula, mentoring, peer education and counseling. The goal of such efforts is to reduce the probability of substance abuse by changing the knowledge and behaviors of individuals. These services are provided by a variety of organizations and agencies, such as non-profit community based organizations, school districts, and law enforcement agencies.

Recognizing the importance of offering evidence-based AOD prevention curriculum in the schools, a growing number of Sonoma County school districts have selected and implemented such curriculum as a part of their ongoing classroom education for students. Project Alert, for example, an evidence-based AOD prevention curriculum for middle school students, has been adopted by eighteen (18) school districts in Sonoma County.

Cities throughout Sonoma County have also invested resources to prevent AOD problems and to intervene with youth who are beginning to exhibit high-risk behavior. The Sonoma County Office of Education (SCOE) and the Department of Health Services are supporting this effort by providing funding for teacher training in Project Alert and assisting districts to implement this model curriculum with

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fidelity. SCOE and DHS have also partnered to bring Project SUCCESS (Schools Using Coordinated Community Efforts to Strengthen Students) to six school districts including 18 high schools in Sonoma County. Project SUCCESS is nationally and locally recognized by Upstream Investments as an evidence-based Student Assistance Program that has been proven effective in reducing youth involvement with alcohol, drugs, and violence and strengthening relationships between parents and their teens to promote academic and social success.

Santa Rosa, with funds attained through the passage of Measure O to prevent gang activity, has dedicated significant resources on a range of prevention and early intervention programs that have expand prevention services for youth and families throughout Sonoma County.

A number of cities are also able to continue to offer AOD prevention services through their recreation and police departments, including School Resource Officers, individual and group counseling, and participation in educational programs such as "Every 15 Minutes" and "Alive at 25." Community-based organizations offer a range of educational and counseling programs with funding from city, county, and private sources.

While some regions in the county have begun to develop the capacity for community-based and environmental prevention strategies (see Step 2: Capacity below), these strategies are less well developed in Sonoma County and warrant increased attention and support. Environmental prevention takes into account that individuals do not become involved with substances solely on the basis of personal characteristics. It recognizes the powerful influences of factors in the community environment, such as the rules and regulations of social institutions, the norms of the community, mass media messages, and the accessibility of alcohol and other drugs.

As the field of AOD prevention continues to evolve, there is growing recognition that long-term reduction in AOD-related problems cannot occur without shifts in community norms and policies. Research suggests that environmental approaches can produce a much larger impact per dollar invested than other approaches – a fact that is important given the County's limited and shrinking share of state primary prevention funds.

Environmental prevention strategies address the entire population (national, local community, school, neighborhood), with messages and programs aimed at preventing or delaying the abuse of alcohol, tobacco, and other drugs. Environmental prevention strategies use a public health model to focus on the physical, social, and political settings in which problem behaviors occur. Research has shown that policy strategies, key elements of an environmental approach, are a

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very powerful tool to reduce rates of alcohol-related problems in communities and to change community norms. Environmental prevention is also more likely to affect population-level change than are programs that focus on changing one individual at a time. Benefits of the environmental approach include⁴:

Broader reach. Environmental prevention engages the community and broadens the reach of AOD prevention as more people become engaged in improving the quality of life in their community. Rather than intervening to reduce risk one person at a time, environmental prevention strategies have the ability to create changes among entire populations that result in substantial net benefits to society in terms of reduced problems.

More substantial effects. Environmental prevention produces larger reductions in risk by creating conditions that support the nonuse of illicit substances and responsible use of legal ones. Programs that target individuals without considering the environments in which they live can find their effectiveness diminished by processes outside the individuals that are inconsistent with no-use or responsible-use messages.

More enduring and sustainable effects. Environmental prevention has aptly demonstrated the ability to achieve sustainable change through policy development and implementation. The combined effect of environmental barriers to use and widespread normative change results in the creation of a changed system that offers fewer opportunities and inducements to use substances for current and future generations.

Environmental strategies are best accomplished by community coalitions comprised of local residents, law enforcement, schools, health organizations, prevention service providers, and other interested groups. Coalitions can be a very powerful way to harness local resources and implement the kinds of multidimensional solutions that match the level of complex substance abuse issues found in most local communities. For example:

- Coalitions are ideal for addressing substance abuse and other complex problems. A diverse group of partners from different systems, community-based programs, and affected communities helps to develop comprehensive solutions that cut across boundaries of health, education, law enforcement, and human service systems.

⁴ Fisher, Deborah A., Ph.D., *Environmental Prevention Strategies: An Introduction and Overview*. <http://wch.uhs.wisc.edu/docs/SIG/fisher-EnvironmentalPreventionStrategies.pdf>

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- Coalitions create a kind of synergy where the whole is greater than the sum of the parts.
- Coalitions provide a vehicle for creating a shared vision to community health that can result in undertaking a variety of problems.
- Coalitions also foster joint accountability among members for outcomes.

For the past several years, DHS has worked to build capacity of prevention program providers – who currently offer individual-based “selective” or “indicated”⁵ prevention programming – to better understand and implement environmental prevention strategies. These capacity-building efforts should be expanded in Sonoma County in order to develop the countywide infrastructure necessary for effective and sustainable prevention through a community-based approach. Enhancing the capacity for environmental prevention in Sonoma County will provide the “missing link” in a truly comprehensive prevention plan.

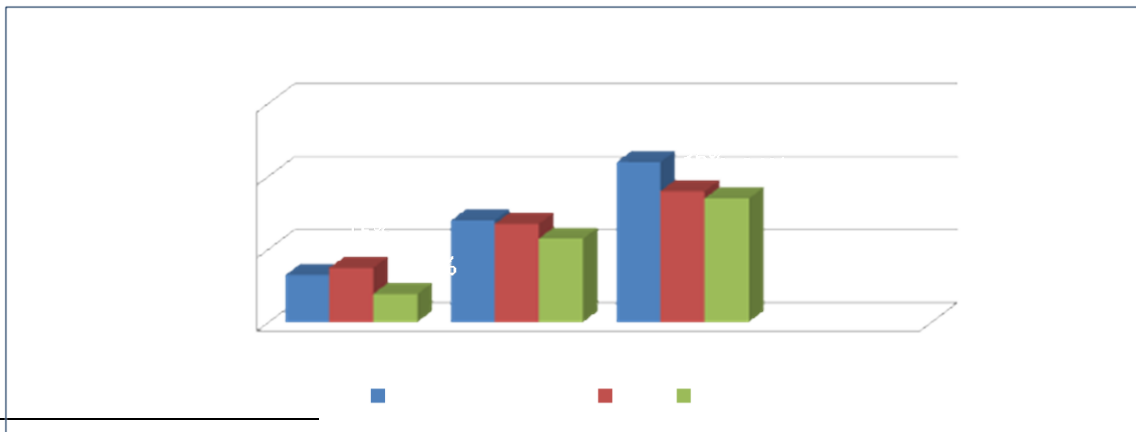
⁵ “Indicated” prevention strategies are efforts aimed at individuals who may already display signs of substance use/abuse. “Selected” prevention strategies target those who are at greater-than-average risk for substance abuse. “Universal” strategies target general population groups without identifying those at particularly high levels of risk.

III. THE PLAN

UNDERAGE DRINKING: SCOPE OF THE PROBLEM

Alcohol is the most widely used substance of abuse among America's youth. According to the U.S. Surgeon General's *Call to Action to Prevent and Reduce Underage Drinking*,⁶ alcohol is the drug of choice among adolescents, used by more youth than tobacco and illicit drugs. And, despite the fact that the minimum legal drinking age is 21 in all 50 states, drinking alcohol remains a popular intoxicant for youth. Underage drinking is a major public health and safety concern and contributes significantly to a range of adverse short-and long-term consequences, including academic and/or social problems; unwanted, unintended, and unprotected sexual activity; physical and sexual assaults; increased risk of suicide; alcohol-related car crashes; and other unintentional injuries such as burns, falls, and drowning; death from alcohol poisonings; violent and property crimes; fetal alcohol syndrome; and the need for treatment for alcohol abuse and dependence.

Results of the California Healthy Kids Survey ⁷ show that forty-four percent (44%) of Sonoma County 11th graders reported having at least one drink of alcohol in the past 30 days, a rate higher than the state rate of 36% and national rate of 33%.⁸ And, among local college students, age 18-20, the rate jumps to 52%⁹, again higher than the state rate of 47%.¹⁰



⁶ U.S. Dept. of Health and Human Services. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking* Rockville, MD: U.S. Dept. of Health and Human Services; 2007. Retrieved from: <http://www.surgeongeneral.gov/topics/underagedrinking>.

⁷ *California Healthy Kids Survey (2007-2009)*. Retrieved from: <http://www.wested.org/chks>.

⁸ PRIDE Surveys Report: National Summary Statistics. 2009-2010. Retrieved from www.pridesurveys.com

⁹ American College Health Association/National College Health Assessment II. (ACHA/NCHA) 2010

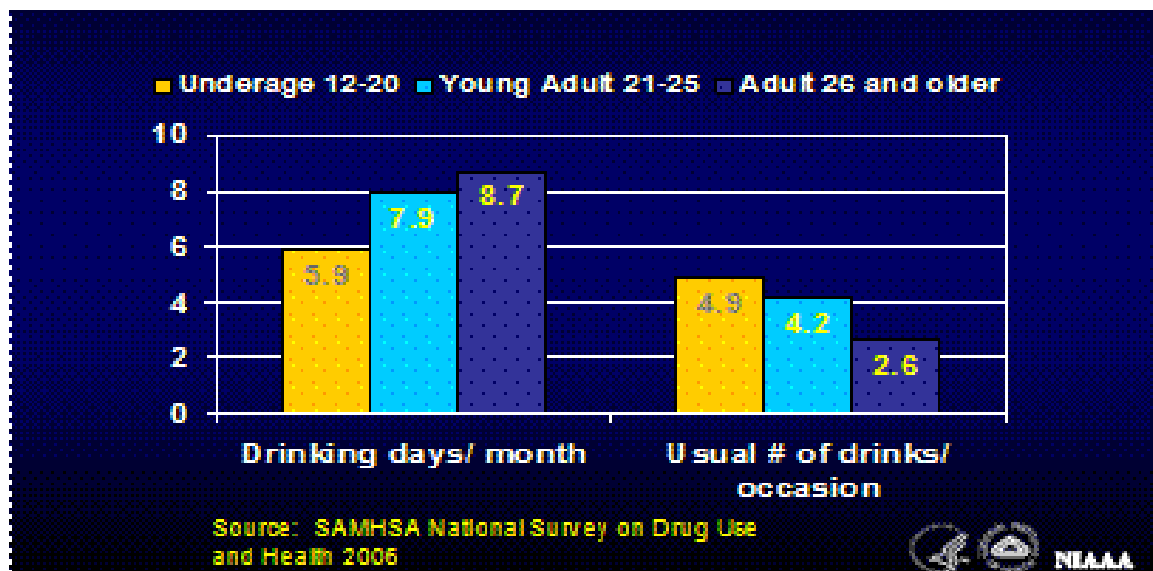
¹⁰ U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration. www.samhsa.gov. Report to Congress on the Prevention and Reduction of Underage Drinking. May 2011.

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Perceived risk of alcohol use: Drinking is often considered to be acceptable behavior among teens – less risky and more approved of than abuse of other substances, and “getting drunk” is the least socially disapproved activity.¹¹ When teens drink, they drink more than adults and a lot at one time. On average, young people have about 5 drinks on the same occasion (i.e., at the same time or within a couple of hours of each other). This is known as binge drinking and is the most common underage consumption pattern. High blood alcohol concentrations and impairment levels associated with binge drinking place binge drinkers and those around them at substantially elevated risk for negative consequences. Twenty-six percent (26%) of Sonoma County 11th graders reported binge drinking, higher than the state rate of 22%. The rate for college age underage youth statewide was 31.7%.¹²

Almost half of teens nationally (45%) reported they do not see a ‘great risk’ in heavy daily drinking.¹³ In fact, the percentage of youths age 12-17 indicating great risk in having four or five drinks of an alcoholic beverage nearly every day increased from 62% in 2002 to 65% in 2010.¹⁴

Figure 2: Number of Drinking Days Per Month And Number of Drinks Per Occasion By Age



¹¹ Johnston, L.D., O'Malley, P.M., Bachman, J.G., & Schulenberg, J.E. (2010) *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2009*. (NIH Publication No. 10-7583). Bethesda, MD: National Institute on Drug Abuse.

¹² U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration. www.samhsa.gov. Report to Congress on the Prevention and Reduction of Underage Drinking. May 2011.

¹³ Partnership Attitude Tracking Study. (2010). Retrieved from: the Partnership at Drugfree.org

¹⁴ Substance Abuse and Mental Health Services Administration. *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-41, HHS Publication No. (SMA) 11-4586. Rockville, MD.

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Drinking early in life increases the likelihood of developing an alcohol use disorder later in life and youth who begin drinking before the age of 15 are four times more likely to become dependent on alcohol than those who wait until age 21.¹⁵

Alcohol and brain development: Alcohol consumption before the age of 21 can have serious health and safety consequences for our youth and is associated with a variety of developmental problems during adolescence as well as problems in later life. Although the peak years of initiation to alcohol are 7th to 11th grade, 10 percent of 9- to -10 year olds nationally have already started drinking¹⁶ and more than one fifth of underage drinkers begin before they are 13 years old.¹⁷ In Sonoma County, twenty-three percent (23%) of 7th graders and forty nine percent (49%) of 9th graders report being under the age of 14 when they had their first drink.¹⁸

Children who drink at age 14 or younger are much more likely during their lifetimes to sustain unintentional injuries, to get into physical fights, and to become involved in motor vehicle crashes after drinking.¹⁹ The risk of addiction is greater for the developing adolescent than for mature adults.²⁰ The brain goes through rapid development and 'wiring' changes between the ages of 12-21. There is compelling evidence showing that teen alcohol use can adversely affect this development. The *prefrontal area* is responsible for thinking, planning, good judgment, decision-making and impulse control. Damage from alcohol during teen years can be long-term and irreversible. The *hippocampus* is involved in learning and memory. Frequent drinkers may never be able to catch up in adulthood since alcohol inhibits systems crucial for storing new information.^{21,22}

Alcohol leading cause of teen death: Teens are at far greater risk of death in an alcohol-related crash than the overall population, despite the fact that they are below the minimum drinking age in every State. Teenagers who drink and drive are at much

¹⁵ Substance Abuse and Mental Health Services Administration. (2010). *Results from the 2009 National Survey on Drug Use and Health: Volume I. Summary of National Findings* (Office of Applied Studies, NSDUH Series H-38A, HHS Publication No. SMA 10-4586Findings).Rockville, MD.

¹⁶ Donovan, J., Leech, S., Zucker, R., Loveland-Cherry, C., Jester, J., Fitzgerald, H., et al. (2004) Really underage drinkers: Alcohol use among elementary students. *Alcoholism: Clinical and Experimental Research*, 28 (2), 341-349.

¹⁷ Eaton, D.K., Kann, L., Kinchen, S., Shanklin, S., Ross, J., Hawkins, J., et al. (2008). Youth Risk Behavior Surveillance-United States, 2007. *Morbidity and Mortality Weekly Report*, 57 (SS-4), 1-131.

¹⁸ *California Healthy Kids Survey* (2007-2009). Retrieved from: <http://www.wested.org/chks>

¹⁹ Hingson, R., and Kenkel, D., Social, health, and economic consequences of underage drinking. In: National Research Council and Institute of Medicine. Bonnie, R.J., and O'Connell, M.E., eds. *Reducing Underage Drinking: A Collective Responsibility*. Washington, DC: National Academies Press, 2004. Pp. 351-382. Available online at: <http://www.nap.edu/books/0309089352/html>.

²⁰ PRIDE Surveys Report: National Summary Statistics. 2009-2010. Retrieved from www.pridesurveys.com

²¹ National Institute on Alcohol Abuse and Alcoholism: Underage Drinking Research Initiative. Alcohol and the Developing Adolescent Brain. Retrieved from: <http://www.niaaa.nih.gov>

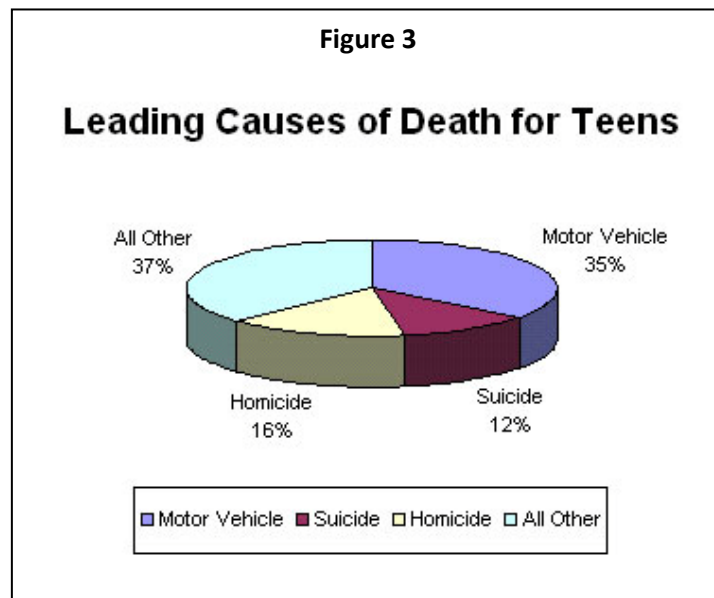
²² White, A.M., and Swartzwelder, H.S. Age-related effects of alcohol on memory and memory-related brain function in adolescents and adults. *Recent Developments in Alcoholism* (2005). Volume 17: 161-76.

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greater risk of serious crashes than are older drivers with equal concentrations of alcohol in their blood. Drinking and driving is a popular practice among teenagers and motor vehicle crashes are the leading cause of death for youth aged 15-20 years. In the United States, 12.8% of all fatal traffic crashes were alcohol-related and 40% of those involved teens driving while drinking alcohol.²³ The crash rate for 16 to 19-year-old CA drivers who had been drinking is 1.9 times higher than drivers of all ages,²⁴ while the proportion of 'had been drinking' drivers involved in fatal/injury crashes under the age of 21 increased by 8.7% from 1998 to 2008.²⁵

In Sonoma County, 28% of 11th graders reported driving a car one or more times when they had been drinking, and 46% of 7th graders reported having been a passenger in a car driven by someone who had been drinking alcohol.²⁶ Twenty-eight (28%) of 9th graders nationwide rode in a car one or more times with someone who had been drinking alcohol.²⁷ National focus group teen participants did not see anything wrong with underage drinking and very little wrong with driving after having consumed just a beer or two. Many believed they could tell when they were too drunk to drive.²⁸ In Sonoma County, 78% of underage youth participating in the court-ordered Drinking Driver Program²⁹ believed they were safe to drive, despite their legal levels of intoxication.

Alcohol is the leading contributor to injury death, the main cause of death for people under age 21. Annually, about 5,000 youth under age 21 die from alcohol-related injuries that involve underage drinking,



²³ The National Highway Traffic Safety Administration (NHTSA). <http://www.nhtsa.gov>

²⁴ California Dept. of Motor Vehicles. Teen Driver Crash Statistics. http://dmv.ca.gov/teenweb/more_btn6/traffic/traffic.htm#

²⁵ California Department of Motor Vehicles; (January, 2011). *Annual Report of the California DUI Management Information System*. dmv.ca.gov

²⁶ *California Healthy Kids Survey* (2007-2009). Retrieved from: <http://www.wested.org/chks>

²⁷ Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance Survey. U.S. 2009. MMWR 2010; 59 (No.SS-5)

²⁸ National Highway Traffic Safety Administration. Teen Unsafe Driving Behaviors: Focus Group Final Report. <http://www.nhtsa.gov>

²⁹ Sonoma County Department of Health Services, Place of Last Drink Survey, Alcohol and Other Drugs Drinking Driver Program. 2011.

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including injuries sustained in motor vehicle crashes, homicides, suicides, as well as unintentional injuries not related to motor vehicle crashes.³⁰

Costs of underage drinking: Underage drinking cost the citizens of California \$1.8 billion in 2007 for medical care, work loss, and pain and suffering associated with the multiple problems resulting from the use of alcohol by youth. Youth violence and traffic crashes attributable to alcohol use by underage youth in California represented the largest costs for the State. Underage drinkers consumed 13.9% of all alcohol sold in California in 2007, totaling \$3.6 billion in sales. These sales provided profits of \$1.8 billion to the alcohol industry.³¹

Emergency room visits: In 2008, an estimated 188,981 alcohol-related emergency department (ED) visits were made by patients aged 12 to 20, accounting for about one third of all drug-related ED visits (32.9 percent) made by this age group. Of these ED visits, 70.0 percent involved alcohol only, and 30.0 percent involved alcohol in combination with other drugs.³² In 2009-10 (18 month time span) data from Petaluma Valley Hospital showed that 33 youth, ages 13-18 were admitted to the ED with a primary diagnosis of alcohol intoxication. Ninety three percent (93%) of those youth had a blood alcohol level above .08.³³

Alcohol use and athletics: Alcohol use among adolescent athletes is fairly high. Young athletes may be more likely to abuse alcohol than their non-athlete peers and more likely to suffer behavioral and psychological consequences as a result of drinking. Alcohol consumption reduces performance potential by up to 11.4%, and heavy episodic drinking can result in the projected loss of up to 14 days of training.³⁴

Alcohol use on college campuses: For most, college drinking does not begin in college, but many students increase their consumption when they get to college.

³⁵Eighty-two percent of college students drink, 40% report binge drinking, and

³⁰ National Institute on Alcohol Abuse and Alcoholism. The Scope of the Problem. Retrieved from <http://www.niaaa.nih.gov>

³¹ Underage Drinking Enforcement and Training Center. Underage Drinking in CA: The Facts. Pacific Institute for Research and Evaluation. (2009). Retrieved from: www.udetc.org/underagedrinkingcosts.asp

³² Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (July 29, 2010). The DAWN Report: Emergency Department Visits Involving Underage Alcohol Use: 2008. Rockville, MD.

³³ Petaluma Valley Hospital ED Underage Drinking Report. January, 2009-May 15, 2010. Provided by Wendi Thomas, RN.

³⁴ American Athletic Institute. www.americanathleticinstitute.org

³⁵ National Institute on Alcohol Abuse and Alcoholism. Research Findings on College Drinking and the Minimum Legal Drinking Age. <http://www.niaaa.nih.gov>

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nearly half of all college students report having been drunk in the past 30 days.³⁶ There are more than 1800 alcohol-related deaths each year among college students³⁷ yet the negative effects related to college student drinking extend far beyond this number: 590,000 unintentional injuries; more than 690,000 assaults by another student; more than 97,000 victims of sexual assault or date rape; and about 25% of students report negative academic consequences.³⁸

Alcohol use among military personnel: According to the 2008 Department of Defense, Health-Related Behaviors among Military Personnel, military personnel aged 18-25 showed significantly higher rates of heaving drinking (26%) than did civilians (16%). Forty seven percent (47%) of all military personnel were binge drinkers. Heavy drinkers across all branches of service reported the highest rates of serious consequences as a result of drinking or a drinking-related illness, including military punishment, alcohol-related arrest, the need for detoxification, being passed over for promotion, loss of productivity, and injury from driving under the influence of alcohol.³⁹

Goal 1: Reduce Alcohol-Related Problems Associated with Social and Retail Access to Alcohol

Communities often look to individual solutions to alcohol problems that are based on the premise that substance abuse develops because of deficits in knowledge about consequences, inadequate resistance skills, poor decision making abilities and low academic achievement.⁴⁰ These efforts, while important in a multiple strategy approach, don't alter the overall environment in which people live and work. And, it is extremely difficult to change the behavior of individuals or protect them from risk when the physical environment makes alcohol easily available, attractive, inexpensive, and socially and legally acceptable.⁴¹

³⁶ Johnston, L. D., O'Malley, P. M., Bachman, J. G., &Schulenberg, J. E. (2009). *Monitoring the Future national survey results on drug use, 1975–2008:Volume II, College students and adults ages 19–50* (NIH Publication No. 09-7403). Bethesda, MD:

National Institute on Drug Abuse.

³⁷ Hingson, R.W.; Zha, W.; Weitzman, E.R. Magnitude of and trends in alcohol-related mortality and morbidity among U.S. college students ages 18-24, 1998-2005. *J Stud Alcohol Drugs* 2009; (16S): 12-20.

³⁸ Saltz, R.; Paschall, Mallie J.; McGaffigan, Richard P.; Nygaard, Peter. Alcohol Risk Management in College Settings: the Safer California Universities Randomized Trial. *Am J Prev Med* 2010; 39 (6): 491-499.

³⁹ Dept. of Defense Survey of Health Related Behaviors Among Active Duty Military Personnel. 2008. Retrieved from: <http://dodreports.com/pdf/ada527178.pdf>.

⁴⁰ Community Anti-Drug Coalitions of America (CADCA). The Coalition Impact: Environmental Prevention Strategies. (2008). Available at www.cadca.org

⁴¹ Prevention Research Center. A Training Manual for PRC Community Organizers. Preventing Alcohol-Related Problems in the Community—Environmental Approaches.

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Prevention aimed at the environment, known as *environmental prevention*, takes into account the fact that individuals are powerfully influenced by a complex set of factors in the environment, such as institutional rules and regulations, community norms, mass media messages, and the accessibility of alcohol, tobacco, and illicit drugs. Effective prevention requires implementation of strategies that effectively make appropriate modifications to the community at large, that focus on system wide changes through public policies and community level interventions.

Underage drinking is not just a teenage problem; it's an adult problem as well, because everywhere you have a teenager drinking, chances are that you have an adult around, either selling the alcohol, providing it or allowing it to be consumed. High-risk environments of alcohol availability and alcohol consumption make significant contributions to a local community's social, health, and economic costs for dealing with alcohol and drug problems. In general, there are 3 kinds of environments of alcohol availability contribute to community-level problems: *retail environments*, where alcoholic beverages are served or sold; *public environments*, where alcoholic beverages are present in public places and at public events; and *social environments*, where alcoholic beverages are used according to social norms and customs particular to a local community.⁴²

Retail (commercial) availability of alcohol is determined by State and local regulations, determining the number, location, types, and serving/selling practices of alcohol licensed retailers. In California, there are specific state laws that govern all alcohol establishments issued a license through the California Dept. of Alcoholic Beverage Control. Across local jurisdictions, and depending on the degree of enforcement, the availability of alcohol to underage youth needs to be addressed through the following sales regulations:

- Limiting the types and location of commercial outlets that are likely sites for youth purchases and theft through Conditional Use Permits;
- Mandating Responsible Beverage Service training to mitigate the likelihood of illegal sales to minors; and
- Conducting comprehensive compliance checks through law enforcement programs.

Addressing the **social (non-commercial) sources** of alcohol and settings for youth drinking is an equally high priority and requires a multifaceted approach designed to shift community norms and cultural values. Points of access need to be limited by:

⁴² Wittman, Friedner, D. Development and Use of Conditional Use Permits to Prevent Problems Related to Retail Alcohol Outlets: An Overview. (1994) Expanded from remarks prepared for the workshop: "The Effective use of local land use controls to prevent problems related to alcohol outlets".

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- Implementing 'shoulder tap' compliance operations;
- Implementing Target Responsibility for Alcohol Connected Emergencies (TRACE) and other point of access enforcement programs;
- Implementing social hosting ordinances; and
- Establishing alcohol restrictions in public locations and special events

Most kids can get alcohol easily by stealing it; some stores don't have enough staff to watch and others have a 'no chase' policy once you are outside...

Focus group participant, 2011

Retail Access to Alcohol: An Overview

Retail (commercial) availability of alcohol is determined by State and local regulations, determining the number, location, types, and serving/selling practices of alcohol licensed retailers. In California, there are specific state laws that govern all alcohol establishments issued a license through the California Dept. of Alcoholic Beverage Control. Across local jurisdictions, and depending on the degree of enforcement, the availability of alcohol to underage youth needs to be addressed.

Research has established a powerful link between the number, types and concentration of alcohol outlets in a given area or neighborhood, and higher levels of consumption. Generally, high-levels of consumption contribute to increased rates of crime, violence, and nuisance activities which in turn threaten the health, safety, and general well-being of the public ^{43,44,45}

Alcohol outlets located next to schools, playgrounds or other locations where youth congregate can contribute to underage drinking problems and can detract from the overall quality of life in a community. Similarly, businesses located near a problem alcohol outlet report a negative impact on their bottom line. Poorly managed alcohol outlets often increase the probability or potential for problems, including sales to minors and intoxicated persons, shoulder taps, drug dealing, and general community blight.

Although youth are more likely to get alcohol from social sources, recent studies have shown that when alcohol is available and easy to get, youth will drink more.⁴⁶ In

⁴³ Campbell, C.A.; et al. (2009). Effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol related-harms. *American Journal of Preventive Medicine*. 37(6).

⁴⁴ Gruenewald, P.J. and Remer, L. (2006). Changes in outlet densities affect violence rates. *Alcoholism: Clinical and Experimental Research*, 30(7):1184-93.

⁴⁵ Treno, A.J.; Gruenewald, P.J.; and Johnson, F.W. (2001). Alcohol availability and injury: the role of local outlet densities. *Alcohol Clinical Experimental Research*, 25, 1467-1471.

⁴⁶ Chen, M.J.; Gruenewald, P.; and Remer, L. (2009). "Does alcohol outlet density affect youth access to alcohol?" *Journal of Adolescent Health*. 44:582-589.

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census tracts with high density of off-sale (convenience stores, liquor stores, etc.) commercial availability of alcohol, there was a greater concentration of underage youth attempting to purchase alcohol and making a successful purchase. Riding with a drinking driver was also significantly concentrated within census tracts with the greatest off-sale alcohol outlet density.⁴⁷ And higher initial levels of drinking and excessive drinking were observed among youths residing in zip codes with higher alcohol outlet densities.

Outlet density may play a significant role in initiation of underage drinking during early teen ages, especially when youths have limited mobility. Alcohol retailers are more likely to sell alcohol to minors if other alcohol outlets are nearby.⁴⁸ Adolescent binge drinking and driving after drinking have been significantly associated with the presence of alcohol retailers within a half mile of one's home.⁴⁹ Suicide rates among boys 15-19 years old have been shown to increase by up to 12% when outlet density increases.⁵⁰

"There are stores...that are notorious for loitering and shoulder tapping. Teens will approach men...and give them money to purchase alcohol."

Sonoma Valley Coalition Member, 2009

Neighborhoods with alcohol outlet density have more violent crime, including homicide, rape, assault, and robbery, even when other neighborhood characteristics such as poverty and age of residents were taken into account.⁵¹ In a typical Los Angeles city of 50,000, with 100 alcohol outlets and 570 assaults, one additional outlet was associated with 3.4 additional assaults per year.⁵² Recent studies continue to support these findings, showing a correlation between the density of alcohol outlets and violent crime with higher rates of crime occurring in neighborhoods around alcohol outlets that allotted more than 10 percent of cooler space for single-serve containers.⁵³

⁴⁷ Reboussin, Beth A., Song, Eun-Young, Wolfson, Mark. The Impact of Alcohol Outlet Density on the Geographic Clustering of Underage Drinking Behaviors within Census Tracts. *Alcohol Clinical and Experimental Research*. Vol. 35, No. 8, 2011: pp 1-9.

⁴⁸ Chen, M.J.; Gruenewald, P.; and Remer, L. (2009). "Does alcohol outlet density affect youth access to alcohol?" *Journal of Adolescent Health*. 44:582-589.

⁴⁹ Truong K. and Sturm, R. Alcohol environments and disparities in exposure associated with adolescent drinking in California. *American Journal Public Health*. 2009; 99 (2), 264-270.

⁵⁰ Markowitz S.; Chatterji, P.; Kaestner, R. Estimating the impact of alcohol policies on youth suicides. *Journal of Mental Health Policy and Economics*. 2003; 6(1): 37-46.

⁵¹ Gorman, D., Speer P., Gruenewald, P., and Labouvie E. (2001) Spatial Dynamics of Alcohol Availability, Neighborhood Structure and Violent Crime. *Journal of Studies on Alcohol*. 62:628-636.

⁵² Scribner, Richard A., MacKinnon, David P., and Dwyer, James H. The risk of assaultive violence and alcohol availability in Los Angeles County. 1995. *American Journal of Public Health* (85)3: 335-340.

⁵³ University of California-Riverside. 2011. Liquor store density linked to youth homicides, U.S. studies find. *Science Daily*. Retrieved Sept. 12, 2011, from <http://www.sciencedaily.com/releases/2011/09/110907163912.htm>.

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Local youth surveys indicate that Sonoma County youth believe alcohol is easy to get. Seventy eight percent (78%) of Sonoma County 11th graders believe alcohol is fairly easy or very easy to get.⁵⁴ Seventy percent (70%) of Sonoma County Friday Night Live Chapter youth reported that alcohol, tobacco and other drugs were easy for youth to get⁵⁵, and Half of the students participating in focus groups in the West County and Sonoma Valley report that alcohol is easy to get from stores.

Strategy: Conditional Use Permit with Nuisance Abatement Standards

The Alcohol Conditional Use Permit (CUP) is a type of zoning tool that municipalities can use to locally regulate the number, location, and operational practices of alcohol outlets. A CUP works by specifying allowable concentration/density of alcohol outlets; regulating proximity to sensitive land-use areas (including schools, churches, parks, private residences, etc); requiring strict standards of operation such as the cleaning up of trash, litter, and graffiti; installation of surveillance equipment; staff training in Responsible Beverage Service (RBS); and proper signage and postings. State law provides that a county can require an applicant to the State Alcoholic Beverage Control (ABC) to obtain a CUP before it can be licensed by the state. The CUP application involves a review process, including

“Kids use their older siblings’ ID or even a friend’s because fake ID’s are expensive. A lot of the time cashiers don’t look at the picture, they just look at the age.”

21 year old West County Resident

public hearings, that gives the applicant, public officials and neighbors the opportunity to present evidence regarding whether the application should be granted, and if so, with what conditions. It is a “discretionary permit,” meaning that it can be denied by County decision makers, including the Board of Zoning Adjustments (BZA), Sonoma County Planning Commission, or the Sonoma County Board of Supervisors.

While the State of CA has the power to issue or approve licenses to sell/serve alcohol and to revoke licenses of problem outlets, local governments have the power and responsibility to exercise their constitutional authority to regulate how, when, and where alcohol is sold and served. Any existing ABC licensed business that wants to change its current mode or manner of operation either by changing its floor space design, type of entertainment, and/or ratio of food to alcohol sales,

⁵⁴ *California Healthy Kids Survey* (2007-2009). Retrieved from: <http://www.wested.org/chks>

⁵⁵ California Friday Night Live Partnership Youth Development Outcomes Assessment Project. (2011) Youth Leadership Institute for California Friday Night Live Partnership with funding provided by the California Dept. of Alcohol and Drug Program.

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would retrigger their existing business status and need to apply under the local CUP. Together, the regulations of a CUP combined with the State ABC Act provide the basic framework for addressing the number of outlets, types of alcohol outlets, concentration of outlets, locations of outlets, and sales and service practices at the local level.

Many communities and neighborhoods are concerned about the public nuisance problems often associated with the sale and consumption of alcohol by minors and over-consumption by adults, such as disturbing the peace, violence, public intoxication, assaults, and loitering. These public health and safety issues can be addressed through the inclusion of nuisance abatement standards or 'deemed approved' standards in comprehensive conditional use permits.

- The City of Rohnert Park passed a Conditional Use Permit with nuisance abatement standards in 2006. Alcohol related problems decreased; merchant compliance with existing laws increased; and the sales to minors violation rate decreased by 11% from 2007-2009.
- The City of Petaluma passed an Alcohol-Related Nuisance Ordinance in 2007. Alcohol-related calls for service decreased by 41% from the previous year, while incidents and arrests decreased by 36%. Between 2007 and 2010, these rates have continued to trend downward.

Strategy: Enforcement of Existing Laws

Enhanced enforcement programs initiate or increase the frequency of retailer compliance checks for laws against the sale of alcohol to minors in a community. They are often conducted as part of a multi-component, community-based effort to reduce sale of alcohol to minors, and to limit underage alcohol purchases. The Task Force on Community Preventive Services⁵⁶ recommends enhanced enforcement as a strategy on the basis of sufficient evidence of effectiveness in limiting underage alcohol purchases. All of the studies included in the review evaluated the percentage of purchase attempts by underage or youthful-looking decoys that resulted in sales and showed a 42% reduction in sales to minors.

Retailer compliance checks, or 'sting operations' are conducted by, or coordinated with local law enforcement or the California Alcoholic Beverage Control (ABC). "Minor Decoy Programs" have been recognized as an excellent method to attack the problems associated with the unlawful purchase and consumption of alcoholic

⁵⁶ Guide to Community Preventive Services. Preventing excessive alcohol consumption: enhanced enforcement of laws prohibiting sales to minors. www.thecommunityguide.org/alcohol/lawsprohibitingsales.html. Last Updated January 6, 2011.

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beverages by young people.⁵⁷ Another enforcement strategy known as the “Shoulder Tap Program” is used to detect and deter those adults who furnish alcohol to minors outside licensed premises.⁵⁸ Minor decoys, under direct supervision of local law enforcement officers, solicit adults outside a alcohol establishment to buy them alcohol. Asking adult family members or friends to purchase the alcohol is another form of shoulder tapping. Local retailers can play an important role in shoulder-tap programs. Under California law, retailers are responsible for activity in the immediate vicinity of their establishment and should refuse sale if they believe the adult is purchasing the alcohol on behalf of a minor.

To insure compliance with state laws and regulations, including illegal sales to minors, the CA Department of Alcoholic Beverage Control (ABC) and the Sonoma County Sheriff’s Office periodically conduct minor decoy and shoulder tap operations on randomly selected and/or problematic establishments in the unincorporated areas of the County. Some recent outcomes:

- In 2008, ABC minor decoy operations in unincorporated West County found that 54% of the 28 establishments visited by ABC sold alcohol to minor decoys.
- In 2009-10, of the 48 off-sale establishments visited by the Sheriff’s Office, six sold to the decoy resulting in a 12.5% violation rate overall.
- In 2009-10, the Sheriff’s Office conducted 11 “Shoulder Tap” Operations. Of the 143 adults approached in front of stores, 31 were arrested for furnishing alcohol to a minor, a violation rate of 22%.

Social Access to Alcohol: An Overview

Seventy six percent (76%) of 11th graders in Sonoma County report alcohol is fairly easy or very easy to obtain.⁵⁹ And, while purchasing or stealing alcohol from supermarkets, convenience stores, gas stations and liquor stores remains a serious problem, underage youth report that they get alcohol from social sources⁶⁰, in other words, directly from parents, with or without permission; from older siblings or older friends; or asking strangers to buy it for them (also known as ‘shoulder tapping’). Twenty-two percent of youth nationwide were given alcohol by their

⁵⁷ California Dept. of Alcoholic Beverage Control. Minor Decoy Program.

http://www.abc.ca.gov/programs/minor_decoy.html.

⁵⁸ Ibid

⁵⁹ *California Healthy Kids Survey* (2007-2009). Retrieved from: <http://www.wested.org/chks>

⁶⁰ Wagenaar, Toomey and Murray. (1996). Sources of Alcohol for Underage Drinkers. *Journal of Studies on Alcohol*. 57, 325-33.

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parents, guardian or an adult family member.⁶¹ In fact, parties in private homes are the most frequent source of alcohol for most youth.

Recent studies show that when alcohol is available to youth in their homes, this becomes a risk factor for increased alcohol use and alcohol-related problems. Parents can restrict the availability of alcoholic drinks at home, while setting strict rules regarding alcohol use, particularly when alcoholic drinks will continue to be in the home.⁶² Even when adults supervise the places where alcohol is used, the

It's easy to take alcohol from home and water the bottle down afterwards...

Focus group participant, 2011

result is higher levels of harmful alcohol consequences for youth. This is contrary to previous held beliefs that supervised alcohol use or starting to drink at an earlier age will reduce the development of adolescent alcohol problems. Giving permission to drink at home may be interpreted to mean that you approve if they drink with friends when you're not around. In fact, parent supervised drinking may set in motion a more rapid shift to unsupervised drinking than otherwise would happen.⁶³

European countries are often held as examples of liberal drinking age laws and attitudes fostering more responsible styles of drinking. However, recent studies show higher prevalence rates for self-reported intoxication than the U.S.⁶⁴ And, in Australia, early-age alcohol use combined with higher levels of adult supervised use contributed to higher rates of alcohol-related problems.⁶⁵

Communities report that many parents have a high tolerance for teen parties, allowing them to occur on their property without any supervision.⁶⁶ Well-meaning parents often host drinking parties on behalf of their children, in the belief they can control the amount of alcohol a teen consumes and the safety of all involved. This

⁶¹ Substance Abuse and Mental Health Services Administration. *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-41, HHS Publication No. (SMA) 11-4586. Rockville, MD.

⁶² Van Den Eijnden, Regina, Ph.D., et al. Alcohol-Specific Parenting and Adolescents' Alcohol-Related Problems: The Interacting Role of Alcohol Availability at Home and Parental Rules. *Journal of Studies on Alcohol and Drugs*, 72, 408-417, 2011.

⁶³ National Institute on Alcohol Abuse and Alcoholism. Alcohol Policy Information System. Retrieved from: www.alcoholpolicy.niaaa.nih.gov

⁶⁴ McMorris, Barbara, Ph.D., et al, Influence of Family Factors and Supervised Alcohol Use on Adolescent Alcohol Use and Harms: Similarities Between Youth in Different Alcohol Policy Contexts. *Journal of Studies on Alcohol and Drugs*, 72, 418-428, 2011.

⁶⁵ Office of Juvenile Justice Delinquency Prevention (OJJDP). Youth Drinking Rates and Problems: A Comparison of European Countries and the United States. 2005.

⁶⁶ Wolfson, M., Wagenaar, A., and Hornseth, G. (1995). Law officers' views on enforcement of minimum drinking age: A four state study. *Public Health Reports*, 110.

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tolerance apparently stems from three misconceptions or beliefs: 1) alcohol, particularly beer, is a relatively harmless drug compared to illegal drugs, and its consumption is part of the passage to adulthood; 2) permitting consumption in a residential setting is safer than having it occur in open areas where there is a higher risk of problems; and 3) teen drinking is inevitable, and 'if my child's going to drink, it might as well be in my home'.⁶⁷

However, in reality, teens are often injured while drinking under adult supervision. And, many teen parties frequently lack adult supervision and can lead to serious health and safety problems. Drunk driving is one of the dangers associated with teen drinking, but even if the teen never gets behind the wheel, there are other serious consequences, including sexual assaults, fights, property destruction, unprotected sex and sexually transmitted diseases, and alcohol poisoning. Parties can be high risk settings. Very young drinkers are often introduced to heavy drinking behaviors at these home parties.⁶⁸ Hosting underage drinking parties is unsafe, illegal, and irresponsible. It undermines the efforts of other parents to protect their kids, and it takes away their right to parent their children.

The National Highway Traffic Safety Administration's national campaign, *Underage Drinking: Adult Consequences*,⁶⁹ warns irresponsible parents that it's "time to grow up". This strong message is targeted to those parents, who for some reason, think it is okay to host parties where underage drinking occurs or to supply alcohol to their teenagers and their teenager's friends.

According to the *Report to Congress on the Prevention and Reduction of Underage Drinking*,⁷⁰ the social and physical settings for underage drinking affect patterns of alcohol consumption. For young people, the usual number of drinks consumed is substantially higher when two or more other people are present than when drinking with one person or alone. (Figure 4).

⁶⁷ Pacific Institute for Research and Evaluation in support of the Underage Drinking Enforcement Training Center. *Regulatory Strategies for Preventing Youth Access to Alcohol: Best Practices*.

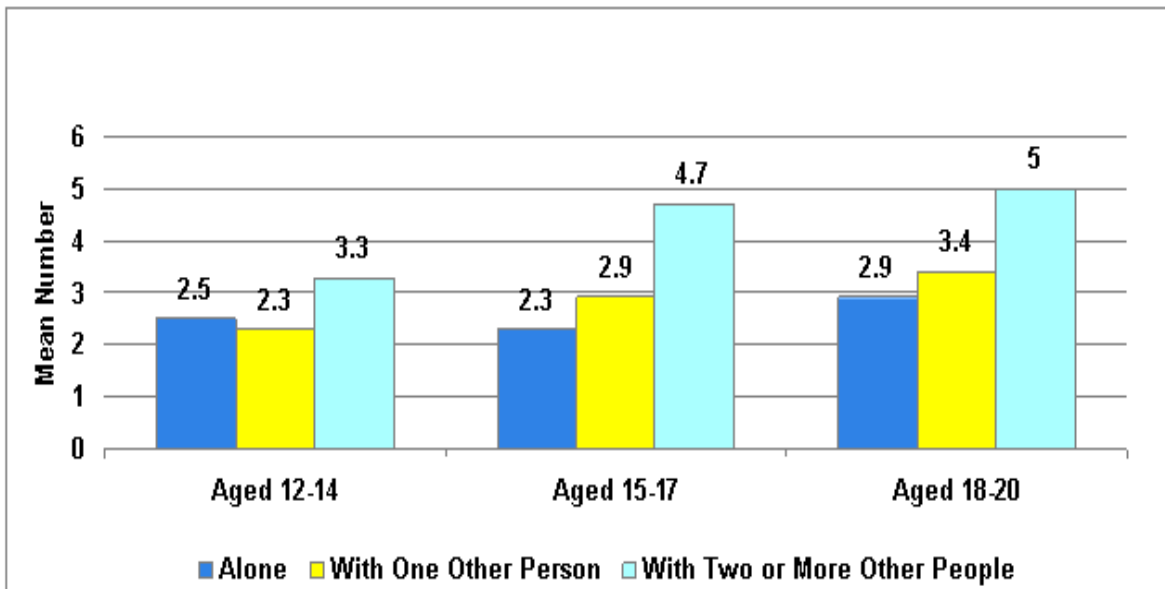
⁶⁸ Wagenaar, Toomey and Murray (1996). Sources of Alcohol for Underage Drinkers. *Journal of Studies on Alcohol*. 57, 325-33.

⁶⁹ National Highway Traffic Safety Administration. *Underage Drinking Adult Consequences: Youth Access to Alcohol*. Retrieved from <http://www.nhtsa.gov/>

⁷⁰ U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration. (May 2011) Report to Congress on the Prevention and Reduction of Underage Drinking.

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Figure 4– Drinks Consumed on Last Occasion of Alcohol Use in the Past Month Among Past-Month Alcohol Users Ages 12 to 20, by Social Context and Age Group⁷¹



Drinking in the presence of others is by far the most common setting for young drinkers. Over 82 percent of youth who had consumed alcohol in the past month reported doing so when at least two others were present.⁷² Thus, most young people are drinking in social contexts that appear to promote heavy consumption and where people other than the drinker may be harmed by the drinker's behavior.

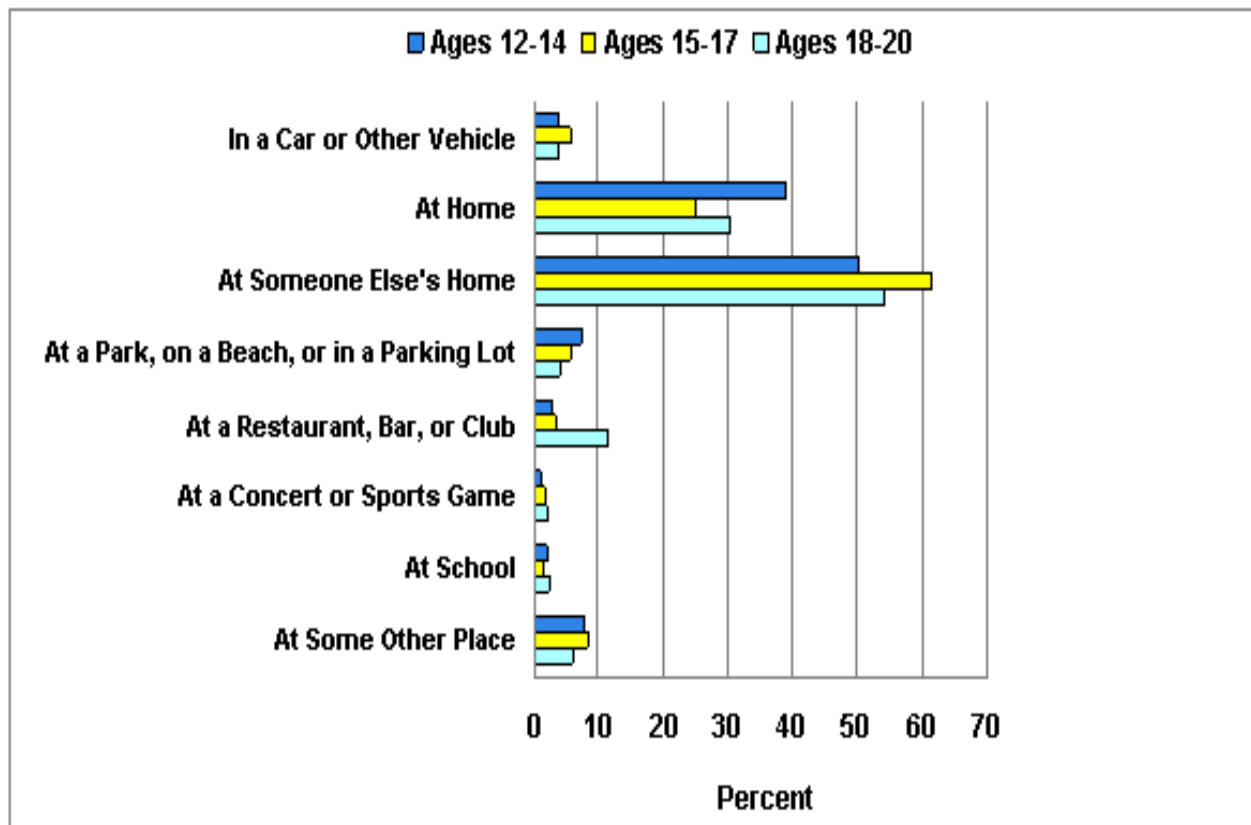
As shown in Figure 5 (below), private residences are the most common setting for youth alcohol consumption, although age differences are reported. Most underage drinkers reported drinking in either someone else's home or their own. The next most popular drinking locations were at a restaurant, bar, or club; at a park, on a beach, or in a parking lot; or in a car or other vehicle. Nationally, 18 to 20 year olds are more likely than their younger peers to report drinking in restaurants, bars, or clubs, or at concerts or sporting events, although the absolute rates of such drinking are low when compared with drinking in private residences.

⁷¹ Substance Abuse and Mental Health Services Administration, *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011.

⁷² Substance Abuse and Mental Health Services Administration, *Results from the 2010 National Survey on Drug Use and Health: Summary of National Finding*, NSDUH Series H-41, HHS Publication No. (SMA) 11-4586. Rockville, MD.

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Figure 5 – Drinking Locations by Age Group, 12-20: 2008-2009⁷³



However, in Sonoma County, 49% of underage college students reported drinking at a friend's house; 25% at home; 21% at a bar or nightclub.⁷⁴ In another local college study, 69% of students were most commonly drinking in an off-campus residence, compared to 43% nationally.⁷⁵ These results show that living at home or living with parents is not a protective factor. And, according to the Sonoma County Place of Last Drink Survey, the majority of those under the age of 21 noted they had been drinking at a friend's house or their own home prior to being stopped and arrested for driving under the influence (DUI). And, on average, they had been binge drinking, consuming over 5 drinks in three hours or less.⁷⁶

These data suggest that underage drinking primarily occurs in social settings, and most often at a private residence. This conclusion is consistent with research that

⁷³ Substance Abuse and Mental Health Services Administration, *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011.

⁷⁴ American College Health Association. *National College Health Assessment: Santa Rosa Junior College Executive Summary* (Spring 2010).

⁷⁵ AlcoholEdu College Surveys. (2009-2010) Sonoma State University. Executive Summary.

⁷⁶ Sonoma County Dept. of Health Services. *Sonoma County Drunk Driver Program. (2011) Place of Last Drink Survey.*

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has found that underage drinking parties, where underage persons gather at private residences, are high-risk settings for binge drinking and associated alcohol problems.⁷⁷

In August, 2011, California Senate Concurrent Resolution 45 urged the Governor to “make the prevention of underage alcohol use a priority of the state by engaging in a statewide effort to prevent and reduce underage drinking and its consequences and ensuring that California join with the 41 other states that are active in the Leadership to Keep Children Alcohol Free, an initiative to prevent the use of alcohol by children 9-15”.

Strategy: Social Host Ordinance

Reducing access to alcohol is considered to be one of the best strategies for preventing underage drinking. The occurrence of underage drinking parties in homes and on private property continues to create dangerous health and safety concerns for both underage drinkers as well as the larger community. Research shows that interventions that modify the environments in which underage youth find themselves have an impact on alcohol consumption levels.⁷⁸

Existing California law states that “every person who sells, furnishes, gives, or causes to be sold, furnished, or given away any alcoholic beverage to any person under the age of 21 years is guilty of a misdemeanor”.⁷⁹ However, these laws are often difficult to enforce. In August 2010, California passed Assembly Bill 2486 which holds a social host who “furnishes alcoholic beverages to an underage person legally accountable for damages suffered by that person, or for injury to the person or property of, or death of, any 3rd person, resulting from the consumption of those beverages”. This law applies in very limited circumstances. There are many other situations that arise from hosting underage drinking parties that don’t result in 3rd party injuries, and so communities throughout the state and Sonoma County are supporting local social host laws that make adults accountable for the act of hosting of underage drinking parties.

⁷⁷ Mayer, R.R., Forster, J.L., Murray, D.M., and Wagenaar, A.C. (1998) Social settings and situations of underage drinking. *Journal of Studies on Alcohol*, 59(2).

⁷⁸ Ibid.

⁷⁹ Alcohol Policy Information System. www.alcoholpolicy.niaaa.nih.gov

Best Practice #14: Implement teen party ordinances: Prohibit teen drinking parties at private residences, and impose fines and fees on homeowners or renters for law enforcement services.

The Social Host Ordinance (SHO) is a powerful policy designed to prevent underage drinking by holding individuals responsible for providing a location where underage drinking takes place. The intent of SHO is to protect the public health, safety, and general welfare by promoting responsible hosting. Social Host policies change the focus from underage drinker to provider/enabler; change the context and setting to deter underage drinking parties; decrease provision and furnishing of alcohol to an underage person or to someone who is obviously intoxicated; and change the community culture and conditions.⁸⁰

SHO encourage hosts to be vigilant and proactive in preventing underage drinking on private and public property, while reinforcing a clear and consistent community-wide message that underage drinking is unhealthy, unsafe and unacceptable. In 2011, 42 states had statutory or case laws establishing tort liability for social hosts for furnishing alcohol; 24 states had social host laws prohibiting underage drinking parties; and 150+ communities in 21 states had a social host ordinance prohibiting underage drinking parties.^{81,82}

Communities in Sonoma County who have enacted Social Host Ordinances include Petaluma (2007), Sonoma (2009) and Sebastopol (2010); the City of Cloverdale, as well as the unincorporated areas of Sonoma County are considering Social Host Ordinances. In the Bay Area, Marin and Napa counties have enacted policies in both incorporated cities and the unincorporated areas of their counties to enhance their efforts to reduce underage drinking. The 2011 National Prevention Strategy recommends that local police, working with community leaders, should adopt and

⁸⁰ Wagoner, P.H., Sparks, M., Wolfson, M. Social Host Laws: Opportunities for Research and Practice. Wake Forest University School of Medicine.

⁸¹ National Institute on Alcohol Abuse and Alcoholism (NIAAA). (2009). Alcohol Policy Information Systems (APIS) <http://www.alcoholpolicy.niaaa.nih.gov>

⁸² Mothers Against Drunk Driving. Social Host Education Initiative: Your role in making a difference.(2008). www.madd.org/socialhost

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announce policies for detecting and terminating underage drinking parties.⁸³ In the Office of Juvenile Justice Delinquency Prevention's report, *Regulatory Strategies for Preventing Youth Access to Alcohol*,⁸⁴ the following recommendation is listed for addressing youth consumption at underage drinking parties, and is identified as one of the highest risk settings for youth consumption:

This kind of law provides law enforcement an additional legal basis for investigating teen parties at private residences. Specific laws for hotels and motels, requiring management to provide adequate security and holding them liable if they negligently rent rooms for teenage parties are also recommended.⁸⁵

In March, 2009, the California PTA passed a Social Host Accountability and Underage Drinking Resolution, "...encouraging and supporting legislation to adopt social host laws..." And, in September of 2009, the League of California Cities passed a similar resolution supporting "...local policies that hold social hosts responsible for underage drinking that occurs on property under their possession, control or authority...". No single law can eliminate teen drinking, but because house parties are the single most frequent place that teens drink, the passage and enforcement of social hosting laws are critical pieces of a comprehensive solution to alcohol problems.

Strategy: Implement Target Responsibility for Alcohol Connected Emergencies (Trace)

"Target Responsibility for Alcohol Connected Emergencies (TRACE)" is a California State ABC program that is implemented when there is a death or serious injury involving underage drinking. An investigation is conducted to determine where the alcoholic beverages were acquired, purchased or served. If the TRACE investigation determines that an ABC licensed location sold or furnished alcoholic beverages to a minor, the Department will file administrative action to suspend or revoke the license of that business. Currently, there is an effort to adapt these protocols to the investigation of underage drinking parties, to determine the source of the alcohol furnished to the minor, specifically if it was brought into the home by a minor.

⁸³ National Prevention Council, *National Prevention Strategy*, Washington, D.C.: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011.

⁸⁴ Office of Juvenile Justice and Delinquency Prevention. *Regulatory Strategies for Preventing Youth Access to Alcohol: Best Practices*. The Underage Drinking Enforcement Training Center. www.pire.org/udetc

⁸⁵ Wagenaar, A., Finnegan, J., Wolfson, M., Anstine, P., Williams, C., Perry, C. 1993. Where and how adolescents obtain alcoholic beverages. *Public Health Reports*, 106, 459-464.

High Risk Adult Drinking: Scope of the Problem

Alcohol is a legal product for adults, 21 years old and older. Alcohol use is very common in our society however drinking alcohol can have immediate effects that can increase the risk of many harmful conditions for adults of any age. Excessive alcohol use is the 3rd leading cause of preventable death in the United States among all adult age groups.⁸⁶ According to the Alcohol-Related Disease Impact (ARDI) tool, from 2001-2005, there were over 79,000 deaths annually attributable to excessive alcohol use, with approximately 9,700 occurring in California.⁸⁷ Excessive alcohol use, either in the form of heavy drinking (drinking more than 2 drinks per day on average for men or more than one drink per day on average for women), or binge drinking (drinking 5 or more drinks during a single occasion for men or 4 or more drinks during a single occasion for women), can lead to increased risk of health problems including unintentional injuries, violence, risky sexual behaviors, miscarriage and stillbirth among pregnant women, and alcohol poisoning.⁸⁸

Over time, excessive alcohol use can lead to the development of chronic diseases, neurological impairments and social problems, including dementia, cardiovascular problems, psychiatric problems, unemployment, cancer, and liver diseases, and other gastrointestinal problems. According to the Behavioral Risk Factor Surveillance System (BRFSS) survey, more than half of the adult California population drank alcohol in the past 30 days. Approximately 6% of the total population drank heavily, while almost 16% of the population binge drank.⁸⁹ Thirty-six percent (36%) of adults in Sonoma County reported binge drinking in the past year, higher than the state rate of 31%.⁹⁰

Alcohol consumption is relatively high among 50 year olds, with almost two thirds (64%) indicating that they consumed at least one alcoholic drink in the past 30 days, and 20% reporting binge drinking.⁹¹ As people get older, their bodies change

⁸⁶ National Prevention Council, *National Prevention Strategy*, Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011.

⁸⁷ Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI) application, 2008. Available at http://apps.nccd.cdc.gov/DACH_ARDI/Default.aspx.

⁸⁸ Centers for Disease Control and Prevention. Alcohol and Public Health and Alcohol Use and Health Fact Sheets. <http://www.cdc.gov/alcohol/index.htm>.

⁸⁹ Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, **2010**.

⁹⁰ California Health Interview Survey (CHIS) 2009 <http://www.chis.ucla.edu>

⁹¹ Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2009). *Monitoring the Future national survey results on drug use, 1975–2008: Volume II, College students and adults ages 19–50* (NIH Publication No. 09-7403). Bethesda, MD: National Institute on Drug Abuse.

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making them more sensitive to alcohol's effects and lowering their body's tolerance to alcohol.⁹² Drinking too much alcohol can cause some chronic health conditions to become worse, and alcohol can cause an interaction with dozens of prescription medicines with possible negative side effects.⁹³

Most Americans who binge drink are not dependent on alcohol.⁹⁴ Yet, binge drinking is a common and dangerous behavior for all ages, often not well-recognized as a public health problem. The percentage of adults who binge drink has not declined for more than 15 years. Sales information on alcohol suggests people may be drinking even more than they report. Binge drinkers usually become impaired, increasing the chances of car crashes, violence against others, spread of HIV and sexually transmitted diseases, unplanned pregnancy, sudden infant death syndrome, and babies born with fetal alcohol spectrum disorders. Binge drinking is most common in men, adults in the 18-34 age range, and people with household incomes of \$75,000 or more.⁹⁵ Most binge and heavy alcohol users were employed in 2010. Among 56.6 million adult binge drinkers, 74.7% were employed either full or part time. Among adults aged 18 or older, rates of binge and heavy alcohol use varied by level of education--27% with some education were binge drinkers and 23% were college graduates.⁹⁶ Whites were more likely than other racial/ethnic groups to report current use of alcohol (56.7%).⁹⁷

Drinking and driving is one of the most glaring alcohol-related problems impacting the health and safety of the community. Eleven percent of traffic crash injuries in 2009 were alcohol-involved.⁹⁸ Driving under the influence (DUI) of alcohol is associated with age with the highest rate among persons aged 21-25.⁹⁹ In Sonoma County, 33% of drunk drivers in the court-mandated Drunk Driver Program were 21-26 years old.¹⁰⁰ Beyond age 25, national DUI rates show a general decline with increasing age, however in Sonoma County, the rates remain constant through age 50.¹⁰¹ Even without alcohol, the risk of crashes goes up started at age 55.¹⁰² Older

⁹² National Institute on Alcohol Abuse and Alcoholism. NIH Senior Health. Alcohol Use and Older Adults. August 2010. Retrieved from: <http://nihseniorhealth.gov>.

⁹³ Ibid

⁹⁴ Dawson, D.A., Grant, B.F. Quantifying the risks associated with exceeding recommended drinking limits. *Alcohol Clin Exp Res.* 2005; 29: 902-908.

⁹⁵ Center for Disease Control. Vital Signs: Binge Drinking. October 2010. <http://www.cdc.gov/vitalsigns>

⁹⁶ Substance Abuse and Mental Health Services Administration, *Results from the 2010 National Survey on Drug Use and Health: Summary of National Finding*, NSDUH Series H-41, HHS Publication No. (SMA) 11-4586. Rockville, MD.

⁹⁷ Ibid

⁹⁸ California Department of Motor Vehicles; (January, 2011). *Annual Report of the California DUI Management Information System*. dmv.ca.gov

⁹⁹ Substance Abuse and Mental Health Services Administration, *Results from the 2010 National Survey on Drug Use and Health: Summary of National Finding*, NSDUH Series H-41, HHS Publication No. (SMA) 11-4586. Rockville, MD.

¹⁰⁰ Sonoma County Department of Health Services, Place of Last Drink Survey, Alcohol and Other Drugs Drinking Driver Program. 2011.

¹⁰¹ Ibid

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adults have higher rates of fatality and injury in motor vehicle crashes per mile driven than any other age group except teenagers, primarily due to the many age-related factors that can impair driving ability.¹⁰³

DUI arrests increased in Sonoma County by 4.8% from 2007 to 2008. These arrest numbers do not, however, reflect the magnitude of the problem. DUI often results in alcohol-related collisions, injuries, and death. Thirty-two percent nationally and 39% statewide of all traffic deaths were a result of alcohol in 2008-2009.¹⁰⁴ From January, 2007 through November, 2009, the California Highway Patrol responded to 987 alcohol-related collisions in unincorporated Sonoma County. As a result of these collisions, 552 individuals were injured and 41 individuals were killed.¹⁰⁵ With no improvement in current safety performance and expected yearly increases in travel, the National Highway Traffic Safety Administration projects that deaths and injuries due to alcohol-related motor vehicles crashes could increase by 50% by the year 2020.¹⁰⁶

Neighborhoods with alcohol outlet density had more violent crime, including homicide, rape, assault, and robbery, even when other neighborhood characteristics such as poverty and age of residents were taken into account.¹⁰⁷ In a typical Los Angeles city of 50,000, with 100 alcohol outlets and 570 assaults, one additional outlet was associated with 3.4 additional assaults per year.¹⁰⁸ Recent studies continue to support and add to these findings, showing a correlation between the density of alcohol outlets and violent crime with higher rates of crime occurring in neighborhoods around alcohol outlets that allotted more than 10 percent of cooler space for single-serve containers.¹⁰⁹

Cost of Alcohol-related Problems

According to Alcohol Justice-The Marin Institute, the total economic cost of alcohol use in California is \$38 billion annually.¹¹⁰ The annual costs were calculated based on costs to the health care and criminal justice systems, the lost productivity from

¹⁰² National Institute on Alcohol Abuse and Alcoholism. NIH Senior Health. Alcohol Use and Older Adults. August 2010. Retrieved from: <http://nihseniorhealth.gov>.

¹⁰³ National Highway Traffic Safety Administration. Multiple Medications and Vehicle Crashes: Analysis of Databases. May 2008. www.nhtsa.gov

¹⁰⁴ California Dept. of Alcohol and Drug Programs. Driving Under the Influence Program Branch. DUI Statistics. February 2011.

¹⁰⁵ California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS). California Dept. of Finance.

¹⁰⁶ American Medical Association. Facts About Youth and Alcohol. (2011). Retrieved from <http://www.ama-assn.org>

¹⁰⁷ Gorman, D., Speer P., Gruenewald, P., and Labouvie E. (2001) Spatial Dynamics of Alcohol Availability, Neighborhood Structure and Violent Crime. *Journal of Studies on Alcohol*. 62:628-636.

¹⁰⁸ Scribner, Richard A., MacKinnon, David P., and Dwyer, James H. The risk of assaultive violence and alcohol availability in Los Angeles County. 1995. *American Journal of Public Health* (85)3: 335-340.

¹⁰⁹ University of California-Riverside. 2011. Liquor store density linked to youth homicides, U.S. studies find. *Science Daily*. Retrieved Sept. 12, 2011, from <http://www.sciencedaily.com/releases/2011/09/110907163912.htm>.

¹¹⁰ Alcohol Justice-The Marin Institute. The Annual Catastrophe of Alcohol in California. July 2008. www.marininstitute.org

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deaths, illness, and injury, and the reduced quality of life. The annual cost of alcohol problems in California is higher than the cost of the Loma Prieta earthquake, the Oakland fires, and the southern CA fires of 2003 combined.

Emergency room visits: In 2008, an estimated 188,981 alcohol-related emergency department (ED) visits were made by patients aged 12 to 20, accounting for about one third of all drug-related ED visits (32.9 percent) made by this age group. Of these ED visits, 70.0 percent involved alcohol only, and 30.0 percent involved alcohol in combination with other drugs.¹¹¹

Alcohol use on college campuses: Eighty-two percent of college students drink, 40% report binge drinking, and nearly half of all college students report having been drunk in the past 30 days.¹¹² There are more than 1800 alcohol-related deaths each year among college students.¹¹³ Yet, the negative effects related to college student drinking extend far beyond this number: 590,000 unintentional injuries; more than 690,000 assaults by another student; more than 97,000 victims of sexual assault or date rape; and about 25% of students report negative academic consequences.¹¹⁴

Alcohol use among military personnel: According to the 2008 Department of Defense, Health-Related Behaviors among Military Personnel, military personnel aged 18-25 showed significantly higher rates of heaving drinking (26%) than did civilians (16%). Forty seven percent (47%) of all military personnel were binge drinkers. Heavy drinkers across all branches of service reported the highest rates of serious consequences as a result of drinking or a drinking-related illness, including military punishment, alcohol-related arrest, the need for detoxification, being passed over for promotion, loss of productivity, and injury from driving under the influence of alcohol.¹¹⁵

¹¹¹ Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (July 29, 2010). The DAWN Report: Emergency Department Visits Involving Underage Alcohol Use: 2008. Rockville, MD.

¹¹² Johnston, L. D., O'Malley, P. M., Bachman, J. G., &Schulenberg, J. E. (2009). *Monitoring the Future national survey results on drug use, 1975–2008:Volume II, College students and adults ages 19–50* (NIH Publication No. 09-7403). Bethesda, MD: National Institute on Drug Abuse.

¹¹³ Hingson, R.W.; Zha, W.; Weitzman, E.R. Magnitude of and trends in alcohol-related mortality and morbidity among U.S. college students ages 18-24, 1998-2005. *J Stud Alcohol Drugs* 2009; (16S): 12-20.

¹¹⁴ Saltz, R.; Paschall, Mallie J.; McGaffigan, Richard P.; Nygaard, Peter. Alcohol Risk Management in College Settings: the Safer California Universities Randomized Trial. *Am J Prev Med* 2010; 39 (6): 491-499.

¹¹⁵ Dept. of Defense Survey of Health Related Behaviors Among Active Duty Military Personnel. 2008. Retrieved from: <http://dodreports.com/pdf/ada527178.pdf>.

Goal 2: Reduce high risk adult drinking and associated problems

Alcohol-related injuries and deaths are preventable. Communities often look to individual solutions to alcohol problems that are based on the premise that substance abuse develops because of deficits in knowledge about consequences, inadequate resistance skills, poor decision making abilities and low academic achievement.¹¹⁶ These efforts, while important in a multiple strategy approach, don't alter the overall environment in which people live and work. And, it is extremely difficult to change the behavior of individuals or protect them from risk when the physical environment makes alcohol easily available, attractive, inexpensive, and socially and legally acceptable.¹¹⁷

Prevention aimed at the environment, known as environmental prevention, takes into account the fact that individuals are powerfully influenced by a complex set of factors in the environment, such as institutional rules and regulations, community norms, mass media messages, and the accessibility of alcohol, tobacco, and illicit drugs. Effective prevention requires implementation of strategies that effectively make appropriate modifications to the community at large, that focus on system wide changes through public policies and community level interventions.

The relative low cost and easy availability of alcohol and the fact that binge drinking is frequently not addressed in clinical settings contribute to the acceptability of excessive alcohol use.¹¹⁸ Drinking that occurs outside the home, mainly in bars and restaurants, is strongly associated with binge drinking and with alcohol-impaired driving.¹¹⁹

Retail Availability of Alcohol: An Overview

Retail (commercial) availability of alcohol is determined by State and local regulations, determining the number, location, types, and serving/selling practices of alcohol licensed retailers. In California, there are specific state laws that govern

¹¹⁶ Community Anti-Drug Coalitions of America (CADCA). *The Coalition Impact: Environmental Prevention Strategies*. (2008). Available at www.cadca.org

¹¹⁷ Prevention Research Center. *A Training Manual for PRC Community Organizers. Preventing Alcohol-Related Problems in the Community—Environmental Approaches*.

¹¹⁸ National Prevention Council, *National Prevention Strategy*, Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011.

¹¹⁹ Guide to Community Preventive Services. *Preventing excessive alcohol consumption: overservice law enforcement initiatives*. www.thecommunityguide.org/alcohol/overservice.html. Last update: Sept. 27, 2010.

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all alcohol establishments issued a license through the California Dept. of Alcoholic Beverage Control. Across local jurisdictions, and depending on the degree of enforcement, the availability of alcohol to all segments of the population needs to be addressed through the following sales regulations:

- Limiting the types and location of commercial outlets through Conditional Use Permits;
- Mandating Responsible Beverage Service training to mitigate the over-service to already intoxicated adults; and
- Conducting comprehensive compliance checks through law enforcement programs.

Research has established a powerful link between the number, types and concentration of alcohol outlets in a given area or neighborhood, and higher levels of consumption. Generally, high-levels of consumption contribute to increased rates of crime, violence, and nuisance activities which in turn threaten the health, safety, and general well-being of the public.^{120,121,122}

Densities of off-sale alcohol outlets are significantly related to injuries from accidents, assaults, and traffic crashes for both underage youth (18-20 years) and young adults (21-29 years). Densities of bars have been shown to be associated with more assaults and densities of restaurants with more traffic crash injuries for of-age young adults.¹²³ The presence of more on-sale (restaurants, bars, etc.) increased opportunities for of- age drinkers to drink more regularly.¹²⁴ In 2009, the Sonoma County Sheriff's Office documented 9,563 alcohol-related crime reports requiring law enforcement response. Twenty-seven percent (27%) of those crimes occurred in three unincorporated areas where there is a higher density of alcohol outlets.

¹²⁰Campbell, C.A.; et al. (2009). Effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol related-harms. *American Journal of Preventive Medicine*. 37(6).

¹²¹ Gruenewald, P.J. and Remer, L. (2006). Changes in outlet densities affect violence rates. *Alcoholism: Clinical and Experimental Research*, 30(7):1184-93.

¹²² Treno, A.J.; Gruenewald, P.J.; and Johnson, F.W. (2001). Alcohol availability and injury: the role of local outlet densities. *Alcohol Clinical Experimental Research*, 25, 1467-1471.

¹²³ Gruenewald, P.J., Freisthler, B., Remer, L., and LaScala, E.A. 2010. "Ecological associations of alcohol outlets with underage and young adult injuries," *Alcoholism: Clinical and Experimental Research*, 34(3): 519-527.

¹²⁴ Reboussin, Beth A., Song, Eun-Young, Wolfson, Mark. The Impact of Alcohol Outlet Density on the Geographic Clustering of Underage Drinking Behaviors within Census Tracts. *Alcohol Clinical and Experimental Research*. Vol. 35, No. 8, 2011: pp 1-9.

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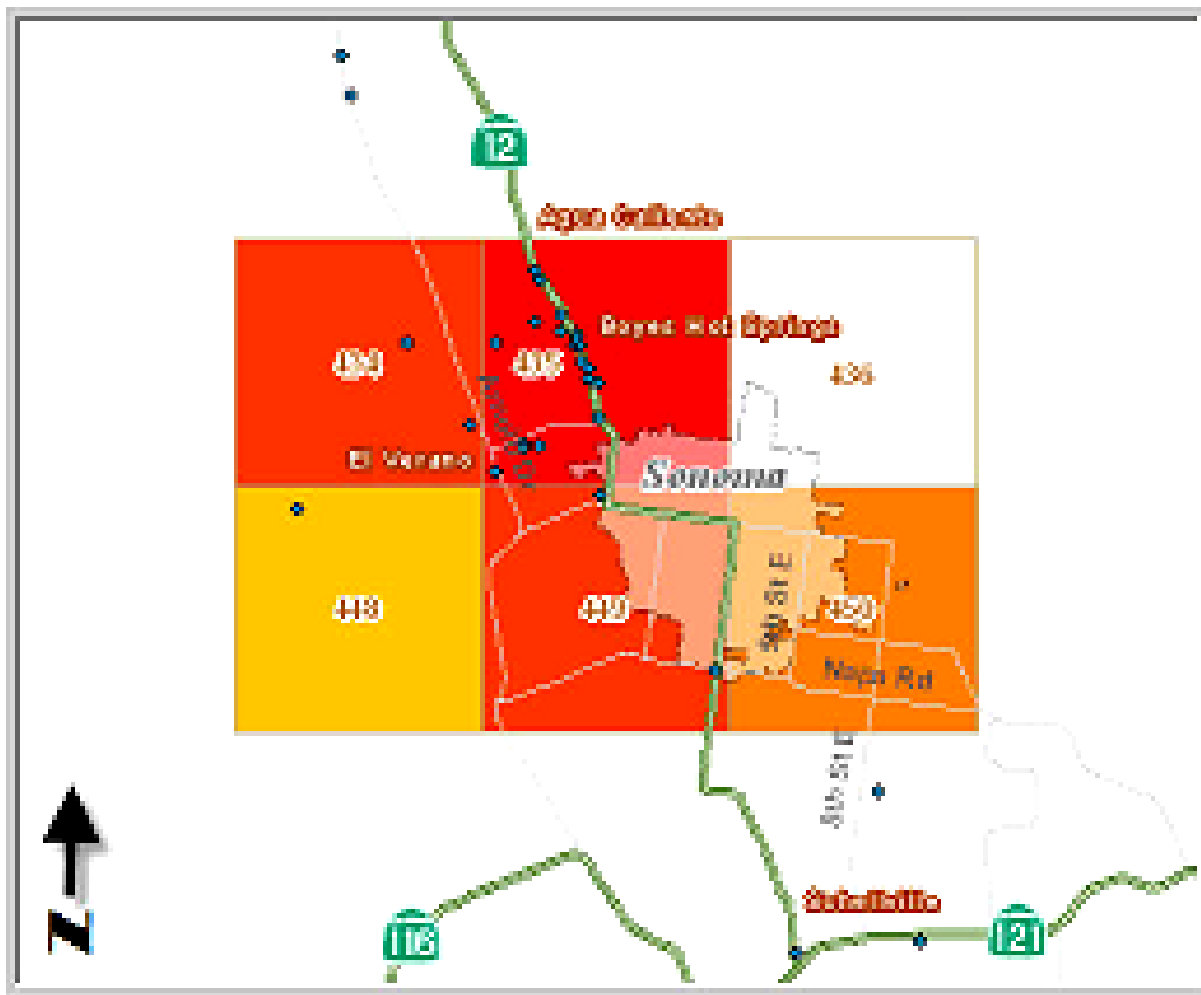


Figure 6:
ABC & Sheriff Crime Analysis Data

RED = 101-1285 Sum arrests and calls

RED ORANGE = 51-100 Sum arrests and calls

ORANGE = 26-50 Sum arrests and calls

GOLD = 7-25 Sum arrests and calls

WHITE = 0-6 Sum arrests and calls

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Strategy: Conditional Use Permit with Nuisance Abatement Standards

The Alcohol Conditional Use Permit (CUP) is a type of zoning tool that municipalities can use to locally regulate the number, location, and operational practices of alcohol outlets. A CUP works by specifying allowable concentration/density of alcohol outlets; regulating proximity to sensitive land-use areas (including schools, churches, parks, private residences, etc); requiring strict standards of operation such as the cleaning up of trash, litter, and graffiti; installation of surveillance equipment; staff training in Responsible Beverage Service (RBS); and proper signage and postings. State law provides that a county can require an applicant to obtain a CUP before it can be licensed by the State Alcoholic Beverage Control (ABC). The CUP application involves a review process, including public hearings, that gives the applicant, public officials and neighbors the opportunity to present evidence regarding whether the application should be granted, and if so, with what conditions. It is a "discretionary permit," meaning that it can be denied by County decision makers, including the Board of Zoning Adjustments (BZA), Sonoma County Planning Commission, or the Sonoma County Board of Supervisors.

While the State of CA has the power to issue or approve licenses to sell/serve alcohol and to revoke licenses of problem outlets, local governments have the power and responsibility to exercise their constitutional authority to regulate how, when, and where alcohol is sold and served. Any existing ABC licensed business that wants to change its current mode or manner of operation either by changing its floor space design, type of entertainment, and/or ratio of food to alcohol sales, would retrigger their existing business status and need to apply under the local CUP. Together, the regulations of a CUP combined with the State ABC Act provide the framework for addressing the number, types, concentration, locations, and sales and service practices of outlets at the local level. The Task Force on Community Preventive Services recommends the use of regulatory authority, through licensing and zoning, to limit alcohol outlet density on the basis of sufficient evidence of a positive association between outlet density and excessive alcohol consumption and related harms.¹²⁵

Many communities and neighborhoods are concerned about the public nuisance problems often associated with the sale and consumption of alcohol by minors and over-consumption by adults, such as disturbing the peace, violence, public intoxication, assaults, and loitering. These public health and safety issues can be

¹²⁵ Guide to Community Preventive Services. Preventing excessive alcohol consumption: regulation of alcohol outlet density. www.thecommunityguide.org/alcohol/outletdensity.html. Last Updated: February 28, 2011.

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addressed through the inclusion of nuisance abatement standards or 'deemed approved' standards in comprehensive conditional use permits. The City of Rohnert Park passed a Conditional Use Permit with nuisance abatement standards in 2006. Alcohol related problems decreased; merchant compliance with existing laws increased; and the sales to minors violation rate decreased by 11% from 2007-2009. The City of Petaluma passed an Alcohol-Related Nuisance Ordinance in 2007. Alcohol-related calls for service decreased by 41% from the previous year, while incidents and arrests decreased by 36%. Between 2007 and 2010, these rates have continued to trend downward.

Strategy: Responsible Beverage Service (RBS) Training for Alcohol Retailers

Responsible Beverage Service Training an environmental prevention strategy that researchers have found to be effective in reducing the risks associated with retail alcohol environments when the trainings are part of a comprehensive community level approach to address both underage and adult high risk drinking that also includes public policy and enforcement.

The State of California certified curriculum teaches business owners and employees how they can protect themselves and their business. It includes facts about criminal, civil and ABC liability; updates on state and local alcohol and tobacco laws; information on what is acceptable identification and the best ways to check ID; techniques for the early identification and prevention of problems; and how to refuse sales or service. The training improves public health and safety; establishes a higher professional standard for hospitality service; improves the business viability of responsible establishments; and supports the quality of life in the neighboring community.

RBS trainings are targeted to off-sale alcohol convenience stores and supermarkets (alcohol is consumed off the premises) and to on-sale outlets, such as bars, restaurants, and clubs (alcohol is consumed on the premises). On- and off-sale trainings are four hours in length. RBS trainings are conducted at locations around Sonoma County. Special events trainings can also be arranged for non-profit and community groups selling or serving alcohol at public or private events, such as festivals, fundraisers, and other special events. Staff and volunteers receive an abbreviated RBS training, with a focus on the most common scenarios that occur at events and how to respond in order to host safe and problem-free events. Special events trainings are 2 hours in length. To increase convenience on-line and webinar special events training courses are being considered. These courses will be specifically designed to meet the training needs of non-profit and community groups applying for one-day liquor licenses.

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Priority Area 1: Under-Age Drinking Logic Model

Goal #1: Reduce alcohol-related problems associated with social and retail access to alcohol							
Identified Problem	Contributing Factors	Objectives	Strategies	Short-term Outcomes	Intermediate Outcomes	Long-Term Outcomes	Measurement Indicators
Under-age Drinking	Acceptance of underage drinking among Sonoma County adults	1. By 2016, seven (7) municipalities in Sonoma County will adopt and enforce policies that reduce youth access to alcohol in social settings.	1a Assist four (4) municipalities in the adoption of Social Host ordinances.	1a Sonoma County (unincorporated), Cloverdale, Santa Rosa and Healdsburg adopt social host ordinances.	1a Communities comply with social host ordinances as a result of education/awareness and enforcement.	1a There will be a decrease in youth access to alcohol in social settings.	1a Reduction in calls for services and nuisance related problems; reduction in youth drinking at parties; increased awareness/support for Social Host ordinance.
			1b Support enforcement and compliance in seven (7) municipalities with existing social host ordinances.	1b Increased awareness and support for enforcement of existing social host ordinances and those that are adopted among law enforcement and community; an initial increase in social host related calls	1b Increased enforcement and compliance, and reduce acceptance among community; reduction in youth drinking at parties; increased awareness/support for Social Host ordinance.	1b There will be a decrease in youth access to alcohol in social settings. a decrease in enforcement activity related to social hosting;	1b Calls for service/incident reports; Baseline and intermittent youth and adult surveys.
Under-age Drinking	Youth have easy access to alcohol.	2a By 2016, the ways that Sonoma County youth are able to get alcohol will be identified in seven (7) municipalities.	2a Seven (7) municipalities in Sonoma County will adopt and implement the Alcoholic Beverage Control (ABC) Target Responsibility for Alcohol Connected Emergencies (TRACE) protocols for identifying primary source of youth	2a Law enforcement and other community stakeholders will become more aware of the youth access issue/problem leading to increased engagement and support.	2a The adapted ABC program: TRACE protocols implemented locally.	2a Simultaneous investigation at party scene to determine where the alcoholic beverages were acquired or purchased.	2a Specific identification of primary sources of youth access to alcohol; evidence will be collected that may indicate where alcoholic beverages were obtained: false (or not own) identification; receipts; bags; labels; and statements of witnesses.

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Under-age Drinking		2b By 2016, seven (7) municipalities will successfully reduce availability/access of alcohol to youth at the identified points of access (i.e. social host, peer to peer, shoulder tapping, home availability).	<p>access to alcohol. Assist four (4) of these municipalities will incorporate the TRACE protocols into their SHO language.</p> <p>2b Develop strategies to disrupt primary youth access to alcohol in social environments.</p>	2b Municipalities in Sonoma County will have strategies in place to disrupt social access to alcohol.	2b Citations to adults who host or purchase alcohol for underage youth will increase,	2b Reduction of availability of alcohol from the identified sources.	2b Rates of underage drinking (CHKS); initial increase followed by reduction in violations (ABC)/local law enforcement; Reduction in calls for service related to parties.
Under-age Drinking	Outlet Density in Sonoma County	3. By 2016 five (5) municipalities will have established a clear and effective set of criteria that determines how and where on and off-sale alcohol outlets can operate.	<p>3a Work with Unincorporated Sonoma County, Petaluma, and Sebastopol to strengthen existing CUP's deemed approved standards.</p> <p>3b Work with the city of Sonoma and town of Windsor to adopt strong CUP's, (patterned after the unincorporated Sonoma County CUP) that include a set of conditions proven to mitigate problems.</p>	3a/b Five (5) municipalities will have the ability to document the numbers and operation of local alcohol outlets.	3a/b Maintain or reduce the density of outlets in a municipality	3a/b Reduction in alcohol related problems within the underage population.	3a/b. Types and number of alcohol outlets; Reduction in DUI's; calls for service within the underage population for alcohol related problems such as disturbing the peace, public drunkenness, minor in possession, sales to minors, and theft.

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Priority Area 2: High-Risk Adult Drinking Logic Model

Goal #2: Reduce high risk adult drinking and associated problems.							
Identified Problem	Contributing Factors	Objectives	Strategies	Short-term Outcomes	Intermediate Outcomes	Long-Term Outcomes	Measurement Indicators
High risk Young adult drinking	Outlet density in Sonoma County	1. By 2016 five (5) municipalities will have established a clear and effective set of criteria that determines where and how on-and off-sale alcohol outlets can operate.	1a Work with Petaluma, Sebastopol, and unincorporated Sonoma County to strengthen existing CUP's / deemed approved standards. 1b Work with the city of Sonoma and town of Windsor to adopt strong CUP's, (patterned after the unincorporated Sonoma County CUP) that include a set of conditions proven to mitigate problems.	1. Five (5) municipalities will have the ability to document the numbers and operation of local on-sale and off-sale alcohol outlets.	1. Maintain or reduce the density of outlets in a municipality	1. Reduction in alcohol related problems within the young adult population	1. Types and number of alcohol outlets; Reduction in DUI's; calls for service in the young adult population for sexual and other assaults, destruction of property; drug dealing; public drunkenness; littering; trash; graffiti; vandalism; noise; and disturbing the peace (fighting).
High risk Young adult drinking	Service to intoxicated patrons	2a By 2016, On-and off-sale employees will have the ability to recognize patrons who are intoxicated and the skills to refuse them service.	2a A total of 50 RBS trainings will be conducted in Sonoma County, as part of a comprehensive prevention/compliance approach, with 1,250 employees from retailers and vendors receiving training to understand how to avoid serving or selling alcohol to intoxicated patrons.	2a Employees will successfully implement strategies to reduce service to intoxicated patrons.	2a Fewer people will be intoxicated or a nuisance in public (i.e. problems such as accidents, injuries, property damages or DUI arrests)..	2a A safer and more vibrant downtown will be utilized by families and perceived to be a friendly place to frequent.	2a DUI reports; fewer bars as place of last drink (POLD); reduction in ABC violations for service to intoxicated patrons; fewer CFS for nuisance behavior in front of bars.

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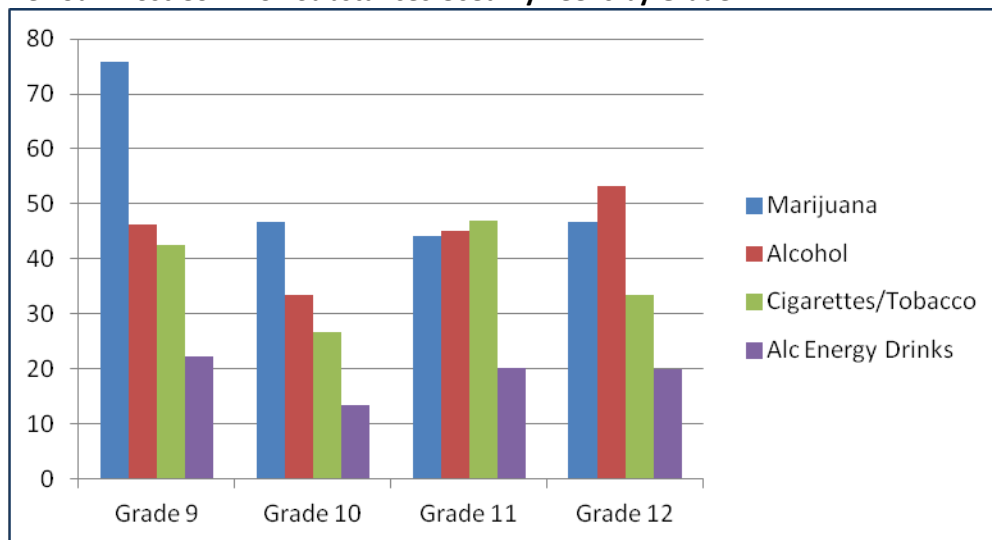
		<p>2b By 2016, special events employees and volunteers that work at special events will have the ability to recognize patrons who are intoxicated and the skills to refuse them sale or service.</p> <p>2c By 2016, compliance will improve as a result of an increase in the perceived threat of enforcement.</p>	<p>2b. An on-line special events training will be developed, as part of a comprehensive prevention/compliance approach, and implemented to educate community organizations on proper sales and service of alcohol at events.</p> <p>2c Implement purchase surveys; publicity and social marketing strategies; and follow-up to DUI place of last drink.</p>	<p>2b Employees and volunteers at special events will successfully implement strategies to reduce sales and service to intoxicated patrons.</p> <p>2c On-sale and off-sale outlets owners and employees will become more accountable for sales and service practices.</p>	<p>2b Fewer people will become intoxicated and drive from a special event venue.</p> <p>2c Fewer people will be intoxicated or a nuisance in public (i.e. problems such as accidents, injuries, property damages or DUI arrests).</p>	<p>2b Reduction in DUI's; fewer alcohol related problems will occur at community events.</p> <p>2c A safer and more vibrant downtown will be utilized by families and perceived to be a friendly place to frequent.</p>	<p>2b/c DUI reports; fewer special events listed as POLD; fewer police calls for service to special events; lower rates of over-serving; reduction in service to overly intoxicated attendees; no sales to minors at events.</p>
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UNDERAGE MARIJUANA USE: SCOPE OF THE PROBLEM

Adolescent substance abuse of illicit drugs continues to be a problem in Sonoma County. According to the 2007 California Student Survey 37.5 percent of 9th and 50 percent of 11th graders used either an illicit/illegal drug or a diverted prescription drug to get high at least once in their lifetime.¹²⁶ Taking this into consideration, total lifetime use of alcohol and other drugs (AOD) is estimated at 52 percent and 68.5 percent respectively. Including use of cold/cough medicines to get high, lifetime AOD 9th-grade use rose to 60 percent and 11th-grade use to 73.5 percent.

In 2010, marijuana was the most commonly used illicit drug, with 17.4 million current users. It was used by 76.8 percent of current illicit drug users and was the only drug used by 60.1 percent of them.¹²⁷ Marijuana is also the illicit substance most commonly abused by adolescents¹²⁸. In a pilot survey of Sonoma county high-school aged students, marijuana was not only found to be by far the most common drug used by students (Figure 7), but also the easiest drug to obtain (Figure 8)– in most schools, even easier than alcohol or tobacco.

Figure 7: The Four Most Common Substances Used By Teens by Grade



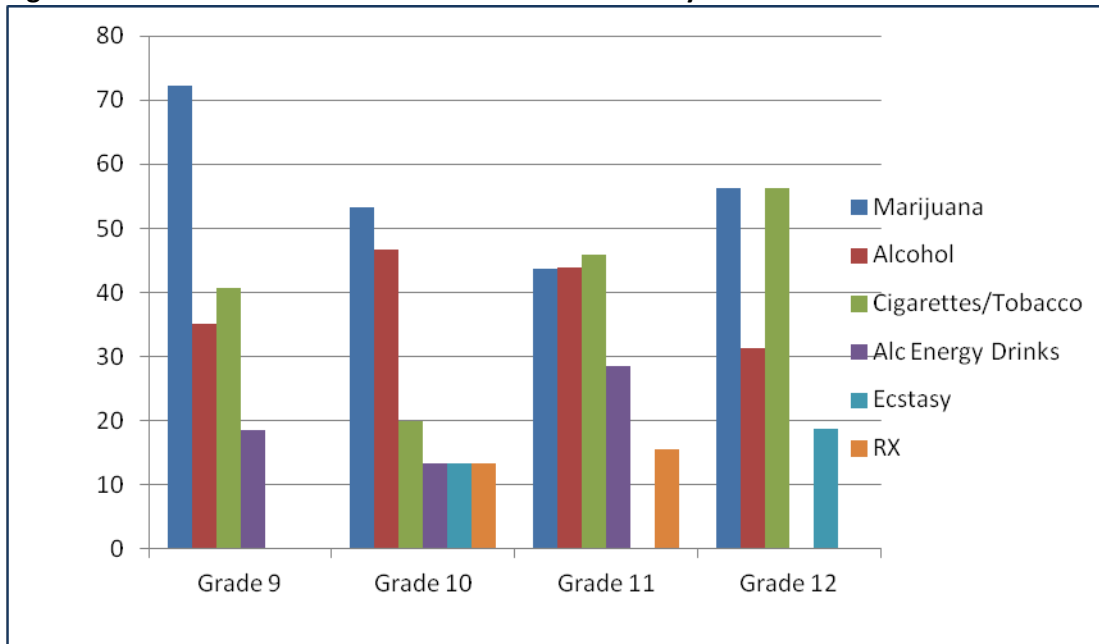
¹²⁶ Gregory Austin, Ph.D., and Rodney Skager, Ph.D. WestEd, 12th Biennial California Student Survey: Drug, Alcohol and Tobacco Use., 2007

¹²⁷ Substance Abuse and Mental Health Services Administration, "Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings," NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011. p. 11. <http://oas.samhsa.gov/NSDUH/2k10NSDUH/2k10Results.pdf>

¹²⁸ Schydlower M. Preface. In: Schydlower M, ed. Substance Abuse: A Guide for Health Professionals. 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2002:viii–x

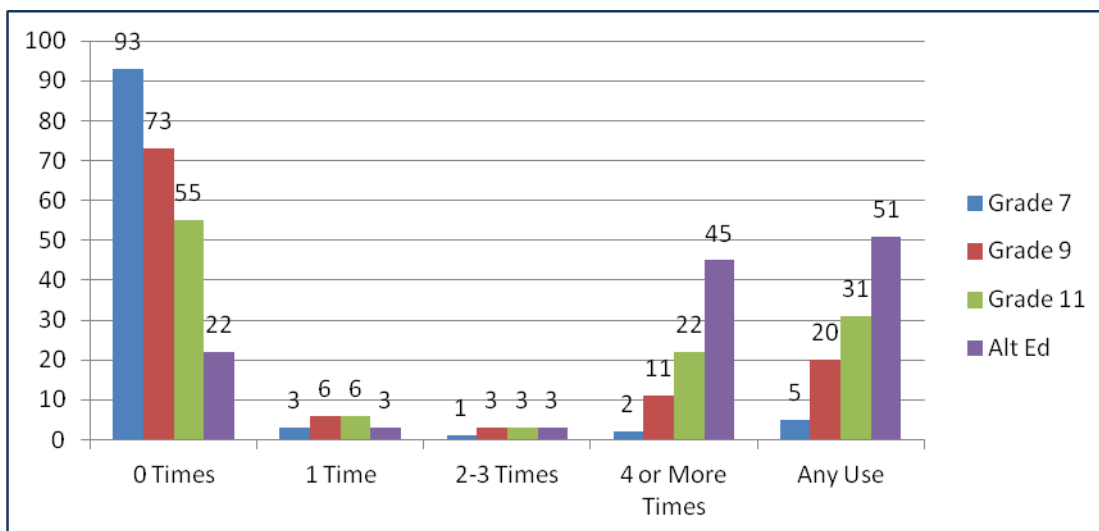
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Figure 8: The Four Easiest Substances to Get for Teens by Grade.



In Sonoma County 46% of 11th graders report having tried marijuana and 31% report use in the last 30 days (California Healthy Kids Survey, 2008/2009). These rates jump to 79% and 51% respectively for youth in alternative education programs.¹²⁹

Figure 9: Percentage of Sonoma County Students Reporting Marijuana Use in the Past 30-days by Amount and by Grade Level. Source: California Healthy Kids Survey



¹²⁹ <http://chks.wested.org/>

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Perhaps of even more concern is the fact that 5% of 7th graders, 9% of 9th graders, 8% of 11th graders and 26% of youth in alternative education programs report the use of marijuana before the age of 13¹³⁰. The National Institute on Drug Abuse (NIDA), recognizes drug addiction as a Pediatric/Adolescent Onset Disease and prevention of first use is critical¹³¹ as youth who first smoke marijuana under the age of 14 are more than five times as likely to develop substance use disorders as adults¹³². The National Center on Addiction and Substance Abuse at Columbia University found that clinical diagnoses rates for marijuana abuse and/or dependence for minors increased by a staggering 492.1 percent between 1992 (when marijuana use was at its lowest point) and 2006. According to the 2009 Monitoring the Future Survey results, 42% of high school seniors nationally have tried marijuana, with 20.6% of them reporting that they have used marijuana in the last 30 days.¹³³

The dangers of alcohol and other drug use are extensive and lasting for teens and yet the social pressures to drink and use other drugs are enormous. Many factors affect a young person's decisions about drinking, smoking and other drug use: their community including family, friends, and school; a propensity for risk taking; and stress. And, much the same as with alcohol, factors such as permissive attitudes, adult behaviors, and easy availability from commercial and social sources play a huge role in contributing to marijuana use among Sonoma County Youth.

Consequences of Marijuana Use

Brain Function

While drug use disrupts brain function of users regardless of age, National Institute of Drug Abuse (NIDA) research demonstrates that these effects are much more detrimental and long-lasting among youth. Marijuana use predominantly affects the prefrontal cortex, which is the last area of the brain to develop and has not fully matured in adolescence. Marijuana use "disrupts the brain function critical to motivation, memory, learning, judgment, and behavior control." Marijuana intoxication can therefore cause distorted perceptions, impaired coordination, difficulty with thinking and problem solving, and problems with learning and memory. Research has shown that, in chronic users, marijuana's adverse impact on learning and memory can last for days or weeks after the acute effects of the drug

¹³⁰ <http://oas.samhsa.gov/nsduhLatest.htm>

¹³¹ http://www.cadca.org/files/policy_priorities/Arguments_Against_Legalization%20from_Prevention_Standpoint.pdf

¹³² The National Survey on Drug Use and Health (NSDUH). <http://oas.samhsa.gov/nsduhLatest.htm>

¹³³ <http://monitoringthefuture.org/pubs/monographs/overview2009.pdf>

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wear off.¹³⁴ As a result, someone who smokes marijuana every day may be functioning at a lower intellectual level all of the time.

Use of marijuana has been shown to negatively impact academic performance. Marijuana can hinder a teen's ability to learn¹³⁵ with heavy marijuana use impairing young people's ability to concentrate and retain information. This can be especially problematic during peak learning years. The National Survey on Drug Use and Health has reported that youth with an average grade of D or below were more than four times as likely to have used marijuana in the past year as youth with an average grade of A. The study found that youth who initiate marijuana use by age 13 usually do not go to college, while those who have abstained from marijuana use, on average, complete almost three years of college. It also found that even if they decrease their usage later in life, those who begin using marijuana by age 13 are more likely to report lower income and lower level of schooling by age 29. Marijuana has been shown to have other adverse effects on Health. According to NIDA marijuana can negatively affect:

Mental Health

A number of studies have shown an association between chronic marijuana use and increased rates of anxiety, depression, and schizophrenia. Some of these studies have shown age at first use to be an important risk factor, where early use is a marker of increased vulnerability to later problems. However, at this time, it is not clear whether marijuana use causes mental problems, exacerbates them, or reflects an attempt to self-medicate symptoms already in existence.

Chronic marijuana use, especially in a very young person, may also be a marker of risk for mental illnesses - including addiction - stemming from genetic or environmental vulnerabilities, such as early exposure to stress or violence.

Currently, the strongest evidence links marijuana use and schizophrenia and/or related disorders.¹³⁶ High doses of marijuana can produce an acute psychotic reaction; in addition, use of the drug may trigger the onset or relapse of schizophrenia in vulnerable individuals.

The Heart

Marijuana increases heart rate by 20-100 percent shortly after smoking; this effect can last up to 3 hours. In one study, it was estimated that marijuana users have a

¹³⁴ Pope HG, Gruber AJ, Hudson JI, Huestis MA, Yurgelun-Todd D. Neuropsychological performance in long-term cannabis users. *Arch Gen Psychiatry* 58(10): 909–915, 2001.

¹³⁵ Pope HG et al. Early-onset cannabis use and cognitive deficits: What is the nature of the association? *Drug and Alcohol Dependence.*,69 (3): 303-310, 2003

¹³⁶ Moore TH, Zammit S, Lingford-Hughes A, et al. Cannabis use and risk of psychotic or affective mental health outcomes: A systematic review. *Lancet* 370 (9584): 319–328, 2007

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4.8-fold increase in the risk of heart attack in the first hour after smoking the drug.¹³⁷ This may be due to increased heart rate as well as the effects of marijuana on heart rhythms, causing palpitations and arrhythmias. This risk may be greater in aging populations or in those with cardiac vulnerabilities.

The Lungs

Numerous studies have shown marijuana smoke to contain carcinogens and to be an irritant to the lungs. In fact, marijuana smoke contains 50-70 percent more carcinogenic hydrocarbons than tobacco smoke. Marijuana users usually inhale more deeply and hold their breath longer than tobacco smokers do, which further increase the lungs' exposure to carcinogenic smoke. Marijuana smokers show dysregulated growth of epithelial cells in their lung tissue, which could lead to cancer;¹³⁸ however, a recent case-controlled study found no positive associations between marijuana use and lung, upper respiratory or upper digestive tract cancers.¹³⁹ Thus, the link between marijuana smoking and these cancers remains unsubstantiated at this time.

Nonetheless, marijuana smokers can have many of the same respiratory problems as tobacco smokers, such as daily cough and phlegm production, more frequent acute chest illness, and a heightened risk of lung infections. A study of 450 individuals found that people who smoke marijuana frequently but do not smoke tobacco have more health problems and miss more days of work than nonsmokers.¹⁴⁰ Many of the extra sick days among the marijuana smokers in the study were for respiratory illnesses.

Daily Life

Research clearly demonstrates that marijuana has the potential to cause problems in daily life or make a person's existing problems worse. In one study, heavy marijuana abusers reported that the drug impaired several important measures of life achievement, including physical and mental health, cognitive abilities, social life, and career status.¹⁴¹ Several studies associate workers' marijuana smoking with increased absences, tardiness, accidents, workers' compensation claims, and job turnover.

¹³⁷ Mittleman MA, Lewis RA, Maclure M, Sherwood JB, Muller JE. Triggering myocardial infarction by marijuana. *Circulation* 103(23):2805–2809, 2001.

¹³⁸ Tashkin DP. Smoked marijuana as a cause of lung injury. *Monaldi Arch Chest Dis* 63(2):92–100, 2005.

¹³⁹ Hashibe M, Morgenstern H, Cui Y, et al. Marijuana use and the risk of lung and upper aerodigestive tract cancers: Results of a population-based case-control study. *Cancer Epidemiol Biomarkers Prev* 15(10):1829–1834, 2006.

¹⁴⁰ Polen MR, Sidney S, Tekawa IS, Sadler M, Friedman GD. Health care use by frequent marijuana smokers who do not smoke tobacco. *West J Med* 158(6):596–601, 1993.

¹⁴¹ Gruber AJ, Pope HG, Hudson JI, Yurgelun-Todd D. Attributes of long-term heavy cannabis users: A case control study. *Psychological Med* 33(8):1415–1422, 2003

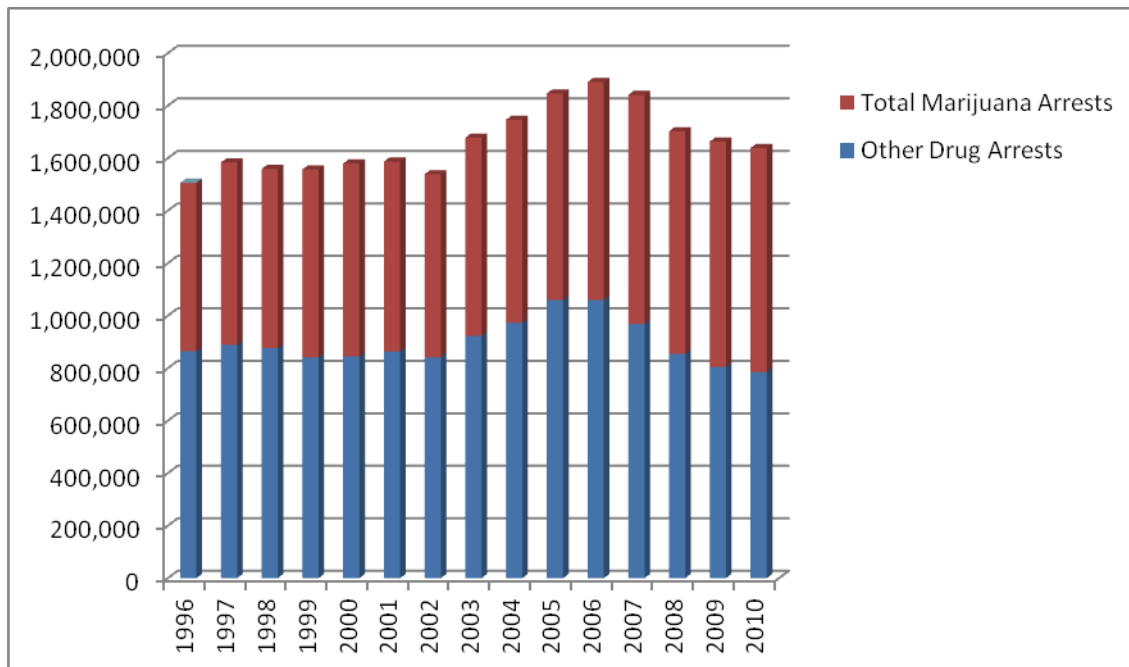
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Crime

In the U.S. marijuana is the most commonly detected drug at the time of arrest. The percentage of arrestees testing positive for marijuana ranges from just under a third in Atlanta and Washington, D.C. to about half in Charlotte.¹⁴²

Nationally, over half (52.1%) of the 1,638,846 total 2010 arrests for drug abuse violations were for marijuana -- a calculated total of 853,839. Of those, an estimated 750,591 people (45.8%) were arrested for marijuana possession alone. By contrast in 2000, a total of 734,497 Americans were arrested for marijuana offenses, of which 646,042 (40.9%) were for possession alone. From 1996-2010, there were 10.1 million arrests for marijuana possession and 1.4 million arrests for the sales and trafficking of marijuana, equaling a total of 11.5 million marijuana arrests during that fifteen year time frame. (Source: Narrative analysis for this Fact by Mary Jane Borden, Editor of Drug War Facts.)

Figure 10: National total, drug and marijuana arrests by year 1996-2010

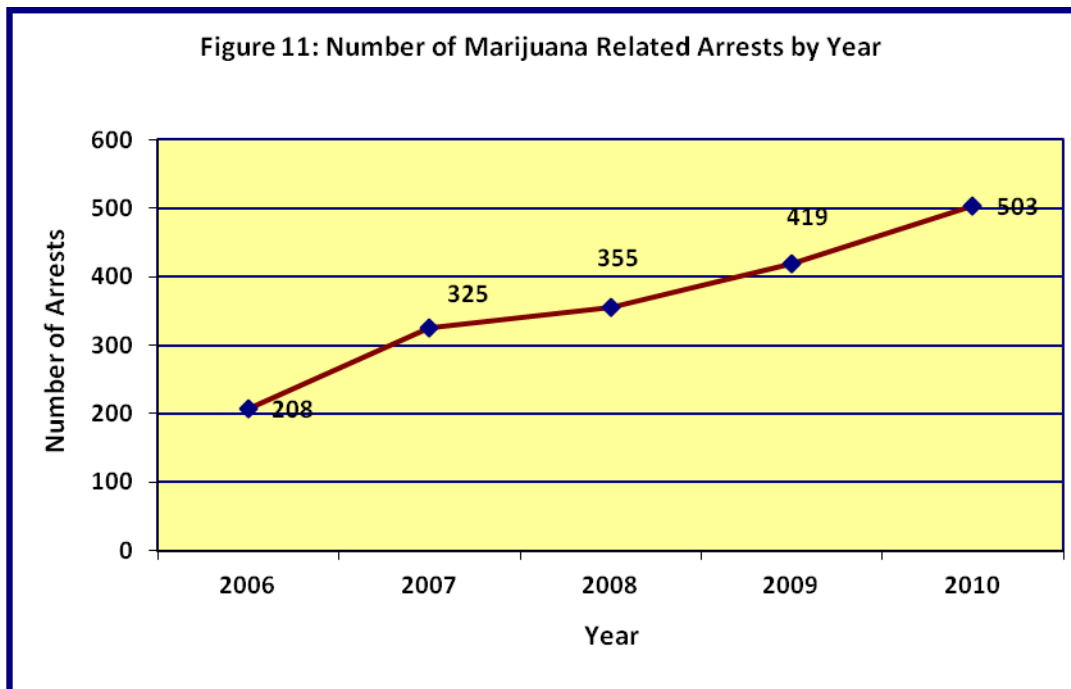


Source: Crime in the United States 2010," FBI Uniform Crime Report (Washington, DC: US Dept. of Justice, September 2011), Table 29. <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/>

Reports of marijuana-related arrests by the Sonoma County Sheriff's Department have steadily increased each year with 208 in 2006, 325 in 2007, 355 in 2008, 419 in 2009 and 503 so far in 2010.

¹⁴² <http://www.ondcp.gov/news/press09/052809.html>

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A nationally representative survey by the National Highway Traffic Safety Administration (NHTSA)¹⁴³, found that in 2007, approximately one in eight weekend, nighttime drivers tested positive for illicit drugs. Moreover, approximately one in twelve high school seniors responding to the 2010 [Monitoring the Future Study \(MTF\)](#) reported driving after smoking marijuana within two weeks prior to the survey interview.¹⁴⁴ An ONDCP analysis of 2009 data from the National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis Reporting System (FARS) census, shows that roughly one in four (23 percent) of fatally injured drivers who tested positive for drugs were under the age of 25. Additionally, based on data from 2005 to 2009, almost half (42 percent) of fatally injured drivers who tested positive for marijuana were under the age of 25.

The California Police Chiefs Association lists a number of other life safety hazards related to marijuana cultivation and distribution including fires that have often erupted in resultant home grow operations, robbery, and violence in and around dispensaries and grow sites.

¹⁴³ [The National Roadside Survey of Alcohol and Drug Use by Drivers](#)

¹⁴⁴ [Monitoring the Future Study \(MTF\)](#)

Goal 3: Reduce Problems Associated with Underage Marijuana Use

As is true with alcohol, it is extremely difficult to change the behavior of youth or protect them from risk when the physical environment makes marijuana easily available, attractive, inexpensive, and socially and legally acceptable.¹⁴⁵

Programs that address knowledge about consequences, the development of protective factors including resistance skills, decision making abilities and academic achievement are addressed through the support of a range of community and school based efforts. The County DHS role is focused on strategies aimed at addressing underage marijuana use by changing aspects of the environment that contribute to the use of marijuana. Specifically, environmental prevention strategies designed to decrease the social and health consequences of marijuana abuse by limiting access to the drug and changing social norms that are accepting and permissive of its use. These include changing public laws, policies and practices to create environments that decrease the probability of marijuana use and abuse.

Prevention aimed at the environment, known as *environmental prevention*, takes into account the fact that individuals are powerfully influenced by a complex set of factors in the environment, such as institutional rules and regulations, community norms, mass media messages, and the accessibility of alcohol, tobacco, and illicit drugs. Effective prevention requires implementation of strategies that effectively make appropriate modifications to the community at large, that focus on system wide changes through public policies and community level interventions.

Youth Access

Many argue that decriminalization/legalization of marijuana will reduce youth access because of the corresponding regulation of the industry. First, it is clear that regulatory oversight is inconsistent. Tobacco and alcohol products, both legal for adults 18 and 21 years of age, respectively, are highly regulated and remain

“Any sort of flat-out legalization would risk a large increase in the number of very heavy users. A legal cannabis industry, like the legal alcohol industry, would derive more than half its revenue from people with diagnosable substance abuse disorders. Telling marketers they can get rich by creating disease is dangerous.”

Mark Kleiman is Professor of Public Policy in the UCLA School of Public Affairs

¹⁴⁵ Prevention Research Center. A Training Manual for PRC Community Organizers. Preventing Alcohol-Related Problems in the Community—Environmental Approaches.

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the psychoactive substances most widely abused by adolescents, and teens report alcohol as being very easy to access. The majority of young people who report drinking alcohol, also report that they got their first drink from their home or the home of a friend. Any change in the legal status of marijuana, even if limited to adults, could affect the prevalence of use among adolescents.¹⁴⁶ If more adults have access to marijuana and have it readily available in their homes then it is likely that more children and youth will also have access to marijuana.

In Sonoma County, however, preliminary reports show that that while youth often steal alcohol from parents and/or retail outlets, marijuana is purchased as opposed to taken, gifted or grown.¹⁴⁷ The proliferation of marijuana outlets in the form of dispensaries raises concerns that increased availability will increase consumption which will in turn increase the problems related to marijuana use including: motor vehicle crashes, crime, violence, and a range of health problems.

In a recent review of research assessing the association between outlet density and population-level alcohol consumption, studies found that density and consumption were positively associated; increased density was associated with increased consumption, and vice versa.¹⁴⁸ If we look at current legal substances, such as alcohol and tobacco, it is reasonable to assume that increased availability of marijuana in a community will lead to an increase in use – not only by those ages 21 and over but also by those under the age of 21.

Strategy: Manage Dispensaries by Assisting Local Jurisdictions in the Adoption of Marijuana Land-Use Ordinances

Marijuana availability has a significant impact on the number and type of drug-related problems a community experiences. Community members report a number of local problems tied to marijuana availability including: perception that marijuana is legal; sales to minors; smoking in public and at work sites; crime and violence; loitering; excessive noise; driving under the influence; illicit drug sales; fire risk; and, theft and robbery. Decreasing marijuana availability by making it less convenient to purchase and less accessible at public and social events can help mitigate the negative consequences of marijuana use.

¹⁴⁶ American Academy of Pediatrics, Committee on Substance Abuse and Committee on Adolescence. Technical report: legalization of marijuana: potential impact on youth. *Pediatrics*.2004; 113 (6).

¹⁴⁷ Results of West County youth surveys conducted by the West County Coalition for Alcohol and Drug Free Youth.

¹⁴⁸ The Effectiveness of Limiting Alcohol Outlet Density As a Means of Reducing Excessive Alcohol Consumption and Alcohol-Related Harms, Carla Alexia Campbell, MHS, et.al., *Am J Prev Med* 2009; 37(6) December 2009,

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Historically communities throughout Sonoma County have addressed these problems by attempting to limit youth use through a range of individually focused knowledge and behavior change efforts. But we now know that a more effective approach is to combine individually focused programs with strategies that work to prevent or at least reduce problems through local policies. In part, this means putting certain limits on the retail distribution of marijuana, the operation of marijuana dispensaries, and the management of environments in which marijuana is available.

In order to regulate the availability of medical marijuana in Sonoma County both storefront dispensaries and home delivery of medical marijuana must be understood so that local policy makers and community stakeholders can make informed decisions about the best strategies for addressing their unique issues. Although there are moratoriums and ordinances in cities and in the County of Sonoma, changes in elected officials, and events and experiences can shift public awareness and opinion. This plan proposes a public information and technical support strategy that will provide education and assist communities and policymakers in local jurisdictions in identifying appropriate strategies for managing dispensaries through the adoption of land-use ordinances and addressing home delivery of medical marijuana. Approaches may include:

- Development of a profile of marijuana in Sonoma County – assessment of the problem, access, consequences, etc.
- Provide education to local municipalities to identify appropriate specific strategies for regulation and managing the number of dispensaries in cities
- Develop better understand and regulate home delivery services for medical marijuana
- Control the number of dispensaries to reduce youth access to marijuana

We know that even if youth aren't served at dispensaries, adult friends, family members etc. will supply and/or sell to youth. The availability of alcohol has been studied more extensively than marijuana. There is a significant association between adolescent binge drinking when there are alcohol retailers within a half mile of the teens home.

Truong K and Sturm R. Alcohol environments and disparities in exposure associated with adolescent drinking in California. American Journal of Public Health. 2009;99(2), 264-270.

Strategy: Provide Education on the Community Health Impacts of Marijuana Use to Increase Perception of Harm Perceived Risk of Marijuana Use

Marijuana currently is classified by the US Drug Enforcement Agency as a schedule I drug, which means that it has a high potential for abuse, has no currently accepted medical use in the United States, and lacks accepted safety for use under supervision by a physician. Rigorous scientific research to determine whether marijuana, especially cannabinoids, has any potential therapeutic effect is just beginning. In contrast, the significant neuropharmacologic, cognitive, behavioral, and somatic consequences of acute and long-term marijuana use are well known and include negative effects on short-term memory, concentration, attention span, motivation, and problem solving, which clearly interfere with learning; adverse effects on coordination, judgment, reaction time, and tracking ability, which contribute substantially to unintentional deaths and injuries among adolescents (especially those associated with motor vehicles); and negative health effects with repeated use similar to effects seen with smoking tobacco.¹⁴⁹

However, most adults and youth in Sonoma County do not perceive marijuana use as high risk. In fact, surveys of youth and adults indicated that many do not consider marijuana a "drug". Much of this is due to aging of Baby Boomers and Gen Xers¹⁵⁰ who grew up with very permissive attitudes regarding the use of marijuana. These now make up the new generation of parents, and we know that parents are the most powerful influence on their children when it comes to drugs. Two-thirds of youth ages 13-17 say losing their parents' respect is one of the main reasons they don't smoke marijuana or use other drugs¹⁵¹. Parental disapproval plays a strong role in turning back drug use. In 2004, youth who believed that their parents would strongly disapprove of marijuana use had rates over 80 percent lower than those whose parents would not strongly disapprove (5.1 percent use vs. 30 percent use rates).¹⁵² And, kids who learn about the risks of marijuana and other illicit drugs from their parents are far less likely to use drugs.¹⁵³

When Parents perceive little risk associated with marijuana use they are more likely to have children with similar beliefs. The recent effort in CA to decriminalize

149 IBID

¹⁵⁰ generally includes people born in the 1960s through the early '80s, usually no later than 1982

¹⁵¹ Partnership for a Drug-Free America Attitude Tracking Study, 2002.

¹⁵² National Survey on Drug Use and Health 2004. SAMHSA, 2005.

¹⁵³ Greenblat, J. Self-reported behaviors and their association with marijuana use. SAMHSA. Based on data from the National Household Survey on Drug Abuse, 1994-1996.

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marijuana through Proposition 19: The Regulate, Control and Tax Cannabis (RCTC) Act of 2010 in November 2010 demonstrated strong support in Sonoma County indicating that the majority of voting adults in Sonoma County do not perceive marijuana to be harmful. In addition, many believe the position that for some marijuana is a medical necessity and should be readily available. The proliferation of marijuana dispensaries serves to strengthen the “normalize” marijuana use.

Many parents do not fully appreciate the specific dangers of marijuana today. In some cases, they draw on their own experiences with the drug, 20-30 years ago when it wasn't nearly as potent. Long-term marijuana abuse can lead to addiction; that is, compulsive drug seeking and abuse despite the known harmful effects upon functioning in the context of family, school, work, and recreational activities. Estimates from research suggest that about 9 percent of users become addicted to marijuana; this number increases among those who start young (to about 17 percent) and among daily users (25-50 percent). Marijuana is a serious, harmful drug, yet because of the folklore and false information that surround and support it, many people do not perceive marijuana to be a problem. Since the 1990s, surveys have shown that marijuana use among youth has increased as perception of risk and peer disapproval among youth has declined. In fact, recent California Healthy Kids Survey (CHKS) findings show that the perception of marijuana as harmful has fallen to rates lower than tobacco and alcohol¹⁵⁴.

Shifts in perceived risk of use of a substance have been shown to signal future changes in the prevalence of use - but in the opposite direction. According to the most recent National Survey on Drug Use and Health¹⁵⁵, trends among adolescents in past month marijuana use and perceptions of great risk from smoking marijuana once a month were generally on opposite trajectories between 2002 and 2007. Marijuana use decreased between 2002 and 2005, and then leveled out; the perception of risk increased between 2002 and 2003, and then leveled out. Comparisons between marijuana use and perceptions of its risk in 2007 by demographic characteristics also showed generally opposing patterns. Marijuana use increased with age and was higher for males than females, while the perception of great risk decreased with age and was higher for females than males.

¹⁵⁴ <http://www.monitoringthefuture.org/pressreleases/09drugpr.pdf>

¹⁵⁵ Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (January 8, 2009). *The NSDUH Report: Marijuana Use and Perceived Risk of Use among Adolescents: 2002 to 2007*. Rockville, MD.

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	Adolescents Reporting Past Month Marijuana Use	
	Perceived Great Risk from Smoking Marijuana Once a Month	Perceived Moderate Risk to No Risk from Smoking Marijuana Once a Month
Total	1.4%	9.5%
Gender		
Male	1.6%	10.4%
Female	1.3%	8.5%
Age Group in Years		
12 or 13	0.3%	1.4%
14 or 15	1.3%	8.1%
16 or 17	3.3%	16.7%

Source: SAMHSA, 2007 NSDUH.

Adolescents who perceived great risk from smoking marijuana were much less likely to have used marijuana themselves than those who perceived only moderate to no risk from such use. This emphasizes the need for accurate information and education for Adults as well as young people on the negative community health impacts of marijuana. Approaches may include:

- Educate the community about the harmful effects of marijuana (similar to alcohol, tobacco, and other drugs)
- Educate jurisdictions and public on the community wide consequences of increased availability
- Address economic myths
- Promote the value of good regulation

STRATEGY: Reduce the Density of Medical Marijuana Dispensaries

In Sonoma County, the cities of; Cloverdale, Healdsburg, Petaluma, Sonoma, and Windsor do not permit dispensaries; dispensaries are permitted in the cities of; Cotati, Santa Rosa, Sebastopol and the unincorporated areas of the county. Each of the city/county ordinances provides similar restrictions on location but dispensaries are proliferating throughout the County. Rohnert Park has a moratorium on dispensaries at the present time. As of April 2011 there were twelve legal dispensaries and at least twenty illegal dispensaries operating in the county. Sonoma County is also served by sixteen medical marijuana dispensaries

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that provide home delivery of marijuana. The legality of non-storefront dispensaries is unclear throughout the state.

While public opinion drives the proliferation of dispensaries, the opposite is also true. The more dispensaries there are, and the more mainstream marijuana retailing appears, the less threatening it seems. In Sonoma County, proprietors of marijuana dispensaries have gone to great effort to engage in mainstream community activities/events such as: City Council meetings, sponsorships, memberships on advisory boards, philanthropy, etc. Not only is the presence of the dispensaries contributing to normalizing marijuana, but these activities are contributing to a “good neighbor” perception – further reducing the inclination toward a perception of dispensaries as part of the problem. This is one more reason that regulating dispensaries through Land Use ordinances is a critical step in addressing marijuana use.

Conditional use permits (CUP) are a particular type of land use ordinance that provide communities and local governments control over where certain land uses (e.g., dispensaries, bars, liquor stores, non-residential storage buildings, and duplexes) may be located and how they operate, (e.g., hours of operation, parking, staff training). Said another way, the conditional use permit includes specific conditions that limit the applicant’s authority to use the property. The CUP process also provides citizens a voice in determining if and how proposed new businesses should open in their neighborhoods. CUP ordinances also provide a mechanism for localities to revoke the use permits of those businesses that operate out of compliance with the conditions set forth in the CUP.¹⁵⁶ A local land use ordinance can be used not only to regulate the location and density of marijuana retailers in a community, but also to impose requirements on how dispensaries operate through the Conditional Use Permit process.

Municipalities have the obligation and the power to protect citizens and to utilize the tools of government to ensure the safety and welfare of citizens. Cities and counties currently use their regulatory powers to manage alcohol outlets, restaurants and bars. These same tools can be used in the management of businesses that sell marijuana under California’s Medical Marijuana law.³¹

¹⁵⁶ Medical Marijuana Dispensaries: An Overview Of Regulatory Approaches for Localities Community Prevention Initiative — 2010, funded by the California Department of Alcohol and Drug Programs and administered by CARS.

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Priority Area 3: Under-age Marijuana Use Logic Model

Goal #3: Reduce problems associated with underage marijuana use							
Identified Problem	Contributing Factors	Objectives	Strategies	Short-term Outcomes	Intermediate Outcomes	Long-Term Outcomes	Measurement Indicators
Under-age Marijuana Use	Availability of marijuana in Sonoma County	<p>1a. By 2016, sales of medical marijuana (as defined as; point of sale and home delivery of medical marijuana) will be carefully regulated to limit availability.</p> <p>1b. By 2016, marijuana growers will be carefully regulated to limit availability.</p>	<p>1a Provide education and assist municipalities in identifying appropriate, local strategies for managing dispensaries through the adoption of land-use ordinances and addressing home delivery of medical marijuana.</p> <p>1b. Work with community stake holders to identify key components of a marijuana ordinance.</p>	<p>1a. Local municipalities will have more control over numbers and types of dispensaries allowed in their municipality.</p> <p>1b. Key stakeholders will have identified elements of an ordinance for marijuana growers.</p>	<p>1a. The number of dispensaries in local municipalities will be maintained (and will not increase).</p> <p>1b. The number of marijuana plants legally grown in Sonoma County will decrease.</p>	1. Reduced access to marijuana in the community.	1a. CHKS, youth survey, treatment admissions, SAP, probation data.
Under-age Marijuana Use	Perceptions of marijuana as not harmful	2. By 2016, attitudes and community norms will reflect an increased perception of marijuana as harmful to youth.	2a Provide education on the community health impacts of youth marijuana use.	2a Adults and youth increase their awareness of the negative community health impacts of marijuana and Community norms will shift to perceptions of marijuana to be of similar harm as Alcohol, tobacco and other drugs.	2a Adults and youth will participate actively in advocacy efforts aimed at support for increased regulation of medical marijuana.	2a Youth access to marijuana will become more restricted.	2a CHKS data; Survey data west Co; youth survey; BRFS; Probation group interviews.

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			<p>2b Reduce in the density of Medicinal Marijuana dispensaries (MMDs) in Sonoma County (defined as point of sale and home delivery of medical marijuana).</p>	<p>2b Local municipalities will have more control over numbers and types of dispensaries allowed in their municipality.</p>	<p>2b The number of dispensaries in local municipalities will be maintained (and will not increase).</p>	<p>2b Reduction of availability of marijuana to youth directly as a result of MMDs and/or from increased marijuana in the community through the density of MMDs.</p>	<p>2b Types and number of MMDs outlets;</p>
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STRATEGY: Youth Development and Early Identification of Risk

As discussed above, the most effective prevention plans will use both environmental and individual substance abuse prevention strategies. This plan supports two key strategies focusing on individually focused prevention and early intervention strategies aimed at strengthening protective factors and reducing risk for the development of substance use and behavioral health disorders.

Friday Night Live

Friday Night Live is designed for high school-aged youth. Activities are organized by youth to appeal to youth. Dances, haunted houses, community service and social action activities, movie nights, and participation in advocacy for safe and healthy environments such as sober grad, are just some of the activities that FNL youth both participate in and organize. One of the most distinguishing aspects of Friday Night Live is youth involvement in mentoring. In FNL, high school-aged youth can act as mentors and tutors to middle school and elementary school students. FNL mentoring activities provide opportunities for young people to engage in ongoing, mutually beneficial, caring relationships which strengthen young people to face today's challenges. The FNL model engages teams of older high school-aged youth to mentor teams of middle school-aged youth in a structured ongoing one-on-one relationship. As the newest addition to the FNL family of programs, counties that participate adhere to certain quality assurance standards while maintaining local creativity, energy and self-determination.

Currently Sonoma County DHS sponsors 4 Countywide FNL chapters including (LIST)

Each is implementing a range of projects aimed at:

Community Service Learning and Social Action: Young people, in partnership with adults, develop and implement community projects designed to bring about real change. Projects might focus on a particular cause, increase awareness of an issue, or bring about real, lasting change in a targeted area.

Leadership and Advocacy: Youth serve on community boards and hold intern or staff positions within FNL programs or local community programs that understand and support the FNL approach. Service can be on boards of directors, advisory councils, commissions, or any decision- or policy-making body.

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Youth-Led Projects and Activities: Youth develop projects and activities designed to send a consistent positive message about youth culture. In addition to providing "safe and sober" activities, the chapter plans innovative, youth-led activities that celebrate young people's contributions, such as Poetry Slams, Health Olympics, Youth Forums, talent showcases, and teambuilding exercises.

Relationship Building: Youth interact with their peers and with adults in structured and non-structured environments. The chapter can host group development activities such as retreats or team building days.

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Priority Area 5: Friday Night Live Logic Model

Goal #5: Create positive and healthy communities for and with young people

Identified Problem	Contributing Factors	Objectives	Strategies	Short-term Outcomes	Intermediate Outcomes	Long-term Outcomes	Measurement Indicators
Lack of youth engagement in leadership roles around ATOD issues	Lack of Effectively organized Youth Development Opportunities	1. By 2016, six (6) FNL Chapters focused on youth development will build their capacity	1a Support 4 Chapters to expand their capacity to incorporate and implement elements of capacity building 1b Assist two new groups with their capacity to form and develop FNL Chapters	1a Youth participation in existing Chapters will be expanded and sustained 1b New Chapters will recruit and train youth to form chapter	1. Youth will work together as part of a team to identify their purpose and vision	1. Youth will develop their roles as leaders	1. Youth Development Surveys will show increase in number of youth stating newly acquired or expanded leadership skills
		2. By 2016, 6 FNL Chapters will conduct action research assessment activities to inform and direct youth-led projects or actions	2. Youth in all chapters will develop assessment plans and implement their plan	2. Youth will understand the core concepts of youth-led action research and its importance; ID the information to collect	2. Youth will know the different ways to collect data and choose best methods for their issue	2. Youth will plan and collect information, analyze, and determine how to use their data as support for their action	2. Assessment Plan completed
		3. By 2016, 6 FNL Chapters will choose an ATOD issue and develop an action plan that supports their overall project goals or effort	3. Youth in all chapters will develop an action plan	3. Youth will understand how to take a problem or an issue and create a goal	3. Youth will brainstorm, assess and prioritize possible project ideas and choose a solution	3. Youth will develop all steps and activities for their project action plan	3. Plan is developed
		4. By 2016, 6 FNL Chapters will	4. Youth in all chapters will	4. Youth will explore and form	4. Youth will understand the	4. Youth will participate in	4. Youth will assess successes and challenges of their activities/projects through student and community

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		implement youth-led ATOD environmental prevention projects that target community norms; media messages; laws, rules, policies and procedures; and/or accessibility and availability of alcohol , tobacco and other drugs	implement one or more specific EP ATOD projects, actions or campaigns in their schools and/or communities	partnerships with existing community coalitions or key stakeholders to engage and mobilize into their plan	principles of civic engagement and how to apply their leadership skills to community advocacy	community level ATOD activities that support their plan objectives and assess their success at the end of funding year	surveys and focus groups
		5. By 2016, FNL youth will develop an evaluation plan at the start of each funding year based on project objectives and outcomes	5. Youth will be trained in various methods of data collection	5. Youth in all chapters will develop an evaluation plan using the Evaluation Tools Worksheet in Roadmap document	5. Youth will review steps to creating an effective surveys/ focus groups and prepare appropriate questions; youth will develop other data collecting tools	5. Youth will administer surveys, focus groups, or other data collecting tools; data collected will be compared to formal surveys: CHKS and YDS to validate findings	5. Youth and community surveys/focus groups to measure changes in norms; number of enforcement activities/compliance rates; decrease in access to or use of ATOD (CHKS and Youth Development Survey)

Student Assistance Programs

Student Assistance Programs (SAP's) are designed to improve school performance by educating students on the harmful effects of alcohol, tobacco, and other drugs. Through school-wide activities, small groups, extra-curricular activities, and individual assessments, students learn skills to resist the pressures to use drugs and alcohol. A student assistance program creates a safe place for discussing these topics so that misconceptions about drugs and alcohol can be corrected and alternate choices can be made available. Project SUCCESS (Schools Using Coordinated Community Efforts to Strengthen Students) is nationally recognized evidence based SAP program. It has been proven effective in reducing youth involvement with alcohol, drugs, and violence and strengthening relationships between parents and their teens to promote academic and social success. SAPS strengthen protective factors and provide support and referral to counseling and or treatment services.



In 2009, six school districts including 18 high schools; six community based organizations; the Department of Health Services; and, the Sonoma County Office of Education (SCOE) formed the Sonoma County Student Assistance Program Collaborative (SAPC) to:

1. Provide outreach and direct services to address the substance abuse and mental/behavioral health needs of culturally diverse students and families;
2. Develop increased capacity for school-based prevention, early identification, and screening for substance abuse and mental/behavioral health problems;
3. Increase accountability for program outcomes; and
4. Improve ability to leverage existing resources and build efficiencies.

In its second year SAPC received Mental Health Services Act (MHSA) dollars from the Sonoma County Department of Health Services to add early intervention for behavioral health issues to the program. This enhanced program is called Project SUCCESS+. Project SUCCESS+ focuses on high school youth, 14-18 years of age. Highly trained professionals are placed in schools to work with students individually and in groups to provide education; counseling; skills training; problem identification and referral; and, promotion of environments that support healthy, safe behaviors. In addition, students are taught skills such as communication, decision making, stress and anger management, problem solving, refusal skills and

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resisting peer pressure. Project SUCCESS+ is a voluntary program. Most students self-refer but peers, parents, and faculty may also refer students to the program.

Students and parents who can benefit from additional services are referred to appropriate agencies or practitioners in the community or to other services in the school. Project SUCCESS+ also includes school staff and parents as collaborative partners in prevention through staff and parent workshops, consultation and referral, involvement in PTA, ELAC and other school and community organizations. Services to parents are available in English and Spanish.

Priority Area 6: Student Assistance Programs Logic Model

Objective 1: By 2016, youth in Sonoma County will have increased resources to resist AOD use and mitigate behavioral health problems.

Selected Strategy/Activities	Measurement Indicators
1a. Provide Prevention Education Series (in a six week series of classroom prevention education) to an estimated 973 students.	60% of students who receive PES classes will report an increase in knowledge of access and availability of Alcohol and Other Drug and Behavioral Health (AODBH) services by the end of the PES series. Determined by post - survey
1b. Provide Short-term Prevention/Education Groups (including PS Groups, Girls Circle, The Counsel, Anger/Stress Mgt & others) to an estimated 656 students.	2% decrease in the following: binge drinking, perception of harm of binge drinking and disapproval of binge drinking, 2% increase in the following: feeling safe at school, school connectedness and attendance. Determined by pre/post survey/CHKS.
1c. Provide 1:1 sessions Short-term Counseling (1-3 sessions, not screenings).	1,506 sessions will be provided to students and tracked by Countywide program database.
1d. Provide Screenings: Early I.D. for Drug & Alcohol, & Behavioral Health Issues etc	935 screenings will be conducted and tracked by Countywide program database.
1e. Provide School-wide Prevention/Awareness Activities (Proj Grad, COA Week, GAS, Safe Prom, Red Ribbon, etc.)	41 school-wide activities will be conducted and tracked by Countywide program database.

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Selected Strategy/Activities	Measurement Indicators
1f. Provide Student Club led or co-led by PS+ Counselor including prevention efforts on fifteen campuses' in Sonoma County.	Each school will have one student club involved in prevention activities
1g. Provide 50 Parent Engagement Presentations and AOD Workshops	60% of Parents will report increased knowledge of AODBH issues, and increased confidence in addressing these issues with their children based on post-workshop surveys.
1h. Provide school staff presentations	28 School Staff presentations will be delivered in faculty meetings etc and tracked by Countywide program database.
1i. Attend Community Coalition meetings	PS Counselors will attend 27 community coalition meetings which will be tracked by Countywide program database.
1j. Trainings will be provided for PS+ and school staff	15 Trainings will be delivered for PS and/or School Staff, 51% of PS and/or School Staff will report increased knowledge of AODBH issues, and increased confidence in addressing these issues with students based on year end surveys
1k. Provide Targeted Outreach Activities-Presentations to targeted* student populations	35 Outreach Activities-Presentations will be offered to targeted student populations including ELACs and tracked by Countywide program database.
1l. Targeted student populations will be served	767 targeted students will be served by program activities with 30% more /targeted student populations will be participating in PS+ activities in June 2011 as compared to September 2010.
1m. Students will be referred for outside services (>PS+)	414 students will be referred for outside services and will be tracked by Countywide program database.
1n. Parent/Family Engagement Classes in Spanish	37 Parent Workshops (AOD, Behavioral support, etc) will be delivered in Spanish with 60% of Parents will report increased knowledge of AODBH issues, and increased confidence in addressing these issues with their children based on post-workshop surveys
1o. Additional Behavioral Health Groups or Services (NAMI)	1 12-wk. Family-to-Family courses and 2 On-going Drop-in Family Support Groups and 5 Peer Support Groups will be delivered with 60% of participants will report increased knowledge.

Prescription Drug Abuse and Misuse: Scope of the Problem

Prescription drug abuse is the Nation's fastest growing health problem. According to the Centers for Disease Control and Prevention (CDC), prescription drug abuse is a national epidemic.¹⁵⁷ It affects all age groups although drugs of choice, perceptions, and patterns of drug use can differ.¹⁵⁸

Prescription drug abuse is defined as the intentional use of a medication without a prescription; in a way other than as prescribed; or for the experience or feeling it causes.

Studies suggest that women are more likely than men to be prescribed an abusable prescription drug, particularly narcotics and anti-anxiety drugs—in some cases, 55 percent more likely. Overall, men and women have roughly similar rates of nonmedical use of prescription drugs. An exception is found among 12- to 17-year-olds. In this age group, young women are more likely than young men to use psychotherapeutic drugs non-medically. In addition, research has shown that women are at increased risk for nonmedical use of narcotic analgesics and tranquilizers (e.g., benzodiazepines).¹⁵⁹

According to the National Survey on Drug Use and Health (NSDUH), in 2009 there were 7.0 million (2.8 percent) people in the U.S. aged 12 or older who used prescription psychotherapeutic drugs non-medically in the past month.¹⁶⁰ The medications most commonly abused are pain relievers (5.3 million), tranquilizers (2 million), stimulants (1.3 million), and sedatives (0.4 million).¹⁶¹ Nearly one-third of people age 12 and over who used drugs for the first time in 2009 reported they began by using a prescription drug non-medically.¹⁶² Drug overdoses have risen five-fold over the last decade, and overdoses from prescription drugs now exceed

¹⁵⁷ Mora, Edwin. "Killer in the Medicine Cabinet: Officials Call Prescription Drug Abuse an 'Epidemic'." CBSNews.com April 20, 2011 <http://www.cbsnews.com/news/article/killers-cabinet-officials-call-prescript>

¹⁵⁸ *Prescription Drug Abuse, A Research Update from the National Institute on Drug Abuse*, May 2011, National Institute on Drug Abuse. <http://www.nida.nih.gov/tib/prescription.html>

¹⁵⁹ *Prescription Drugs, Abuse and Addiction, Research Report Series, October 2011*. U.S. Department of Health and Human Services, National Institutes of Health. <http://drugabuse.gov/PDF/RRPrescription.pdf>

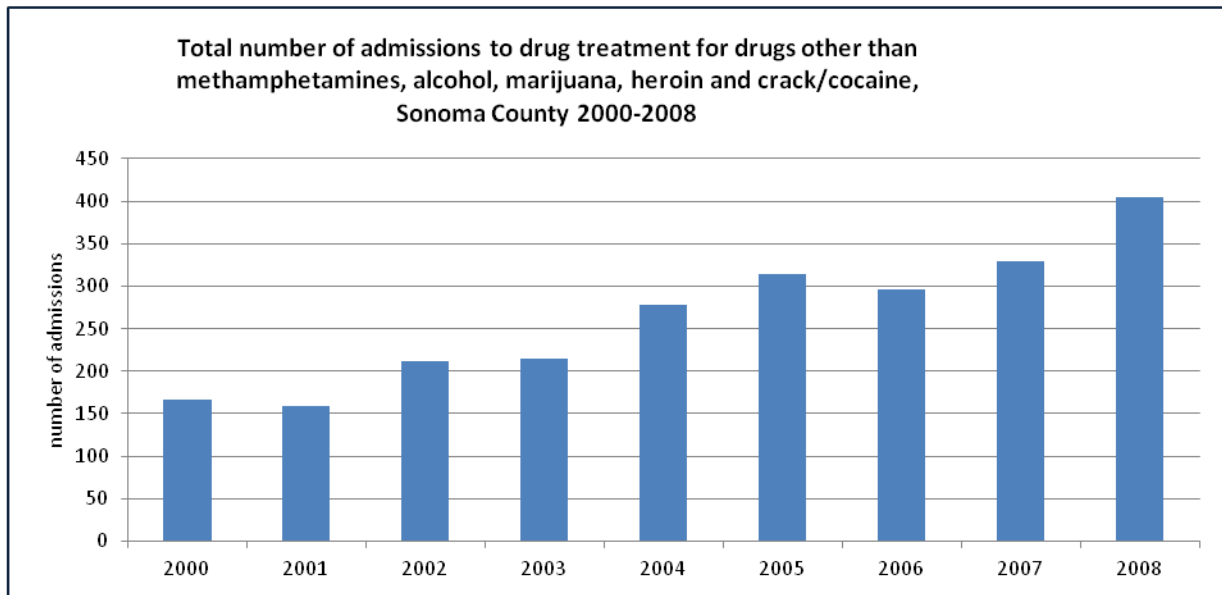
¹⁶⁰ Ibid.

¹⁶¹ Ibid.

¹⁶² *Results from the 2009 National Survey on Drug Use and Health (NSDUH): National Findings, 2010*, Substance Abuse Mental Health Administration Services. <http://oas.samhsa.gov/nsduh/2k9nsduh/2k9resultsp.pdf>

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those from heroin and cocaine combined.¹⁶³ National Substance Abuse Treatment data supports this showing a four-fold increase in the number of admissions involving pain relievers between 1998 and 2008.¹⁶⁴¹⁶⁵ This pattern is evident in California as well.



Source: *Indicators of Alcohol and Other Drug Risk and Consequences for California Counties, Sonoma County, 2010*, Prepared by the Center for Applied Research Solutions (CARS), Inc. for the California Department of Alcohol and Drug Programs.

Across the 147 narcotic treatment programs licensed by California Alcohol and Drug Programs, the number of people admitted for addiction to pain relievers increased by more than 80 percent from 2006 to 2009.¹⁶⁶ In Sonoma County, between 2000 and 2008, admissions to drug abuse treatment programs for drugs other than methamphetamine, alcohol, marijuana, heroin and crack/cocaine increased, while at

¹⁶³ SAMHSA. "SAMHSA's Latest National Survey on Drug Use & Healthy". SAMHSA: Office of Applied Studies. Sept. 10, 2010. <http://www.oas.samhsa.gov/nsduhLatest.htm>

¹⁶⁴ SAMHSA, Office of Applied Studies. Substance Abuse Treatment Admissions Involving Abuse of Pain Relievers: 1998 and 2008. Report, Rockville, MD: SAMHSA, 2010

¹⁶⁵ <http://www.iom.edu/Reports/2011/Relieving-Pain-in-America-A-Blueprint-for-Transforming-Prevention-Care-Education-Research.aspx>

¹⁶⁶ California Department of Alcohol and Other Drug Programs. <http://www.adp.cahwnet.gov/youth/prescriptiondrugs.shtml>

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the same time admissions to drug abuse treatment for methamphetamines, alcohol, marijuana, and heroin (excepting crack/cocaine) decreased.¹⁶⁷

Consequences of Prescription Drug Abuse & Misuse

Prescription drug abuse contributes to risk of addiction, drug overdoses, unintentional death, impaired driving, and crime. However, data inconsistencies can make drug use and its consequences hard to quantify.¹⁶⁸

Risk of Addiction

Some prescription drugs can become addictive, especially when they are used in a manner inconsistent with their labeling or for reasons for which they were not prescribed. These include painkillers like OxyContin or Vicodin, sedatives and tranquilizers like Xanax and Valium, and stimulants like Dexedrine, Adderall or Ritalin.¹⁶⁹ The abuse of these medications can lead to psychological and physical dependence and to addiction.

Drug Overdoses

The increase in drug abuse and misuse has led to more accidental drug overdoses and poisonings, many of which have result in death.¹⁷⁰ Since 1990, rates of drug overdose deaths have increased approximately five-fold over all. The increase in drug overdose death rates is largely because of prescription opioid painkillers.¹⁷¹ Opioids are synthetic versions of opium used to treat moderate and severe pain. Americans make up 4.6 percent of the world's population but use 80 percent of the global supply of opioid pain relievers.¹⁷²

¹⁶⁷ *Indicators of Alcohol and Other Drug Risk and Consequences for California Counties, Sonoma County, 2010*. Prepared by the Center for Applied Research Solutions (CARS), Inc. for the California Department of Alcohol and Drug Programs (ADP).

http://www.adp.ca.gov/Prevention/pdf/indicators_2010/Sonoma.pdf

¹⁶⁸ *The National Prescription Drug Abuse Prevention Strategy: 2011-12 Update*, Center for Lawful Access and Abuse Deterrence (CLAAD). <http://claad.org/news/policy-brief/102>

¹⁶⁹ *Prescription Drug Abuse and Addiction*. <http://www.prescription-drug-abuse.org>

¹⁷⁰ *Ibid.*

¹⁷¹ *Unintentional Drug Poisonings in the United States*, Centers for Disease Control and Prevention, Issue Brief, July 2010. <http://www.cdc.gov/HomeandRecreationalSafety/pdf/poison-issue-brief.pdf>

¹⁷² U.S Food and Drug Administration. "FDA Acts to Reduce Harm From Opioid Drugs." U.S. Food and Drug Administration, Consumer Updates. 2011. www.fda.gov

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Emergency room visits due to prescription drug overdoses has risen as well. Between 2004 and 2008, the number of these emergency room visits rose 97%.¹⁷³

This has been a particularly serious issue in the older adult population. For example, according to a recent The DAWN Report (Drug Abuse Warning Network)¹⁷⁴:

- In 2004, there were an estimated 115,803 emergency department (ED) visits involving pharmaceutical misuse and abuse by adults aged 50 or older; in 2008, there were 256,097 such visits, representing an increase of 121.1 percent.
- One fifth (19.7 percent of ED visits involving pharmaceutical misuse and abuse among older adults were made by persons aged 70 or older.
- Among ED visits made by older adults, pain relievers were the type of pharmaceutical most commonly involved (43.5 percent), followed by drugs used to treat anxiety or insomnia (31.8 percent) and antidepressants (8.6 percent).
- Among patients aged 50 or older who visited the ED for pharmaceutical misuse or abuse, more than half (52.3 percent) were treated and released, and more than one third (37.5 percent) were admitted to the hospital.

Drug-Induced Deaths

As a direct consequence of drug use, 4,178 persons died in California in 2007. This is compared to the number of persons in California who died from motor vehicle accidents (4,306) and firearms (3,268) in the same year. California drug-induced deaths (11.4 per 100,000 population) were lower than the national rate (12.7 per 100,000).¹⁷⁵

Impaired Driving

According to the National Traffic Safety Administration (NHTSA) report released in 2010, 33% of drivers involved in fatal car crashes, for which there were known test results, were under the influence of drugs but illicit and prescription.¹⁷⁶ In 2009, over ten million people age 12 or older reported driving under the influence of illicit drugs during the past year.¹⁷⁷

¹⁷³ *Fact Sheet: Prescription Drug Abuse – a DEA Focus.*

http://www.justice.gov/dea/concern/prescription_drug_fact_sheet.html

¹⁷⁴ *Drug-Related Emergency Department Visits Involving Pharmaceutical Misuse and Abuse by Older Adults*, The DAWN Report, November 25, 2010. <http://oas.samhsa.gov/2k10/dawn018/Pharma50plus.htm>

¹⁷⁵ National Vital Statistics Reports Volume 58, Number 19 for 2007, Centers for Disease Control and Prevention. http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_19.pdf

¹⁷⁶ Ibid.

¹⁷⁷ *Results from the 2009 National Survey on Drug Use and Health (NSDUH): National Findings*, 2010, Substance Abuse Mental Health Administration Services. <http://oas.samhsa.gov/nsduh/2k9nsduh/2k9resultsp.pdf>

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Crime

Prescription drug abuse, by means of drug diversion, which is defined as the transfer of a prescription drug from a legal to an illegal channel of distribution or use, is associated with a rise in crime. Law enforcement officials and pharmacies nationwide report an increase in pharmacy thefts. Thefts of prescription medications from home medicine cabinets are also on the rise.¹⁷⁸

Goal 4: Reduce Problems Associated with Prescription Drug Abuse and Misuse

There are a variety of reasons why people use, misuse or abuse drugs. These include: to get high, to counter anxiety, for pain or sleep problems, or to enhance cognition.¹⁷⁹ While we do not yet understand all of the reasons for the increasing abuse of prescription drugs, we do know that increasing availability is a contributing factor. Between 1991 and 2010, prescriptions for stimulants increased from 5 million to 45 million and opioid analgesics increased from 30 million to 180 million.¹⁸⁰ Fifty-six percent of teens believe that prescription drugs are easier to get than illicit drugs.¹⁸¹

Another likely contributing factor is increased accessibility. In addition to the increasing number of medicines being prescribed for a variety of health problems, some medications can be obtained easily from online pharmacies. Most of these are legitimate businesses that provide an important service; however, some online pharmacies dispense medications without a prescription and without appropriate identity verification, allowing minors to order the medications easily over the Internet.

Misconceptions about harm and safety can also contribute to increased use and misuse. Because medications are prescribed by physicians, it is assumed that they are

¹⁷⁸ The *National Prescription Drug Abuse Prevention Strategy: 2011-12 Update*, Center for Lawful Access and Abuse Deterrence (CLAAD). <http://claad.org/news/policy-brief/102>

¹⁷⁹ *Prescription Drug Abuse, A Research Update from the National Institute on Drug Abuse*, May 2011, National Institute on Drug Abuse. <http://www.nida.nih.gov/tib/prescription.html>

¹⁸⁰ *Prescription Drug Abuse, A Research Update from the National Institute on Drug Abuse*, May 2011, National Institute on Drug Abuse. <http://www.nida.nih.gov/tib/prescription.html>

¹⁸¹ *Fact Sheet: Prescription Drug Abuse – a DEA Focus*. http://www.justice.gov/dea/concern/prescription_drug_fact_sheet.html

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safe to take under any circumstances.¹⁸² This is true for many older adults but especially true for the adolescent population. Two in five teens believe that prescription drugs are “much safer” than illegal drugs and three in ten believe that prescription pain relievers are not addictive.¹⁸³

The strategies proposed here are aimed at decreasing the prevalence of this problem by increasing awareness and promoting additional research on prescription drug abuse and misuse.

Youth Access

Prescription drug abuse is a serious problem for youth. According to the latest Monitoring the Future study – the Nation’s largest survey of drug use among young people –prescription drugs are the second most-abused category of drugs after marijuana.¹⁸⁴

Every day, on average, 2,500 teens use prescription drugs to get high for the first time.¹⁸⁵ Next to tobacco and alcohol, adolescents report prescription and over-the-counter medications account as the most frequently abused drugs by high school seniors with 1 in 12 reporting nonmedical use of Vicodin and 1 in 20 reporting abuse of OxyContin.¹⁸⁶ According to the Partnership At Drugfree.org’s 2010 Partnership Attitude Tracking Study, one in four teens reported taking a prescription drug not prescribed to them at least once in their lives, and more than one in five used a prescription pain reliever not prescribed to them by a professional.¹⁸⁷

The 2005-2006 California Student Survey (CSS/CHKS), “7th, 9th, and 11th Graders in California Use of Prescription Pain Killers and Other Drugs in Lifetime” reported misuse of pain relievers at rates of 4.4 percent, 9.1percent, and 15.1 percent respectively. The rapidly increasing rate of prescription drug misuse across different ages corresponds to findings from the National Survey on Drug Use and Health that

¹⁸² *Prescription Drug Abuse, A Research Update from the National Institute on Drug Abuse*, May 2011, National Institute on Drug Abuse. <http://www.nida.nih.gov/tib/prescription.html>

¹⁸³ *Fact Sheet: Prescription Drug Abuse – a DEA Focus*.
http://www.justice.gov/dea/concern/prescription_drug_fact_sheet.html

¹⁸⁴ Johnston, L. D., O’Malley, P. M., Bachman, J. G., and Schulenberg, J. E. (2010), *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2009* (NIH Publication No. 10-7583).Bethesda, MD: National Institute on Drug Abuse. <http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2010.pdf>

¹⁸⁵ *Fact Sheet: Prescription Drug Abuse – a DEA Focus*.
http://www.justice.gov/dea/concern/prescription_drug_fact_sheet.html

¹⁸⁶ *Prescription Drug Abuse, A Research Update from the National Institute on Drug Abuse*, May 2011, National Institute on Drug Abuse. <http://www.nida.nih.gov/tib/prescription.html>

¹⁸⁷ *2010 Partnership Attitude Tracking Study*, The Partnership at Drugfree.org, Released April 6, 2011.
<http://www.drugfree.org/wp-content/uploads/2011/04/FULL-REPORT-FINAL-PATS-Teens-and-Parent-April-6-2011-1.pdf>

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prescription drug misuse, along with other forms of illicit drug use, increases as children age. According to the CSS/CHKS data, alcohol is the most commonly misused drug among youth, followed by marijuana; prescription drugs are the third most commonly misused drug.¹⁸⁸ The most recent CSS Biennial Report (2007-08) released in the fall of 2008 indicates higher patterns of use rates for prescription drugs than reported in the 11th Biennial Report (2005-06). Specifically, lifetime use rates for prescription pain killers (e.g., Vicodin®, OxyContin® and Percodan®) went from 9 percent for 9th graders in the 2005-06 school year to 11.6 percent in 2007-08. 11th graders went from 15 percent in 2005-06 to 17.6 percent in 2007-08.¹⁸⁹

In the California Healthy Kids Survey for Sonoma County (Main Report, 2007-2009), when asked “how many days did you use illegal drugs or pills during the past 30 days?”: on average, 7th graders responded two days, 9th graders responded four days, 11th graders responded five days, and students in alternate education responded 12 days in the past 30 days. When asked “during your lifetime, how many times have you been high (loaded, stoned or wasted) from using drugs?”: 1 percent of 7th graders, 8 percent of 9th graders, and 17 percent of 11th graders responded having been high seven or more times during their lives.

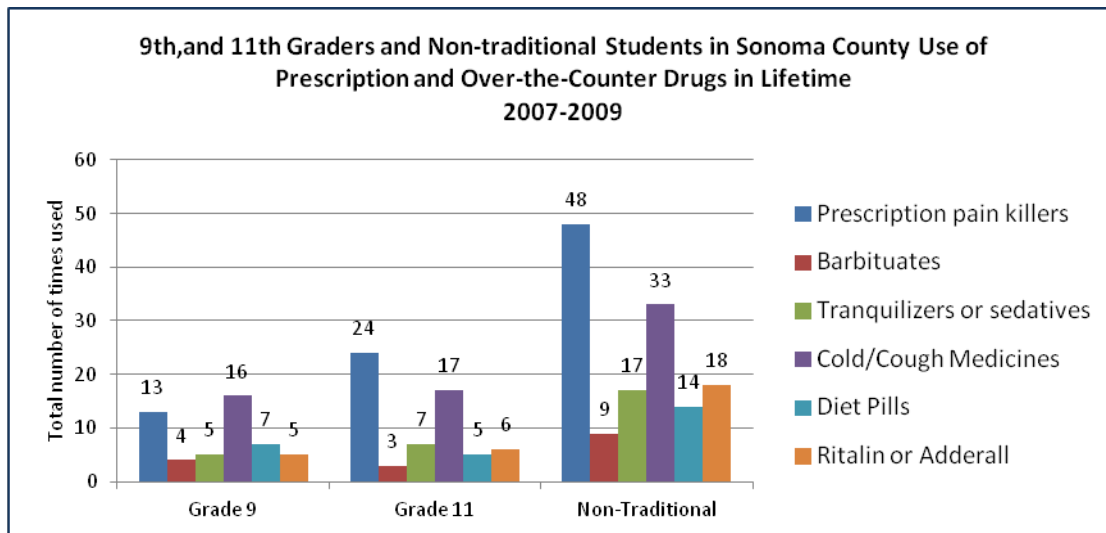
When examining lifetime use of any prescription drugs or over-the-counter medications among Sonoma county youth, prescription pain killers were the most often used among all grades and usage increased with age. Additionally, prescription pain killer use by students in alternate education settings was disproportionately higher than traditional students in the 9th and 11th mainstream high school grades. The second most common medications used was over-the-counter cold/cough medicine. Again, use by non-traditional students was double that of traditional 9th and 11th graders.¹⁹⁰

¹⁸⁸ *The California State Task Force on Prescription Drug Misuse, Summary Report and Recommendations on Prescription Drugs; Misuse, Abuse and Dependency*, California Department of Alcohol and Drug Programs. http://www.adp.ca.gov/director/pdf/Prescription_Drug_Task_Force.pdf

¹⁸⁹ *12th Biennial Statewide Survey of California Students in Grades 7, 9 and 11*, California Attorney General’s Office, December 2008. http://www.wested.org/online_pubs/hhdp/css_12th_highlights.pdf

¹⁹⁰ *California Healthy Kids Survey*, California Department of Education (Safe and Healthy Kids Program Office) and WestEd (Health and Human Development Department). http://chks.wested.org/resources/0709_49_Sonoma.pdf?1282248033

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Source: California Healthy Kids Survey (CHKS), Sonoma County Secondary Main Report, 2007-2009.

OLDER ADULT PRESCRIPTION DRUG ABUSE

Prescription drug medication (PDM) is a growing problem for the aging baby boomers many of whom are entering older adulthood with higher lifetime rates of illicit drug use while at the same time developing chronic age-related conditions that may require medication. People over the age of 65 make up only 13 percent of the population, yet they account for about one-third of all medications prescribed in the U.S.¹⁹¹ As the Baby Boomer generation ages over the next twenty years, the potential for misuse and abuse of prescription drugs increases. Because research has shown the baby-boomer generation (those born between 1946 and 1964) to have higher rates of substance use than previous generations, non-medical use of prescription-type drugs has been identified as a priority concern for this population.¹⁹²

Older patients are more likely to be prescribed long-term and multiple prescriptions, which can lead to unintentional misuse. Older adults are also at risk for prescription drug abuse as a result of:

- Taking medications that are not medically necessary
- Using medications for conditions for which they were not originally prescribed

¹⁹¹ *Prescription Drugs, Abuse and Addiction, Research Report Series, October 2011.* U.S. Department of Health and Human Services, National Institutes of Health. <http://drugabuse.gov/PDF/RRPrescription.pdf>

¹⁹² *Illicit Drug Use among Older Adults, The NSDUH Report, September 1, 2011.* http://oas.samhsa.gov/2k11/013/WEB_SR_013_HTML.pdf

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- Using over-the counter (OTC) medicines and dietary supplements in combination with prescribed medicines which taken together can increase the risk of negative drug interactions.¹⁹³

Additionally, if prescription drugs are mixed with alcohol there is an increased risk of illness, injury or death. For example, one in five (20.4 percent) of emergency department visits related to pharmaceutical misuse or abuse also involved alcohol.¹⁹⁴

Nearly 3 in 10 people between the ages of 57 and 85 use at least five prescriptions daily.

Substance Abuse and Mental Health Administration (SAMHSA)2011

In general, substance abuse is more easily overlooked in adults ages 50 and older because its symptoms often mimic other medical and behavioral disorders more common among this population, such as dementia, diabetes and depression. According to the National Survey on Drug Use and Health the incidence of prescription drug abuse in this age group is rising, making up 3.5 percent of all substance abuse treatment admissions in 2008, up from 0.7 percent in 1992 and older adults are more likely to primarily abuse prescription pain relievers.¹⁹⁵

Although there is a lack of good data available on prescription drug misuse and abuse in the older adult population in California and in Sonoma County, the California Department of Alcohol and Drug Programs estimates that tens of thousands of older adults misuse prescription drugs for nonmedical reasons in California in any given year.¹⁹⁶

As the Baby Boomer population in Sonoma County ages, it is expected that the numbers, as well as the types of substances being used will increase significantly. Because the boomer generation used more illicit drugs and alcohol than their parents, it is anticipated that many will bring these habits with them into their later

¹⁹³ *Prescription Drugs, Abuse and Addiction, Research Report Series, October 2011.* U.S. Department of Health and Human Services, National Institutes of Health. <http://drugabuse.gov/PDF/RRPrescription.pdf>

¹⁹⁴ *Drug-Related Emergency Department Visits Involving Pharmaceutical Misuse and Abuse by Older Adults, The DAWN Report, November 25, 2010.* <http://oas.samhsa.gov/2k10/dawn018/Pharma50plus.htm>

¹⁹⁵ *Changing Substance Abuse Patterns Among Older Admissions: 1992 and 2008, SAMHSA.* <http://oas.samhsa.gov/2k10/229229OlderAdms2k10htm>

¹⁹⁶ *The California State Task Force on Prescription Drug Misuse, Summary Report and Recommendations on Prescription Drugs: Misuse, Abuse and Dependency.* http://www.adp.ca.gov/director/pdf/Prescription_Drug_Task_Force.pdf

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years. We're already seeing this trend occur in Sonoma County. Between 2006 and 2010, the total number of admissions to publicly funded treatment programs decreased by 16%, while the number of people age 60 or older who entered publicly funded substance abuse treatment programs in Sonoma County during this same time period increased by over 100%. Alcohol and prescription medication are cited as the primary problems for the majority of older adults entering treatment programs, but an increasing number are battling cocaine, heroin, and marijuana addictions as well.¹⁹⁷

Strategy: Implement a Prescription Drug Safe Disposal Campaign

Recently, the Executive Office of the President of the United States released a document titled "Epidemic: Responding to America's Prescription Drug Abuse Crisis" in which they presented a prescription drug abuse prevention plan. Among their recommended strategies were education and proper disposal.¹⁹⁸

A large source of the problem of prescription drug abuse is a direct result of what is in home medicine cabinets. Unused and readily accessible medicines have the potential to be misused and abused, especially by youth. According to the U.S. Department of Justice Drug Enforcement Administration, Office of Diversion Control, studies show that a majority of abused prescription drugs are obtained from family and friends, including the home medicine cabinet.¹⁹⁹ SAMHSA's 2009 National Survey on Drug Use and Health found that over 70 percent of people who used prescription pain relievers non-medically got them from friends or relatives, while approximately 5 percent got them from a drug dealer or the internet.²⁰⁰ Unused and readily accessible medicines have the potential to be misused and abused, especially by youth. It is therefore recommended that homeowners safely and properly store prescription drugs to reduce the risk of misuse and abuse by family members and others as well as to prevent theft and drug diversion.

¹⁹⁷ *Sonoma Web Infrastructure for Treatment Services (SWITS)*, May 2011. This percentage includes treatment services and detoxification services admissions.

¹⁹⁸ *Epidemic: Responding to America's Prescription Drug Abuse Crisis*, Executive Office of the President of the United States, 2011. http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx_abuse_plan.pdf

¹⁹⁹ U.S. Department of Justice Drug Enforcement Administration, http://www.deadiversion.usdoj.gov/drug_disposal/takeback/

²⁰⁰ *Results from the 2009 National Survey on Drug Use and Health (NSDUH): National Findings*, 2010, Substance Abuse Mental Health Administration Services. <http://oas.samhsa.gov/nsduh/2k9nsduh/2k9resultsp.pdf>

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Providing a secure and convenient way to dispose of medications will help prevent drug diversion and abuse as well as reduce the introduction of medications into the environment. Initial efforts will focus on community safe medicine disposal site events that provide people with a secure and convenient way to dispose of medications. These events provide an opportunity to educate as well as free and safe disposal. In addition, staff and partners will continue to work with area hospitals, clinics, pharmacies, law enforcement and merchants to establish permanent take back sites throughout Sonoma County.

Strategy: Increase Awareness of the Problem

Another crucial strategy in tackling the problem of prescription drug abuse is to raise awareness of the problem through the education of parents, youth, patients, and healthcare providers.

- **Parent, Youth, and Patient Education/Awareness:** Parents and youth in particular need to be better educated about the dangers of the misuse and abuse of prescription drugs. Many people are still not aware that the misuse or abuse of prescription drugs can be as dangerous as the use of illegal drugs, leading to addiction and even death.
- **Healthcare Provider Education/Awareness:** Prescribers and dispensers, including physicians, physician assistants, nurse practitioners, pharmacists, nurses, prescribing psychologists, and dentists, all have a role to play in reducing prescription drug misuse and abuse. Educating prescribers on substance abuse is critically important because even brief interventions by primary care providers have proven effective in reducing or eliminating substance abuse in people who abuse drugs but are not yet addicted to them. Additionally, educating providers about this growing problem will reduce the over-prescribing of medication necessary to treat minor conditions. This also has the added benefit of reducing the amount of unused medication sitting in home medicine cabinets.

Other Potential Strategies

The scope of the problem of prescription drug use in Sonoma county is not yet fully understood. Over the next year staff will continue to work with the Prevention Partnership and community partners to develop deeper understanding of the problems associated with youth use and older adult misuse in order to build a comprehensive set of strategies to address prescription drug abuse. The planning process will involve working with the Prevention Partnership, County programs,

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community coalitions, law enforcement and schools to collect good local information and data in order to fully define and address the problem and its contributing factors.

There are a number of strategies that are recommended by the Executive Office of the President, including tracking and monitoring of prescriptions and dispensing of prescription drugs, and support of law enforcement efforts. Prescription drug monitoring programs (PDMPs) can detect and prevent the diversion and abuse of prescription drugs at the retail level. Enhancement and increased utilization of prescription drug monitoring programs will help identify “doctor shoppers” and detect therapeutic duplication and drug-drug interactions. PDMPs track controlled substances prescribed by authorized providers and dispensed by pharmacies. Currently, the State of California Department of Justice, Office of the Attorney General has a prescription drug monitoring system in place.²⁰¹

Another strategic approach is to provide law enforcement agencies with support and tools to expand their efforts to shut down “pill mills” and to stop “doctor shoppers” who contribute to prescription misuse and abuse as well as drug diversion and trafficking.

²⁰¹ California Prescription Drug Monitoring Program (PDMP).
https://pmp.doj.ca.gov/pmpreg/RegistrationType_input.action

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Priority Area 4: Prescription drug misuse and abuse

Goal #4: Reduce problems associated with Prescription drug misuse and abuse							
Identified Problem	Contributing Factors	Objectives	Strategies	Short-term Outcomes	Intermediate Outcomes	Long-Term Outcomes	Measurement Indicators
<p>Youth (defined as under 18) and Older Adult Prescription Drug Use/Misuse</p>	<p>Youth are able to steal drugs from adult family members</p> <p>Older adults are unaware of the dangers of Rx including combing with alcohol and/or other drugs</p>	<p>1. By 2016, Youth will not be able to access prescription drugs from parents and/or grandparents</p> <p>2. Older adults will dispose of unused and un-needed drugs</p>	<p>1/2. Implement a Rx safe disposal campaign to increase awareness of proper disposal and provide safe disposal opportunities throughout Sonoma County.</p>	<p>1/2. Permanent drop locations are available; and promoted widely</p>	<p>1/2. Sonoma County residents use drop boxes to dispose of prescription drugs</p>	<p>1/2. There are fewer medications available in the home and a decrease in youth access to prescription drugs by stealing from home.</p>	<p>1/2. Youth will not identify parents and/or grandparents as a primary source for prescription drugs. Reports from parents, grandparents re disposal; drug drop off utilization rates; youth reports re: access. Hauler reports (lbs collected, sites, etc.)</p>
<p>Under-age and aging adult Prescription Drug Use</p>	<p>Over-prescription of medications leads to misuse and abuse.</p>	<p>2. By 2016, the issue of over prescription to youth and aging adults will be researched to test the hypothesis that medications are being over prescribed.</p>	<p>2. Work with local communities to understand the issue of youth and older adult over prescription.</p>	<p>2. Have a better understanding of how youth and aging adults are using prescription medication.</p>	<p>2. Collection of data and description of the problem of over prescription in Sonoma County.</p>	<p>2a Develop strategies</p>	<p>2. Reports of drug of choice, treatment admissions/primary drug of choice for youth, aging adult Rx use.</p>

IV. EVALUATION

PRIORITY AREA 1: UNDERAGE DRINKING						
GOAL #1: REDUCE ALCOHOL-RELATED PROBLEMS ASSOCIATED WITH SOCIAL ACCESS TO ALCOHOL						
Identified Problem	Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
UNDER-AGE DRINKING	1. Acceptance of underage drinking among Sonoma County adults.	1.a. Sonoma County (unincorporated), Cloverdale, Santa Rosa and Healdsburg adopt social host ordinances.	1.a. Social host ordinances in place.	1.a.1. Documentation of all ordinances. 1.a.2. Summary of adoption process, e.g., arguments pro and con; support by individuals, business and/or community groups; policy body votes, etc.	1.a.1. Participating jurisdiction/SCDHS. 1.a.2. Interviews with jurisdiction representatives/SCDHS**.	1.a.2 Data collected from Petaluma, Sonoma and Sebastopol 7/1/2011-10/31/2011
		1.b.1. Increased awareness and support for enforcement of existing social host ordinances and those that are adopted among law enforcement and community.	1.b.1. Changes in community awareness over time; changes in community support over time.	1.b.1. Opportunity surveys/interviews; survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives*; interviews with adult and juvenile probationers.	1.b.1. Surveys***; interviews with jurisdiction representatives/Program Evaluator; SCDHS.	New Ordinances: 6 months post-passage
		1.b.2. An initial increase in social host related calls for service.	1.b.2. Changes in # of social host-related calls for service; calls for service linkage to increased awareness and support for social host ordinances.	1.b.2. Law enforcement*reporting on social host-related calls for service; interviews with law enforcement re callers' recognition of new ordinances.	1.b.2. Law enforcement jurisdictions' calls for service and citation reports; interviews with jurisdiction representatives/Program Evaluator; SCDHS.	1.b.1 and 1.b.2 Baseline data collected from all jurisdictions: 7/1/2011-10/31/2011 Existing ordinances: quarterly thereafter New ordinances: 6 months post passage; then quarterly
		INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
		1.a. Communities comply with social host ordinances as a result of education/awareness and enforcement..	1.a. Changes in # of social host-related calls for service; calls for service linkage to increased awareness and support for	1.a. Law enforcement*reporting on social host-related calls for service; interviews with law enforcement re callers' recognition of new ordinances.	1.a. Law enforcement jurisdictions' calls for service and citation reports; interviews with jurisdiction representatives/Program Evaluator; SCDHS.	See above

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	1. Acceptance of underage drinking among Sonoma County adults (CONT.)	1.b. Increased awareness and support for enforcement of existing social host ordinances and those that are adopted among law enforcement and community.	social host ordinances. 1.b. Changes in community awareness over time; changes in community support over time.	1.b. Law enforcement reporting on social host-related calls for service; interviews with law enforcement re callers' recognition of new ordinances.	1.b. Law enforcement jurisdictions' calls for service and citation reports; interviews with jurisdiction representatives/Program Evaluator; SCDHS.	
		LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
	1.a. There will be a decrease in youth access to alcohol in social settings. 1.b. There will be a decrease in youth access to alcohol in social settings; decrease in enforcement activity related to social hosting.	1.a./b. REDUCTIONS IN: -party-related/residential calls for services; -nuisance-related calls for service/stops; -youth drinking at parties 1.b.1.Changes in # of calls for service; decline in amount of alcohol found re calls for service; changes in types of alcohol found re calls for service. 1.b.2. Calls for service linkage to Increased awareness/support for social host ordinance by youth and parents.	1.a/b. Law enforcement reporting. 1.b.1. Law enforcement reporting; law enforcement representative interviews. 1.b.2. Law enforcement representative interviews.	1.a/b. Law enforcement jurisdictions' calls for service and citation reports; interviews with jurisdiction representatives/Program Evaluator; SCDHS. 1.b.1. Law enforcement jurisdictions' calls for service and citation reports; interviews with jurisdiction representatives/SCDHS. 1.b.2. Law enforcement jurisdictions' calls for service and citation reports; interviews with jurisdiction representatives; surveys**/SCDHS.	1.a/b , 1.b.1 and 1.b.2 Baseline data collected for all jurisdictions 7/1/2011-10/31/2011 Existing Ordinances: Quarterly for trends New Ordinances: 6 months post-passage, then quarterly	
	Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
	2. Youth have easy access to alcohol.	2.a. Law enforcement, and other community stakeholders will become more aware of the youth access issue/problem	2.a.1. Satisfactory identification of primary sources of youth access to alcohol.	2.a.1. Opportunity surveys/interviews; survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile	2.a.1. Surveys**;interviews with jurisdiction representatives; juvenile and adult probation interviews / SCDHS.	2.a.1, 2.a.2 Baseline data collected 7/1/2011-10/31/2011

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	<p>2. Youth have easy access to alcohol. (CONT.)</p> <p>2.b. Municipalities in Sonoma County will have strategies in place to disrupt social access to alcohol.</p>	<p>leading to increased engagement and support.</p>	<p>2.a.2. Demonstrated linkage between identification of youth access sources and increased community engagement/support.</p> <p>2.b.1. Strategies for disruption are developed.</p> <p>2.b.2. Demonstrated linkage between alcohol source information and development of disruption strategies.</p>	<p>probationers.</p> <p>2.a.2. See 2.a.1.</p> <p>2.b.1. Documentation of strategies; documentation of processes used to develop strategies; summary of barriers and assets.</p> <p>2.b.2. Survey of strategy development representatives; survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers.</p>	<p>2.a.2. See 2.a.1.</p> <p>2.b.1. Participating jurisdiction/SCDHS.</p> <p>2.b.2. Interviews with jurisdiction representatives; surveys**/SCDHS.</p>	<p>2.b.1, 2.b.2 Post adoption of access disruption policies</p>
	INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe	
	<p>2.a. The adapted ABC program: TRACE protocols implemented locally.</p> <p>2.b. Citations to adults who host or purchase alcohol for underage youth will increase.</p>	<p>2.a.1. Production, delivery and acceptance of an adapted ABC program for participating communities.</p> <p>2.a.2. TRACE protocols implemented in participating communities.</p> <p>2.a.3. Summary of adaptation and implementation processes.</p> <p>2.b. Changes in volume/rates of citations.</p>	<p>2.a.1. Documentation of processes used to develop program/protocols; summary of barriers and assets.</p> <p>2.a.2. Timing of implementation; duration of implementation; coverage of protocols within communities.</p> <p>2.a.3. Documentation of adaptation/implementation; recommendations for refinement.</p> <p>2.b. Law enforcement reporting.</p>	<p>2.a.1 Participating jurisdiction/SCDHS.</p> <p>2.a.2 Participating jurisdiction/SCDHS.</p> <p>2.a.3. Participating jurisdiction/SCDHS.</p> <p>2.b. Participating jurisdiction/SCDHS.</p>	<p>2.a.1 7/1/2011-1/1/2012</p> <p>2.a.2, 2.a.3 and 2.b 2/1/2012-6/1/2012</p>	

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	2. Youth have easy access to alcohol. (CONT.)	LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
		2.a. Investigations at party scenes to determine how/where alcoholic beverages were acquired or purchased.	2.a.1. Institutionalization of standardized investigation protocol within law enforcement.. 2.a.2. Identification of the range and volume of methods and sources of alcoholic beverages.	2.a.1. Documentation of changes in investigation protocol; interviews with law enforcement representatives. 2.a.2. Law enforcement reporting; survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers.	2.a.1. Participating jurisdiction/SCDHS. 2.a.2. Surveys**;interviews with jurisdiction representatives; juvenile and adult probation interviews / SCDHS.	2.a.1, 2.a.2, 2.b 2/1/2012-6/30/2012
		2.b. Reduction of availability of alcohol from the identified sources.	2.b. Changes in range and volume of methods and sources of alcohol.	2.b. See 2.a.2.; ABC citations; trends and changes in law enforcement calls for service.	2.b. See 2.a.2.	
	Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	
	3. Outlet density in Sonoma County.	3. Five (5) municipalities will have the ability to document the numbers and operation of local alcohol outlets.	3. Current updated monitoring reports from municipalities.	3. Monitoring reports; documentation of barriers and assets for institutionalizing monitoring report capacities.	3. Participating jurisdiction/SCDHS.	Baseline data collected for 5 municipalities: 9/1/2011
		INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
		3. Maintain or reduce the density of outlets in a municipality.	3. Changes in the density of outlets within municipalities.	3. Monitoring reports; documentation of barriers and assets for institutionalizing monitoring report capacities.	3. Participating jurisdiction/SCDHS.	Unincorporated, Petaluma and Sebastopol: 6/30/2012 Sonoma and Windsor: 6/30/2015

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LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
3.a. Maintenance (2012 level) or reduction in density of outlets in each municipality. 3b. Reduction in alcohol related problems within the underage population.	3.a. Changes in the density of outlets within municipalities. 3.b. Changes in volume and types of calls for service and citations for alcohol-related underage population issues.	3.a. Monitoring reports; confirmations of density by ABC. 3b.. Law enforcement reporting; ABC citations.	3.a. Participating jurisdiction; ABC/SCDHS. 3.b.Law enforcement; ABC.	See Above Unincorporated, Petaluma and Sebastopol: 6/30/2013 Sonoma and Windsor: 6/30/2016

PRIORITY AREA 2: HIGH-RISK ADULT DRINKING

GOAL #2: REDUCE HIGH-RISK ADULT DRINKING AND ASSOCIATED PROBLEMS

Identified Problem	Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
HIGH RISK YOUNG ADULT DRINKING	1. Outlet density in Sonoma County.	1. Five (5) municipalities will have the ability to document the numbers and operation of local on-sale and off-sale alcohol outlets.	1.a.Types and number of alcohol outlets i.e., complete baseline dataset. 1.b. Periodic updated current outlet identification reports.	1.a. Monitoring reports; documentation of barriers and assets for institutionalizing monitoring report capacities. 1.b. See 1.a.	1.a. Participating jurisdiction/SCDHS. 1.b. Participating jurisdiction/SCDHS.	Baseline data collected for 5 municipalities: 9/1/2011
		INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
		1. Maintain or reduce the density of outlets in a municipality.	1.a. Net change in types and numbers of alcohol outlets.	1.a. Monitoring reports; documentation of barriers and assets for institutionalizing monitoring report capacities.	1.a. Participating jurisdiction/SCDHS.	Unincorporated, Petaluma and Sebastopol: 6/30/2012 Sonoma and Windsor: 6/30/2015

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	LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
	1. Reduction in alcohol related problems within the young adult population.	1. CHANGES IN: a. #s of DUI's. b. Calls for service from young adult population for sexual and other assaults; c. Property destruction; d. Drug dealing.; e. Public drunkenness; f. Littering and trash; g. Graffiti; h. Vandalism; i. Noise; and disturbing the peace (fighting).	1.a-I. Law enforcement reporting; survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers.	1.a-i. Surveys**;;interviews with jurisdiction representatives; juvenile and adult probation interviews / SCDHS and participating law enforcement agencies.	1.a-i Baseline data collected 7/1/2011-10/31/2011
Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
2. Service to intoxicated patrons.	2.a. Employees of on-sale outlets will successfully implement strategies to reduce service to intoxicated patrons. 2.b. Employees and volunteers at special events will successfully implement strategies to reduce service to intoxicated patrons.	2.a-c. Documentation of trainings; post-training participant surveys on immediate and mid-term value of info; surveys of trainees' perceptions of changes in business practices (immediate and mid-term);	2.a-c. Standardized documentation of training characteristics; survey/interview of trainees (immediate and mid-term post-training).	2.a-c. Standardized training reports; surveys/SCDHS	2.a-c Survey instruments: 7/31/2011 Surveys administered immediately after each training (staggered schedule)beginning 7/31/2011 and ongoing And again 2-months post each training beginning 8/31/2011

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						and ongoing
						Report Delivery Timeframe
INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities			
2.a. Fewer people will be intoxicated or a nuisance in public (i.e., problems such as accidents, injuries, property damages or DUI arrests).	2.a. DUI reports; call for service reports; survey findings.	2.a. DUI citation characteristics; call for service characteristics; survey of outlet employees/volunteers; survey of business owners in proximity to outlets/events.	2.a. Participating jurisdictions; surveys; interviews with jurisdiction representatives; juvenile and adult probation interviews / SCDHS and participating law enforcement agencies.	2.a. Baseline data collected 7/1/2011 - 10/31/2011		
2.b. Compliance with existing laws for alcohol sales and service practices will increase.	2.b. Survey findings; changes in volume of POLD events.	2.b. See 2.a.	2.b. See 2.a.	2.b. POLD ongoing		
2.c.. See 2.a.	2.c.. See 2.a.	2.c. See 2.a.	See 2.a.	2.d 3/31/2012		
2.d . On sale and off-sale outlet owners/ managers routinely request RBS training for managers and staff	2.d Changes in requests for RBS training from on-sale and off-sale owners/managers	2.d Request monitoring/tracking reports	2.d SCDHS			
LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe		
2.a. Commercial districts will be utilized by families, and perceived to be a safe and friendly place to frequent.	2.a. Changes in reported problems related/likely related to alcohol.	2.a. DUI citation characteristics; call for service characteristics; survey of outlet employees/volunteers; survey of business owners in proximity to outlets/events.	2.a. Participating jurisdictions; surveys; interviews with jurisdiction representatives; juvenile and adult probation interviews / SCDHS.	2.a. and 2.b. Baseline data collected (by city or county??) 7/1/2011-10/31/2011		
2.b Reduction in DUI's; fewer alcohol related problems will occur at community events (e.g., sales to minors, overly intoxicated patrons, etc.).	2.b. DUI reports; incident reports involving/likely involving alcohol; survey findings <i>re</i>	2.b. DUI citation characteristics; call for service characteristics; survey of outlet employees/volunteers; survey of business owners in proximity to outlets/events.	2.b. Participating jurisdictions; surveys; interviews with jurisdiction representatives; juvenile and adult probation interviews / SCDHS.			

2. Service to intoxicated patrons (cont.)

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changes.

PRIORITY AREA #3: YOUTH MARIJUANA USE

GOAL #3: REDUCE PROBLEMS ASSOCIATED WITH YOUTH MARIJUANA USE

Identified Problem	Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
YOUTH MARIJUANA USE	1. Retail availability of marijuana	1. Local municipalities will have more control over numbers and types of dispensaries allowed in their municipality.	1. Net change in numbers of dispensaries; growth of dispensaries; regulation of dispensaries.	1. Comprehensive reporting on dispensary characteristics; survey/interviews of municipality representatives.	1. Dispensary reports; surveys/SCDHS.	Baseline data collected on numbers and types of dispensaries/ordinances 7/1/2011-10/31/2011
		INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
		1. The number of dispensaries in local municipalities will be maintained i.e., the number will not increase.	1. Changes in number/growth of dispensaries.	1. Comprehensive reporting on dispensary characteristics; survey/interviews of municipality representatives	1. Dispensary reports; surveys/SCDHS.	Updates or as ordinances are modified 11/1/2011 – 5/31/2012
	LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe	
	1. Retail availability of marijuana (cont.)	1. Reduced access to marijuana in the community.	1. Reported change in ability to access marijuana.	1. Law enforcement reporting; survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers.	1. Surveys/SCDHS.	Surveys and interviews 6/1/2012 – 11/1/2012
	Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
2. Perceptions of marijuana as not	2. Adults and youth increase their awareness of the negative community health impacts of marijuana; and	1. Reported change in perspectives.	1. Survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers.	1. Surveys/SCDHS.	Baseline data on perception of marijuana as not harmful	

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	harmful.	Community norms will shift to perceptions of marijuana being as harm as alcohol, tobacco and other drugs.				7/1/2011 – 10/31/2011
	INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe	
	2.a Reduced social access through adults.	2.a Reported change in ability to access marijuana through social settings	2.a/b . Survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers.	2.a/b. Community surveys/SCDHS	Feedback, surveys, interviews 11/1/2011 – 5/31/2012	
	2.b Reduced social access through peers.	2.b Reported change in ability to access marijuana.				
	LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe	
	2. Perceptions of marijuana as not harmful (cont.)	2. Reduced Use of marijuana	2.a Reported changes in youth use of marijuana 2.b Changes in reported problems related/likely related to marijuana. 2.c. DUI reports; incident reports involving/likely involving marijuana; survey findings re changes.	2. a Law enforcement reporting; survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers. 2.b . Law enforcement reporting; survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers. 2.c See 2.a.2.; ABC citations; trends and changes in law enforcement calls for service.	2. Surveys/SCDHS. 2.b. Surveys**;interviews with jurisdiction representatives; juvenile and adult probation interviews / SCDHS. 2.c. See 2.a..	Feedback, surveys, interviews 6/1/2012 – 11/1/2012

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PRIORITY AREA 4: UNDERS-AGE AND AGING ADULT PRESCRIPTION DRUG USE						
GOAL #4: REDUCE PROBLEMS ASSOCIATED WITH UNDER-AGE AND AGING ADULT PRESCRIPTION DRUG USE						
Identified Problem	Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
UNDER-AGE (<18) AND OLDER ADULT PRESCRIPTION DRUG USE AND MISUSE	1. Youth are able to steal drugs from adult family members.	1. Permanent drop locations are available and promoted County-wide.	1. Directory of locations; documentation of location development (e.g., barriers, assets, etc.).	1. Location directory; location development characteristics.	1. Location directory; location development documentation/SCDHS.	Directory of permanent drop locations 7/1/2011 – 10/31/2011
	1. Youth are able to steal drugs from adult family members (cont.)	INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
		1. Sonoma County residents use drop boxes to dispose of prescription drugs.	1. Drop box inventory findings (e.g., drug volume, drug types, etc.).	1. Inventory of box contents.	1. Box inventory/SCDHS	Inventory of box contents monthly or quarterly reports from drop sites 9/1/2011 - ongoing
		LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
		1. There are fewer medications available in the home and a decrease in youth access to prescription drugs by stealing from home.	1. Survey findings.	1. Survey feedback from existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers.	1. Surveys/SCDHS; participating law enforcement agencies.	Surveys, interviews completed between 11/1/2011 – 5/31/2012

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	Contributing Factor	SHORT-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
	2. Over-prescription of medications leads to misuse and abuse.	2. Communities and local organizations will have gain a better understanding of how youth and aging adults are using prescription medications.	2. Initiation of new data gathering protocol; new techniques for analyzing data; survey findings.	2. Law enforcement citations; opportunity surveys; existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers, interviews with aging adult services organizations.	2. Participating law enforcement agencies/SCDHS; survey agents/SCDHS, service agencies/organizations	Baseline data from law enforcement, surveys, interviews 7/1/2011 – 20/31/2011
		INTERMEDIATE OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
	2. Documentation and reporting of current levels and trends related to youth and aging adults prescription drug use.	2. Publication of findings.	2. Law enforcement citations; opportunity surveys; existing/in-place youth and adult surveys; interviews with law enforcement representatives; interviews with adult and juvenile probationers; interviews with service providers.	2. Participating law enforcement agencies/SCDHS; survey agents/SCDHS..	11/1/2011 – 5/31/2012	
	2. Over-prescription of meds leads to misuse and abuse (cont.)	LONG-TERM OUTCOMES	Measurement Indicators	Data to be Gathered	Data Source(s) / Collection Responsibilities	Report Delivery Timeframe
2. Development of new prevention strategies based upon most current data and analyses.		2. Implementation of new strategies for prevention of youth and aging adult prescription drug abuse.	2. Documentation of process for a) developing new strategies; b) implementing new strategies; c) refinement of new strategies, including new approaches to collecting and maintaining current “best” information.	2. Process documentation/SCDHS.	6/1/2012 – 10/31/2012	

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- * In all cases, “Law Enforcement” denotes, at a minimum, the following jurisdictions: Petaluma Police Department, Santa Rosa Police Department, Sonoma County Sheriff.
- ** When “SCDHS” is used, it implies SCDHS staff, a contract evaluator and/or other persons , agencies or organizations retained /provided by SCDHS. (PLEASE NOTE: later iterations of this plan should include more detail on specifically who will be either a) applying surveys/conducting interviews and/or b) responsible for assessing the adequacy of surveys; notation within the plan should use superscript, with an identification guide following the plan).
- *** When used, “surveys” denotes one or more of the following: 1) applying the survey/conducting the interview; 2) collecting the completed surveys and/or summarizing interview notes; and/or 3) entering survey/interview data into an accessible spreadsheet/database (e.g., MS Excel; MS Access; FilemakerPro; SPSS; etc.). Responsible parties for these activities will need to be specified in survey-specific workplans.