Preventing Underage Drinking and Substance Abuse

Incidence

There are several sources of data about youth drinking and drug use. One is the National Survey on Drug Use and Health (NSDUH, formerly the National Household Survey on Drug Abuse), funded by the federal Substance Abuse and Mental Health Services Administration (SAMHSA). This is the primary source of statistical information on substance use in the U.S. The representative survey samples residents (including youth 12 and older) of households, shelters, rooming houses, dormitories, and civilians living on military bases. In 2002, 68,126 persons were interviewed with 20,478 who were ages 18-24 and 8,041 who were enrolled in college. The survey reports separately on youth 12 to 17. (See www.oas.samhsa.gov/nhsda.htm).

A second source is the Monitoring the Future Data, available from 1975-2007. MTF is a survey of 45,000 students in 8th, 10th, and 12th grades, conducted annually by the University of Michigan’s Institute for Social Research and funded by the National Institute on Drug Abuse. Extensive information is gathered on attitudes, beliefs, and various social influences from family, school, work, and mass-media environments. (See www.monitorthefuture.org/).

A third source is the Youth Risk Behavior Survey, conducted by states on a voluntary basis and funded by the Center for Disease Control (CDC). (Available at: www.cdc.gov/HealthyYouth/yrbs/index.htm).

Since 1991, YRBS has monitored six categories of priority health risk behaviors among youth and young adults. It surveys 13,000 to 14,000 high school students (grades 9 to 12) enrolled in about 150 public and private schools, on a biannual basis. Virginia was one of only six states that did not participate in the most recent survey. Four of the non-participating states have long-term, on-going survey efforts that provide similar information.

Louisiana was dealing with the aftermath of Hurricane Katrina at the time.

The merits of each survey have been debated and there is no consensus about which survey is best. Overall trends are generally consistent among the surveys. Of the three, the NSDUH tends to provide the lowest estimates and may underestimate youth consumption (Bonnie & O’Connell, 2004).

Today, nearly 10.8 million youth ages 12 to 20, are underage drinkers. The percentage depends in part upon age. About 10% of 12-year-olds say they have used alcohol. The percentage doubles by age 13. By age 15, approximately half of youth have sampled alcohol (U.S. Department of Health and Human Services, 2007).

Teens drink less frequently than adults. However, their pattern of drinking is to “binge.” On average, young people drink about 5 drinks on a single occasion. Binge drinking is more likely than moderate consumption to lead to serious problems, even death (U.S. DHHS, 2007).

By the time youth are seniors in high school, about a third are drinking heavily at least once a month and almost three-quarters have tried alcohol. About 40 percent of full-time college students and more than 36 percent of other youth ages 18 to 22 report heavy drinking (Bonnie & O’Connell, 2004). These heavy, binge drinkers account for over 90% of the alcohol consumed by college students (Wechsler et al., 1999, cited in Sullivan & Risler, 2002). Both binge drinking and driving while intoxicated have increased since 1998 among college-age youth (NIAAA Task Force, 2007). Additionally, nearly half of the alcohol consumed by students in 4-year colleges is consumed by underage students (studies cited in Bonnie & O’Connell, 2004).

In general, drinking among ethnic and racial minorities is lower than among whites. Among youth age 12 to 20, alcohol con-
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sumption is highest for non-Hispanic whites, followed closely by Native Americans. Asian Americans and African Americans have the lowest prevalence. Hispanics and youths of multiple races fall about midway between the highest and lowest rates (Bonnie & O’Connell, 2004).

In the past, boys have consumed alcohol at higher rates than girls. However, the gender gap appears to be closing. For youth 12 to 14 and those 15 to 17, the rates are nearly equal. Girls ages 12 to 14 in all racial groups (but most notably Hispanic girls) are actually more likely than boys to have used alcohol in the past 30 days. Among 18- to 20-year-olds, males drink more than females across all ethnic and racial groups and males consistently report engaging in heavy or frequent drinking at higher rates than females (Bonnie & O’Connell, 2004).

Overall, the statistics indicate that substantial numbers of young teenagers are using alcohol. When adolescents and young adults drink, they drink more heavily than adults. Alcohol is apparently easy or fairly easy to obtain for many youth.

Effects of Underage Drinking

The consequence and costs of underage drinking are enormous. Many of the consequences are immediate—injuries or death due to impaired driving or violent behaviors; sexual assault and unwanted pregnancies; and educational failure. The best available cost estimate for underage drinking of alcohol, according to Bonnie & O’Connell (2004) is $53 billion annually, far exceeding the costs of youthful use of illegal drugs.

Health Effects

Health consequences of underage alcohol consumption can be immediate or delayed many years. Some effects depend upon the blood alcohol concentration (BAC) attained. BAC is determined by the amount of alcohol the person has consumed and time elapsed since consumption, gender, and body weight. However, especially for youth, impairments in judgment and motor control can occur at even low levels of BAC.

Alcohol’s physical effects on youth are similar to the physical effects on adults with certain exceptions. Youth experience less of the sedating effects and more memory impairments than do adults. Their risk of continuing damaging or dangerous behaviors while drinking is greater and they are more likely to experience a blackout and forget the events (studies cited in Brown & Tapert, 2004).

Accidental Injury/Death

The leading cause of death for young people is accidental injury primarily related to auto accidents. Death can also result from alcohol overdose. Injuries or even death can result from alcohol-related aggressive behaviors. Suicide is the third leading cause of death for youth and alcohol is involved in approximately 28% of suicides of young people ages 9 to 15 (studies cited in Brown & Tapert, 2004). Heavy drinking in adolescence also predicts depression and suicide attempts in later life (studies cited in Brown & Tapert, 2004).

Each year, approximately 5,000 young people under 21 die as a result of underage drinking. This figure includes about 1,900 deaths from motor vehicle accidents (where the driver under age 21 had positive blood alcohol levels), 1,700 alcohol-related homicides, and 300 alcohol-related suicides. Additionally, there are hundreds of serious, but not life-threatening injuries including falls, burns, and near-drowning (Hingson, et al., 2005; Hingson & Kenkel, 2003; U.S.HHS, 2007). Nonfatal injuries have been estimated at 2 million per year (Levy et al., 1999). This appears due in part to a propensity for persons who start drinking at an early age to engage in behaviors that increase their chances of being unintentionally injured while drinking such as swimming, using machinery, walking in traffic or other dangerous areas (Hingson, Heeren & Zikocs, 2001). Frequent heavy drinkers were more likely to carry weapons and were more likely to engage in fights than peers who did not drink (Hingson & Kenkel, 2003). An early age of drinking onset is associated with alcohol-related violence not only for persons under age 21 but in adult years as well (Hingson et al., 2001).

“Gateway” to Drug Abuse

Alcohol is considered by some as a “gateway” drug. Compared to nondrinkers, youth who consume alcohol are more likely to experiment with other drugs (marijuana; cocaine; injected drugs; steroids; inhalants) and have higher rates of tobacco use (cigarettes; cigars; snuff) (Hingson & Kenkel, 2003). While most youth will not become addicted to alcohol, many do develop dependence rapidly. Levy et al. (1999) estimated that there are 57,000 cases of treatment annually for alcohol dependence in underage drinkers. Although the exact mechanism by which drinking increases smoking cigarettes is not known, the negative consequences of early drinking include heavier smoking and all the attendant health consequences of smoking (Hingson & Kenkel, 2003).

Sexual Activity

Early alcohol use is also correlated with risky or potentially damaging behaviors such as early intercourse. Those who are frequent heavy drinkers are more likely to engage in sexual intercourse, to initiate sexual activity prior to age 13, to have sex with six or more partners, and to have had sex with 3 or more partners within the last month. Youth who drink heavily are less likely to use condoms, increasing the chances of pregnancy and STDs (National Youth Risk Behavior Survey – Grunbaum et al., 2002; studies cited in Brown & Tapert, 2004). For example, The American College Health Association (2005) found that 16% of a national sample of college students reported they had had sex without a condom when intoxicated at least once during the past school year (reported in Abbey et al., 2006).

Chesson, Harrison & Stall (2003) found that changes in alcohol consumption between 1983 and 1998 were significantly associated with changes in gonorrhea and syphilis rates. Each 1% increase in per capita alcohol consumption was associated with increases of about 0.4% to 0.7% in reported gonorrhea incidence rates and 1.8% to 3.6% in reported syphilis incidence rates.

Unwanted sexual activity (date rape or sexual assault) is also more likely in youth who drink alcohol. A recent study by Abbey, Clinton-Sherrard, McAusian, Zawacki, & Buck (2008) found that for college men, alcohol consumption during a sexual assault was related to increased aggressiveness and the victim’s alcohol consumption was linearly related to more severe forms of assault being committed. In casual relationships, perpetrators may seek intoxicated women because they view them as easy targets for sexual assault. The Surgeon General’s Call to Action (2007) estimates 100,000 youth are victims each year of alcohol-related sexual assault or date rape.

For those who become pregnant and continue drinking, fetal alcohol syndrome (FAS) or fetal alcohol effects (FAE) can result. FAS causes numerous physical problems for the fetus and is a leading cause of mental retardation. Levy et al. (1999) estimated 1,200 cases of FAS due to underage drinking during pregnancy. See VCPN, volumes 16 and 33 for more information about FAS.
It is worth noting that some evidence suggests that boys and girls process alcohol differently. According to Brian Kelley, Ph.D., Chair of Psychology at Bridgewater College, girls and women experience the intoxicating effects of alcohol at lower doses than do boys and men. Females become inebriated more quickly and remain drunk longer. “Therefore, when girls engage in ‘drinking games’ with boys, it is particularly dangerous for the girls,” says Dr. Kelley. He continues, “Girls experience more negative effects such as sexual assaults, pregnancy, and hormonal changes. STDs will also have a greater impact on girls.”

### Effects on the Developing Brain

Perhaps least known and most important are the effects of alcohol on the adolescent’s developing brain. By adolescence, the developing brain has reached its full size, but is not fully developed until the early 20’s. Dr. Kelley explains, “Recent data seems to support the notion that adolescence is similar to prenatal development in that both are critical periods for brain development. Exposure to alcohol and other drugs during adolescence disrupts brain development. Rational thinking, multi-tasking, sustained attention, decision-making, and inhibition are all processes that show dramatic changes during adolescence. The development of these processes and abilities is permanently changed by alcohol and drug use. Further, use of alcohol changes and suppresses frontal lobe activity, and thus executive functioning.”

Changes consist mainly of refinements to help the brain operate efficiently. Myelination (a process where axons are insulated with a fatty substance called myelin) facilitates transfer of electrical impulses. In adolescence, this process is occurring in the frontal portions of the brain which are responsible for planning, organization, and inhibition. The brain is also “pruning” and eliminating unneeded connections to allow for a more refined system. Readers interested in further information about brain development can request VCPN, volume 77.

Studies into the effects of alcohol on brain development are just starting. Animal studies and preliminary brain imaging studies on youth suggest that alcohol during adolescence results in learning and memory impairments that may be permanent. Youth who drink heavily have smaller hippocampi (central brain regions that are critical for the formation of memories) and less brain activity during problem-solving than healthy youth (studies cited in Brown & Tapert, 2004).

While results are varied, some studies of alcohol-dependent youth show that compared to healthy youth, they perform poorly on tests of planning and executive functioning, memory, spatial operations, and attention. For example, Brown, Tapert, Granholm & Delis (2000) found protracted alcohol use was associated with poorer verbal and nonverbal retention, with poor visual-spatial functioning and poorer retrieval of information. Hangover experiences or having experienced withdrawal appeared to be predictive of poor performance (studies cited in Brown & Tapert, 2004).

### Impact on Academics

What is clear is that substance use affects academic performance. For example, a large survey of college youth found that those with grade point averages in the “D” or “F” range drank three times as much as those who earned “A” grades (Presley, Meilman & Lyerla, 1994, reported in Brown & Tapert, 2004). A study by Brown et al. (2000) found that adolescents who abuse alcohol may recall 10% less of what they have learned compared to youth who don’t drink. Alcohol use is also associated with poor attendance, truancy, and school drop out.

### Social Functioning

Social functioning is also affected. Underage drinking is associated with decreases in involvement in school activities, socialization with deviant youth, increases in illegal behaviors, runaway behaviors, and increased family conflict (studies cited in Brown & Tapert, 2004).

To the extent that alcohol interferes with academic and social functioning, it interferes with the trajectory of the youth’s development and reduces the chances that youth will emerge into adulthood with work skills, interests, and healthy living patterns. Even modest alcohol use can result in actions that youth regret or in damaged relationships. Friedman, Terras, & Zhu (2004) found that for males, a greater degree of alcohol use up to age 16 predicted poorer work history during the three-year period that preceded age 37.
STOP Underage Drinking: Portal of Federal Resources

StopAlcoholAbuseGov is a comprehensive portal of Federal resources for information on underage drinking and ideas for combating this issue. Available resources include: The Surgeon General’s Call to Action to Prevent and Reduce Underage Drinking as well as A Guide to Action for Families, A Guide to Action for Communities, A Guide to Action for Educators (all available in PDF format). The site also contains materials for Town Hall Meetings.

The site features a SAMHSA educational brochure, Underage Drinking: Myths vs. Facts and information about grants to reduce alcohol abuse.

Resources From the National Institute on Drug Abuse

Preventing Drug Abuse Among Children and Adolescents: A Research-Based Guide for Parents, Educators, and Community Leaders, Second Edition – This resource is available in total or as an In Brief Pamphlet. It presents updated prevention principles, an overview of program planning, and critical first steps for those learning about prevention.

Available from: http://www.drugabuse.gov/Prevention/Prevopen.html or it can be ordered free of charge from: the National Clearinghouse for Alcohol and Drug Information (NCADI) at 1-800-729-6686.

NIDA for Teens

Recognizing that teens want to be treated as equals, NIDA created a web site specific to adolescents ages 11 through 15 (as well as their parents and teachers) on the science behind drug abuse. NIDA enlisted the help of teens in developing the site to ensure that the content addresses appropriate questions and timely concerns. There are animated illustrations, quizzes, and games used throughout the site and to make learning fun through interaction. See: http://teens.drugabuse.gov/

Resources From Channing Bete


A magazine for youth with attractive activities, decision-making exercises, facts, how to resist advertising, ways to deal with stress, how to resist peer pressure- all engaging and written for youth.


Contains facts, reasons why people smoke, laws and regulations, and prevention strategies.


Contains reasons for quitting, encouragement, and strategies for smoking cessation.

Available from: Channing Bete, Inc., One Community Place, South Deerfield, MA 01373-0200, (800) 477-4776, FAX: (800) 499-646, E-mail: custsvcs@channing-bete.com Web site: www.channing-bete.com

An educational program of BEST Foundation For a Drug-Free Tomorrow

PROJECT ALERT

Project ALERT is a nationally-recognized, middle school prevention program that gives students insight, understanding, and actual skills for resisting substance abuse. It is a two-year, fourteen-lesson program that focuses on the substances adolescents are most likely to use: alcohol, tobacco, marijuana, and inhalants. Project ALERT’s core strategies include motivating students against drug use, providing skills and strategies to resist drugs, and establishing non-use attitudes and beliefs. Project ALERT strives to reverse a pro-drug way of thinking and empower teens to resist social pressures to use harmful substances.

The curriculum focuses on consequences, perceptions, resistance, and expectation. Students participate in small group activities and role playing exercises, watch reinforcing videos, and interact in guided classroom discussions. The Project ALERT curriculum was developed and field tested over a ten-year period by RAND. The program’s outcomes have been proven among students from widely diverse backgrounds and communities, and have been validated through longitudinal tests. The Center for the Study and Prevention of Violence lists Project ALERT as a Blueprints Promising Program.

Susan Robertson, a Substance Abuse Prevention Counselor, has been implementing portions of Project ALERT at the middle schools of Hanover, Virginia since 2005. Ideally, Robertson would like to implement the entire program, but due to time restraints and other limitations, Robertson’s school’s de- cided they could not administer the entire program, but were interested in a number of lessons. Regarding her choice in programs Robertson says, “We chose to use pieces of Project ALERT because of the lesson plans and the variety of online resources they make available.” Hanover schools implement two of the lessons from Project ALERT in sixth grade and two more in the seventh grade. Robertson has found various ways to supplement this program, including training high school students and allowing them to administer lessons to the seventh graders. She explains that the peer instruction has been, “highly beneficial for those students who are delivering and receiving these lessons.” In the future, Robertson plans to continue to utilize Project ALERT and would recommend the program to other schools.

Project ALERT is practical; teachers, counselors, nurses and other community liaisons can complete the training online and work at their own pace and convenience. Training is also available in one-day workshops. The total price per educator is $150 plus shipping, and includes training, lesson plans, supporting videos and posters, updates, assessment tools, and access to online resources. On-site training is free if at least 25 Project ALERT packages are purchased.

Project ALERT offers free information, including an overview DVD, sample lesson plans and outcome studies, on their website. There is also a sign up for online training packages.

Contact: Project ALERT, Best Foundation, 725 South Figueroa Street, Suite 1615, Los Angeles, CA 90017-5416, (800) 253-7810 or (213) 623-0580, FAX: (213) 623-0585 E-mail: info@projectalert.best.org Web site: www.projectalert.com
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Mental Health

Alcohol involvement is associated with a wide range of mental health problems. These range from depression and suicide to low self-esteem. In treatment programs, approximately two-thirds of the clients exhibit a major mental health disorder in addition to the substance abuse. (studies cited in Brown & Tapert, 2004).

Early alcohol use is especially problematic. The earlier the use is initiated, the greater the risk for adverse outcome. For example, youth who begin drinking alcohol prior to age 14 show a 41% chance of developing dependence during their lifetime compared to a 10 percent chance for those youth who wait until after age 21 to begin drinking. The odds of alcohol dependence as an adult decrease by 14% with each increasing year of age at onset of use, and the odds of abuse of alcohol decrease 8% with each increasing year of age of onset (Grant & Dawson, 1997).

Which Youth are Most at Risk to Drink?

Youth with disorders such as hyperactivity (ADHD), those who show impulsivity and concentration problems, and youth with school difficulties are at higher risk of underage drinking (McCue et al., 2001, cited in Brown & Tapert, 2004). Homeless, abused, and neglected youth show higher rates of alcohol dependence (McCaskill, Toro & Wolfe, 1998, cited in Brown & Tapert, 2004). Youth with conduct disorders, aggressive, and oppositional behaviors are at greater risk. In girls, anxiety disorders may be correlated with early onset of drinking alcohol (Brown & Tapert, 2004).

What is not clear is causation. Does the presence of certain traits cause the youth to seek alcohol? Does the alcohol exacerbate certain traits? Are there other variables that cause both the co-morbid disorder and the substance abuse? While causation may not be clear, risk factors still can be helpful in knowing which youth to target for prevention and intervention efforts.

Call to Action

The Surgeon General is the Nation’s top doctor and public health officer. When a health topic needs special attention, the Surgeon General issues a national call to action to everyone in America. The Surgeon General’s Call to Action to Prevent and Reduce Underage Drinking is featured in Resources, this issue. (see page 3)

Challenges

Challenges to reducing underage drinking are many. Four that merit special attention were identified by the National Academies of Sciences. These are: the pervasiveness of drinking in the United States; the need for a broad consensus about a national strategy; ambivalence about goals and means; and commercial factors.

Alcohol is readily available to adults through large numbers of outlets. About half of U.S. adults currently drink alcohol. Purchase surveys suggest that 30 to 70 percent of outlets may sell to underage buyers, although the most common source for youth alcohol is an adult. For college students, a large percentage don’t even have to pay for alcohol because they attend parties where the alcohol is supplied by others. (studies cited in Bonnie & O’Connell, 2004).

In our nation’s diverse communities, there are differing beliefs and values about the consumption of alcohol and its social meaning. Expectations and demands on youth likewise differ. Although the majority of families in the nation as a whole support reducing underage drinking, there are individuals, communities, families, and groups that hold views that differ (Bonnie & O’Connell, 2004).

Unlike goals for tobacco use and illegal drug use (where the government discourages use by everyone), the goal for alcohol is not to discourage or eliminate its use by adults. Dis-couragement of excessive or irresponsible consumption that puts others at risk, while being tolerant of moderate consumption by adults, appears to be the likely goal (Bonnie & O’Connell, 2004). Thus, the message to youth is not to abstain but to “wait” or to “abstain for now” (much like the message about sexual activity).

There is no consensus about what exact message should be sent to youth. While many endorse abstention messages for younger youth, for college students and older teens some feel the emphasis should be on the dangers of intoxication or heavy drinking (Bonnie & O’Connell, 2004).

Commercial factors are significant. Alcohol sales generate $116 billion per year. Foster et al. (2003) estimated that underage drinking accounts for 19.7 percent of consumption and 19.4 percent of revenues (about 22.5 billion dollars).

Interventions

Influencing underage drinking is a daunting challenge, according to Bonnie (2004). When alcohol is widely used and alcohol use is approved by adults, and when youthful use is overlooked, condoned, or even encouraged, can public policy changes positively impact youth behavior?

The preeminent goal of the recommended strategy of the National Academy of Sciences and the National Research Council (Bonnie & O’Connell, 2004) is to create and sustain a broad societal commitment to reducing under-age drinking. This strategy will require participation by both individuals and organizations at all levels – local, state, and national. Those who are in position to affect youth decisions include: parents; alcohol producers; wholesalers and retail outlets; restaurants and bars; entertainment media; schools, colleges and universities; the military; landlords; community leaders; youth organizations; and the youth themselves.

At the 2007 Prevention Comes First Conference in Richmond, VA, Deborah Dr. Prothrow-Stith, M. D., Associate Dean and Professor of Public Health Practice at the Harvard School of Public Health, described the range of prevention strategies. Dr. Prothrow-Stith spoke of primary prevention, what she terms the “up front” strategies. Primary prevention involves the shaping of attitudes and social norms. These interventions are targeted at everyone-at the general population. Secondary prevention, which Dr. Prothrow-Stith terms “In the Thick” addresses subgroups with circumstances that place them at higher risk. Tertiary prevention, the “Aftermath” according to Dr. Prothrow-Stith, reduces the negative consequences of an event after it has occurred and tries to reduce the likelihood of similar events.

Most young people who start drinking before age 21 do so when they are about 13-14 years old. That means that primary prevention efforts need to begin early, prior to age where drinking has already begun. It also raises the question of the role of adults, specifically parents. When Congress asked the National Academy of Sciences and the National Research Council to develop a strategy for reducing underage drinking, their conclusion was that parents and adults must be the main target of prevention efforts. Simply educating youth will not be sufficient for change (Bonnie, 2004).

Alcohol use by young people is generally made possible by adults. Sometimes well-meaning adults host parties where they serve youth alcohol or allow alcohol to be present. In their effort to provide a “controlled” event, they unwittingly support the concept that teenage drinking is acceptable.

Parents and other adults may not realize that they can be held responsible if they provide alcohol to youth or if they ignore indications that youth are using alcohol. Specifically, adults may be held responsible for harm due to fights secondary to alcohol use; property damage; harm resulting from sexual assaults; medical expenses due to alcohol poisoning; wrongful death due to alcohol poisoning; and traffic accidents if a teen is driving impaired (GOSAP, 2007). Public information campaigns can teach adults about social host liability laws and the penalties for disdarding them.

Allocation of resources is also a consideration. According to Bonnie & O’Connell continued on page 6
According to the Leadership to Keep Children principle in alcohol use prevention” for youth, alcohol is considered “the most documented that can limit the access of youth to alcohol port that alcohol is “very easy” to obtain than for specific high-risk groups (Holder, 1999). Environmental strategies presuppose that decisions about alcohol use are shaped by the environment. The environmental approach to prevention seeks to reduce risk and harm for all persons, rather than for specific high-risk groups (Holder, 1999).

While it is illegal for youth to have and buy alcohol, 90 percent of 12th grade students report that alcohol is “very easy” to obtain (Bonnie & O’Connell, 2004). There are a number of effective environmental strategies that can limit the access of youth to alcohol (Holder, 1999). Reducing the availability of alcohol is considered “the most documented principle in alcohol use prevention” for youth, according to the Leadership to Keep Children Alcohol Free (2007).

- Retail access can be controlled. Some examples are: prohibiting minors from bars; setting a minimum age for purchase of alcohol and tobacco; limiting the number and location of retail outlets; requiring proof of age for purchase; reducing the days and times that alcohol can be purchased; making sellers and beverage servers legally liable for infractions; training servers and sellers of alcohol; regulating home delivery of alcohol. One improvement to reduce the use of false identification is use of enhanced design in drivers licenses with holographic images or use of colors or picture placement to distinguish underage drinkers (Toomey & Wagenaar, 1999).

- Social access can be regulated. Some examples include: curfews; laws against adults who provide alcohol to minors; social host liability; alcohol restrictions at community events and public places; beer keg registration.

- The increase of the minimum drinking age for purchase and use of alcohol to age 21 was accomplished in the 1980’s. A number of studies undertaken to determine the effects of the uniform, increased age limit offered solid scientific evidence that increasing the minimum age for alcohol use reduced the number of alcohol-involved traffic accidents for drivers under age 21 years (Holder, 1999).

- Sanctions for alcohol misuse can be imposed. These strategies include: fines, jail time; revoking licenses of impaired drivers and those drunk in public as well as youth engaging in underage consumption and adult providers of alcohol to minors; immobilizing and impounding vehicles of those convicted of impaired driving; parental notification of college students who violate alcohol policies; strong legislation.

- Enforcement is a necessary step in administration of sanctions. These strategies include: compliance checks of retail merchants; random BAC testing for drivers; roadside sobriety checks; development of specialized law enforcement units; ending parties.

- There can be restrictions on promotion of alcohol consumption. These include: restrictions on alcohol and tobacco advertising in public places; prohibiting of alcohol or tobacco companies’ sponsorship of events; taxes on alcohol and tobacco products; restrictions on media depiction of smoking or alcohol use.

- Schools (colleges and universities) can establish alcohol policies that clearly state expectations and penalties regarding underage alcohol use by students. They can offer attractive, alcohol-free events.

- A partnership with the alcohol industry is needed. Underage drinking generates revenues for the industry. A partnership between the industry, government, and private partners could facilitate a coordinated, evidence-based approach (Bonnie & O’Connell, 2004).

How Effective are Environmental Strategies?

Studies have examined the effects of changing the minimum legal drinking age (MLDA). According to Sullivan & Risler (2002), substantial reductions in alcohol use and in automobile accidents were observed in states that adopted a higher MLDA. In contrast, states that lowered the MLDA observed higher accident and fatality rates along with increases in drinking rates. The data was so compelling that the federal government passed the Uniform Drinking Age Act in 1984 which provided for a reduction in Federal highway funds to States that did not raise the MLDA to age 21. By 1988, all States adopted a MLDA of 21 years of age (Komro & Toomey, 2002; Sullivan & Risler, 2002).

In isolated areas of Alaska, two studies showed that restricted retail sales to youth reduced consumption levels of alcohol, supporting the idea that restriction of availability will reduce youth alcohol consumption (Sullivan & Risler, 2002).

Holder (1999) reviewed research both in this country and in Europe and Canada. While some studies had methodological flaws, overall the evidence supports that when government monopolies on retail sale of alcohol end (and alcohol becomes more available in more outlets), then the sale and consumption of alcohol increases. Holder’s review was not limited to examining effects on youth and did not report separately for youth consumption.

Toomey and Wagenaar (1999), conducting a similar review to Holder’s, agreed, stating “results from multiple studies using strong research designs replicated across numerous jurisdictions show that elimination of retail state monopolies and introduction of licensed private sales outlets substantially increases sales and consumption of alcoholic beverages” (p. 196).

Chaloupka, Grossman & Saffer (2002) conducted a review of the effects of increasing the monetary price of alcohol. They found that price had an impact on alcohol consumption of youth. In addition to reductions in underage use of alcohol, the authors found that increased pricing lowered the frequency of alcohol-related violent crime, reduced drinking and driving; lowered mortality rates from alcohol-related accidents; decreased property damage; and lowered health problems related to alcohol use. The authors note that alcohol prices have declined relative to the prices of other goods and services over the past 50 years. Holder (1999) reviewed studies on the effects of price of alcohol and arrived at similar conclusions.

Curfew laws establish a time when youth below a certain age must be home. While curfew laws were not initially proposed as a means of reducing underage drinking, research (studies cited in Holder, 1999) has shown positive effects. In states with curfews for youth, alcohol-involved traffic accidents for young people below the curfew age have declined.

Wagenaar et al. (2000) did a randomized 15-community trial of a community organizing intervention designed to reduce the accessibility of alcoholic beverages to youth. Results clearly demonstrated the feasibility of continued on page 8

Available from: National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20847-2345 (301) 468-2600 or (800) 729-6866 TDD (800) 487-4899 Website: www.ncadi.samhsa.gov

This guide for parents and caregivers of children ages 7 to 13 focuses on six key strategies to help children stay drug free. Drugs, along with social and academic pressures, have been rated by students aged 12 to 17 as the most important problem faced by adolescents. As parental influence has been shown to be the primary reason that adolescents do not use drugs, this booklet provides information for parents on how to establish and maintain good communication with children, especially when talking about drugs and alcohol. Furthermore it provides active steps to take as parents to ensure being a positive role model for children.

For parents who may suspect that their child is using alcohol, there are stories of support from other parents who have dealt with children who are abusing drugs and alcohol, and there are helpful tips on how parents can help children deal with peer pressure and the need for acceptance. Finally, also within this guide are several pages of drug facts, including product names, street names, symptoms of use, consequences, and the product’s legal status. This guide is useful for parents and for teachers.
randomly selecting communities that were not necessarily interested or ready to address youth alcohol consumption and mobilizing those communities to successfully address the issue. Interventions were significant and sizeable, favorably affecting the consumption of 18- to 20-year-olds, the practices of on-sale alcohol establishments, and may have favorably affected the practices of off-sale alcohol establishments.

The results of a 5-year community prevention trial (Holder et al., 2000) in California are extremely promising. A number of environmental strategies were employed: forming community coalitions and using media advocacy; use of police surveillance such as roadside check points; trainings of beverage servers coupled with police enforcement; restrictions on access to alcohol for underage youth; implementing stricter zoning restrictions on sale of alcohol. The efforts successfully reduced underage purchases of alcohol from 44% to 17%; there were significant reductions in nighttime motor vehicle crashes of 10% per month; there was a 6% decrease in monthly rates of DUI incidents; reductions in self-reported rates of alcohol consumption occurred; there were reductions in self-reported rates of drinking and driving; and the community experienced a 2% per month decline in hospital assault cases. These results were achieved even though 2% more people reported alcohol use over the baseline and the frequency of drinking did not change. The authors report that the combination of environmental strategies was the key to the success of the prevention strategies.

Some efforts have targeted college drinking. The Robert Wood Johnson Foundation, though its flagship program, A Matter of Degree, made grants available to colleges with high rates of binge drinking. The schools formed partnerships with their communities to address alcohol abuse. The program also funded a media campaign aimed at deglamorizing student binge drinking. Results appear very promising. For example, data from the Nebraska site showed a decrease in binge drinking from 62% in 1997 to 47% in 2003. Schools that employed more environmental strategies showed better success (Parker, 2005).

A major report by the NIAAA Task Force on College Drinking was published in April, 2002. A Call to Action: Changing the Culture of Drinking at U.S. Colleges, informed by the best scientific evidence available, strongly endorses environmental management. Their list of effective and promising approaches can serve as a departure point for universities that wish to craft a comprehensive prevention program. Tier 1 programs show evidence of effectiveness among college students. Programs in this category are limited to interventions with at-risk or alcohol-dependent students (described later in the article). Tier 2 programs show evidence of success with general populations. Tier 3 programs show evidence of promise and Tier 4 programs show evidence of ineffectiveness.

Tier 2 programs have shown success with the general population. These efforts include:
- raising the minimum drinking age;
- increased enforcement of minimum legal drinking age (such as increased enforcement regarding sales to minors; eliminating fake ID; eliminating home delivery of alcohol; registering kegs);
- enforcing laws to reduce alcohol-impaired driving (sobriety check points; targeted patrols);
- restrictions on alcohol retail outlet density;
- responsible beverage service (RBS) policies (such as training programs for servers of alcoholic beverages; checking for proof of age; limiting the number of servings per alcohol sale; restricting sales of pitchers; cutting sales to patrons who might be intoxicated; compliance monitoring);
- increased prices and excise taxes on alcoholic beverages (price variations especially affect young people, even those who are already heavy drinkers).

According to Holder (1999), environmental strategies have at least two difficulties. First, there must be political will and public support because the policies can be controversial and politically difficult to implement. Second, environmental policies do not target specific high-risk groups. Rather, they reduce convenience, availability, and access for all.

The difficulties are off-set by several factors. According to Holder (1999), environmental strategies show evidence of scientific effectiveness, especially for alcohol and cigarette consumption. Retail price, availability, location and type of outlets, days and hours of sale, retail and social access, enforcement, and sanctions against high-risk alcohol use all have evidence of effectiveness.

Additionally, environmental strategies are likely to be lower in cost than social or educational strategies. Toomey and Wagenaar (1999) comment, “While we as a nation continue to spend hundreds of millions of dollars annually on alcohol prevention programs,...dozens of policy options for prevention remain underutilized” (p. 207). Changes in rules and regulations do not usually require ongoing costs that educational programs entail. Some policy changes, such as raising the cost of alcohol through taxes, actually generate revenue.

Finally, policy changes are easier to sustain and maintain than are educational programs. Policies can continue to have impact, even without reinforcement, as is shown, for example, by studies of the sustained effects on drinking and driving in states with higher drinking age when compared to states with lower drinking ages (Holder, 1999).

**Educational Strategies**

- Mass media campaigns can educate the general public about the issue of underage drinking. Research has shown that parents tend to dramatically underestimate rates of underage drinking and their own children’s drinking in particular (Bonnie & O’Connell, 2004). The campaign needs to reach both youth and the adults to advocate actions that decrease adult conduct that facilitates underage drinking and increases actions that reduce underage drinking.
- In 2001, the alcohol industry spent $1.6 billion in advertising (Bonnie & O’Connell, 2004). By 2006, expenditures on advertising were over $2 billion (The Center on Alcohol Marketing and Youth, 2006). A substantial proportion of alcohol advertising reaches an underage audience. For example, according to Bonnie & O’Connell (2004) televised alcohol advertisements routinely appear on programs where the percentage of underage viewers is greater than the percentage of underage youth in the population. Ads are often in a style that is attractive to youth. Reducing youth exposure to advertising is seen as desirable. Likewise, youth exposure to music, art, television shows or other media that glamorize or promote alcohol consumption should be limited, according to the National Academy of Sciences report. Content analysis of television shows from 1991 showed more than 70 percent of the episodes of prime-time shows depicted alcohol use, often in a positive light. Likewise, more than 90 percent of the most popular 200 movie rentals for 1996-97 and 17% of 1,000 popular songs across five genres of music popular with youth contained alcohol references (studies cited in Bonnie & O’Connell, 2004).
- Stores, restaurants and outlets can post warning signs about penalties for underage drinking.
- Youth can be educated about the dangers of underage drinking and substance use. They should also learn about alcohol use rates (which are often lower than students imagine) and can be encouraged to be in the majority of youth who do not use alcohol regularly.
- Parents can be educated. Parents appear to be a crucial variable in underage drinking. For example, Blobaum & Anderson (2006) analyzed data from the 1999 National Household Survey on Drug Abuse using a data set of 12,806 males and 12,806 females ages 12 to 20. They found that youth who are exposed more frequently to alcohol in their homes or neighborhoods and who perceive less parental disapproval of underage drinking are more...
Creating Lasting Family Connections (CLFC) is a community-based substance abuse prevention program designed for families with children ages 9-17. The program was selected as one of 20 Exemplary Prevention Programs in 1989, 1995, and in 1999 by the Center for Substance Abuse Prevention. It was one of eight models selected for national replication in 1998 by the federal Center for Substance Abuse Prevention. It was listed in 2007 in the National Registry of Effective Prevention Programs and Practices. It has also been featured as a Model Family Program by GHDPP in 2000. The curriculum is currently in use in all 50 states and several foreign countries.

CLFC may be implemented through churches, schools, community centers, and court-referred settings. CLFC is practical in its staffing requirements, requiring two trainers qualified to provide adult or youth practical training in substance use education and prevention, parenting skills, individual and family communications, and team building. Training is provided for both youth and their parents in 5-6 week sessions, but can be adapted to 18-20 weeks for maximum effectiveness.

Goals of CLFC for youth include engagement in the community, information about available resources, and reduction of drug and alcohol use by youth. Parents benefit from increased training in parenting and communication skills with their children while also learning facts about substance abuse and resources for youth in trouble. Costs for materials for the CLFC program are approximately $125, and training sessions range from $200 to $1000. CLFC has proven to decrease the use of alcohol and drug use in youths (Johnson et al., 1998), increase the participation of youths in the community, and decrease conflict between parents and children.

The popularity of the program can be seen by its wide use across the country, including implementation in several communities throughout Virginia. Bonnie Favero, Prevention Director at Piedmont Regional Community Services Board, said they have implemented the program for the past 9 years in Martinsville. This past year, 10 families attended. A total of 18 adults and 21 youth were served. The program, located at the Martinsville Middle School, is intended to teach adolescents responsible decision-making. The program also provides adolescents’ parents with effective parenting models. The program requires participants to be enrolled for 15-20 weeks. Favero expressed that they are excited about the success of this program, but they would still like to increase involvement among the community.

Contact: Bonnie Favero, Prevention Director, Piedmont Regional Community Services Board, 24 Clay Street Martinsville, VA 24112, (276) 632-7128 E-mail: bfavero@piedmontcsb.org Website: http://copes.org

CROSSROADS

The CROSSROADS program is a high school drug prevention program that includes a series of interactive activities specifically designed to change students’ attitudes, beliefs, and behaviors. It is generally taught within high school health classes. The program consists of a classroom curriculum (guides for peer educators and teachers; worksheets; and an interactive DVD); a school-wide intervention (guides for peer educators and faculty advisors; drug information booth brochures and handouts), an online course, and a resource website.

Eight lessons are taught by peer educators with assistance from the health teacher and mentoring from college students. The online course is student-paced and can be given as a homework assignment in health, as training for students in special clubs (such as Students Against Destructive Decisions), and as a preventive intervention for at-risk students. The resource website contains a school-specific online calendar, program resources, information for parents and students, and several tools to support communication between high school peer educators and college mentors. The classroom, school-wide, and online course components can be used together or independently.

A school-wide intervention is led by peer educators with mentoring from college students. It consists of several risk and drug information booths for all students in the school and social norms campaigns distributed throughout the school.

The program targets risk and protective factors that are related to problem behaviors other than substance use, such as: beliefs about short- and long-term consequences, decision-making skills, resisting peer pressure, goal-setting, and healthy communication.

When asked how CROSSROADS compared to their general health classes, students stated: “It was more fun”; “We could talk openly instead of just copying notes”; and “We got to do activities.” The students also responded favorably to having their peers help lead the classes. They liked having someone other than their teacher explain the information to them. As one student commented, “I thought it was kind of cool to hear it from a different person. All day you are in a classroom with a person older than you, like your teacher, and this time you had your classmates.”

David Wyrick of Greensboro, NC and Melodie Fearnan-Kenney of Mechanicville, VA received a grant from the National Institute on Drug Abuse in 2002 to develop the CROSSROADS program. The program is currently completing its final year of a large-scale evaluation. The complete packaged version of CROSSROADS just became available this year. It has recently been used in 30 high schools in North Carolina, 9 high schools in Nebraska, 7 high schools in South Carolina, and 15 high schools in Kansas.

As a Virginia resident, Fearnan-Kenney is anxious to establish the curriculum in additional Virginia schools. Other plans include applying for model program status from the Department of Education and SAMHSA; disseminating the program widely; continuing program evaluation with different populations of youth in different contexts; developing training materials for school systems that want to involve their local college or university as a source of college student mentors; and strengthening the parent involvement component. The pilot study and the current large-scale evaluation make the program evidence-based.

For more information contact Melodie Fearnan-Kenney, Ph.D., Prevention Strategies, LLC, 9212 Wagon Ct. Mechanicville, VA 23116 (804) 746-3607 mel@preventionstrategies.com or visit their website at www.crossroadsprevention.com.

Motor vehicle accidents are the leading cause of death for youth who are ages 15 to 20. This group is less than seven percent of the population, yet they are responsible for over 20% of the nation’s traffic fatalities. The National Highway Traffic Safety Administration reports that 7,884 drivers ages 15 to 20 were involved in fatal traffic accidents in 2003. These accidents killed a total of 8,666 persons. A third of these young drivers had been drinking alcohol.

The Century Council reports that the majority of underage youth (65%) say they obtain alcohol from family and friends. Some parents have become willing accomplices in planning teen parties that allow alcohol use. These parents may believe their actions are justified because they are providing a safe and supervised place for youth to drink. They may hold mistaken beliefs that high school graduation, proms, or other special occasions merit alcohol use because they are celebrations.

Laws vary state to state. In some cases, parents can be held responsible for damages resulting from the alcohol use. For example, parents who provide alcohol to underage youth can be held responsible if an adolescent:

- gets into a fight and hurts someone;
- falls and hurts themselves or someone else;
- sexually assaults someone;
- damages property;
- dies from drinking too much;
- injures or kills someone while driving after leaving the party.

In addition to civil penalties for damages, the parent may face criminal charges for contributing to the delinquency of a minor and for providing alcohol or allowing alcohol to be used by underage youth in their home. Additionally, purchasing alcohol for youth or aiding and abetting youth in the use of alcohol is a Class 1 misdemeanor and punishable by up to one year in jail and/or a $2,500 fine.

Virginia Department of Alcoholic Beverage Control has developed a brochure with information about Virginia’s alcohol laws and with tips for hosting an alcohol-free party for teens. Contact Virginia ABC at (804) 213–4688 or by E-mail at education@abc.state.va.us or visit their website at www.abc.virginia.gov.
How has the Commonwealth fared in efforts to promote a safe and drug-free Virginia? The news is good. According to an epidemiological profile compiled by the Governor’s Office for Substance Abuse Prevention (May, 2007), the trends in youth alcohol use in Virginia are declining from 2000 to 2006. The percentage of youth who report using alcohol is decreasing, although for 8th and 10th grade youth, the percentage is still slightly above the national rates. Both the percent of youth who have ever used alcohol is decreasing and the age of first use is increasing (now averaging 13.2 years). The percent of youth reporting binge drinking is decreasing (8.7%) and is now below the national rate (10.5%). The percent of youth who report recent heavy drinking is decreasing. Rates of youth driving while impaired are also dropping.

Despite the positive trends, by 12th grade, over 75% of Virginia’s youth report that they have used alcohol. Of 8th grade students, 1 in 5 report using alcohol in the last 30 days while 1 in 3 of 10th grade students say they have used alcohol within the last month and 1 in 2 of 12th grade students report use within the past 30 days. According to a 2007 survey by Virginia’s Youth Alcohol and Drug Abuse Prevention Project (YADAPP), 42% of youth report that is easy for them to find a person of legal age to buy alcohol for them.

In 2005, underage drinkers consumed 14.8% of all the alcohol sold in Virginia, totaling $418 million in sales. These sales provided profits to the alcohol industry of $202 million (Pacific Institute for Research and Evaluation, 2006). Slightly lower figures are offered by the website “Join Together.” In 2005, 7.5% of the 28,545 substance abuse arrests were children under age 18.

According to a report by the Pacific Institute for Research and Evaluation (October, 2006), underage drinking in Virginia in 2005 cost the Commonwealth over $1.2 billion dollars. This figure translates into a cost of $1,706 per year for every youth in the Commonwealth. Virginia ranks 45th among the 50 states in the cost per youth of underage drinking, with higher costs per youth than 44 other states.

Youth violence and traffic accidents attributable to alcohol use represent the largest costs, but many other expenses were documented as well. These include: property crimes; the costs of high-risk sex; costs associated with fetal alcohol syndrome; medical treatment; and substance abuse treatment. In 2004, 1,816 youth ages 12 to 20 were admitted for treatment for alcohol dependence or abuse, accounting for 9% of all admissions for treatment for alcohol dependence or abuse.

It is important to note that youth who drink alcohol report that they begin drinking regularly at between ages 14 and 15. This has implications for prevention programs. Starting later than middle school means that youth who are inclined to use alcohol will have already established a consistent pattern of use prior to the prevention efforts.

The Governor’s Office for Substance Abuse Prevention (GOSAP)

The Governor’s Office for Substance Abuse Prevention (GOSAP) assists the Governor in authorizing, directing and coordinating Virginia’s substance abuse prevention activities and expenditures. It administers the Governor’s portion of Safe and Drug Free Schools and Communities Funding and other federal funding sources that require involvement of the Governor; leverages and coordinates resources to support prevention activities; and provides tools and training to assist state, local, public and private entities in developing and implementing evidence-based prevention strategies to reduce and prevent substance abuse and related problem behaviors.

In addition to its leadership and policy functions, GOSAP administers a competitive grant program that distributes funding for local implementation of proven, evidence-based prevention programs and strategies (over $500,000 to 17 grantees in 2007). GOSAP’s Website Clearinghouse is a one-stop site for information on prevention in Virginia. It offers:

- A calendar of prevention-related training and events with links to sponsoring agency websites for further information or registration;
- Links For Kids, For Parents and For Professionals to provide prevention information;
- Links to current funding opportunities administered by Collaborative agencies, as well as funding research resources for other funding streams;
- Announcements on prevention-related initiatives and news;
- Information on GOSAP, its products and services;
- Downloadable copies of Virginia’s statewide prevention plan, pocket guide to prevention, and other useful publications; and
- Links to Collaborative member websites for information on each agency’s specific role in Virginia’s prevention efforts.

GOSAP’s Community Profile Database is a web-based, interactive database to support evidence-based prevention practice by allowing easy access to data to monitor the development of children in Virginia and the well-being of Virginia’s communities on one user-friendly website. In addition to data, the Community Profile Database provides information on evidence-based services and strategies operating in Virginia, as well as links to additional resources and best practices for evidence-based prevention.

The GOSAP Collaborative

To address the problems, in 2002, the Governor’s Office on Substance Abuse Prevention (GOSAP) brought together the 13 state agencies that have prevention as part of their mission to form the GOSAP Collaborative. Comprised of state-level prevention leaders who have the authority to influence agency prevention funding and administrative practices, the GOSAP Collaborative is reshaping how prevention works in Virginia. Agencies are improving communication, building agreement, cooperating and working as partners, sharing resources, and increasing consistency to simplify processes and increase accountability in prevention practice. The agencies are working together because research shows that the risk factors and the protective factors that influence whether or not a child will succumb to substance abuse are often the same factors that influence other problem behaviors such as delinquency, gang involvement, school drop-out, and violent behaviors. Visit their website at: www.gosap.virginia.gov to learn more.
Efforts by Alcoholic Beverage Control

The mission of the Virginia Department of Alcoholic Beverage Control (ABC) is to promote responsible consumption and distribution by licensees of alcohol beverages to those of legal age to drink. They advocate zero tolerance for underage consumption. To that end, the agency has several initiatives. One is Managers’ Alcoholic Responsibility Training (MART). This six-hour class has been developed for managers of Virginia’s on- and off-premise establishments. The next classes will be in June, 2008. There is also a Responsible Sellers and Servers: Virginia Program (RSVP). This new three-hour training is for clerks, cashiers, wait staff, and other “front line” employees. Project Sticker Shock is a community awareness campaign designed to educate persons 21 years of age or older who might purchase alcohol and provide it illegally to minors.

The special initiatives are in addition to the routine enforcement by 130 agents throughout the Commonwealth. One monitoring program by the agents sends underage buyers into local businesses to try to purchase alcohol and tobacco. In fiscal year 2007, 99% of the personnel in ABC retail stores refused to make sales to minors during the checks and 87% of the employees of convenience stores, restaurants, grocery stores, and other businesses also avoided selling to the minor. The Virginia ABC website contains many other resources and useful information (see page 13).

The Department of Mental Health, Mental Retardation and Substance Abuse Services

The Department of Mental Health, Mental Retardation and Substance Abuse Services supports community-based substance abuse prevention programs through Virginia’s 40 community services boards (CSBs) and behavioral health authorities (BHAs). Currently, funding from the Substance Abuse Prevention and Treatment Block Grant Prevention Set-Aside is allocated to the boards and the authorities, who are required to work with their local prevention coalitions, assess community needs, and develop a plan for prevention services. CSB and BHA services include education and alternative programs for youth, families, and parents, identification and referral services, and efforts, with the local coalition, to change community attitudes and norms.

In 1999, the Department awarded eight competitive grants to CSBs and BHAs to conduct evidence-based programs designed to address risk factors for underage drinking by strengthening skills and relationships in families. The funded programs, with activities for parents, children, and families, include Families and School Together, Strengthening Families, Dare to Be You, and Making Lasting Family Connections. Over the years, the number of program grants has increased to 16.

The Department works with other federal, state and local entities to provide additional support for the prevention and reduction of alcohol, tobacco, and other drug use and abuse by children and youth. The Department managed three surveys in 2000, 2003, and 2005. Current activities include: supporting coalitions through training and grants; developing the prevention workforce through the sponsorship of the prevention track of the Prevention Institute; initiating a mentorship program for new CSB and BHA prevention Directors; and supporting certification for prevention professionals through the Substance Abuse Certification Alliance of Virginia (SACAVA), and the International Certification and Reciprocity Consortium/Alcohol and Other Drug Abuse, Inc.

Ongoing Studies

It is apparent that Virginia’s efforts have been successful, but much remains to be done. During the 2007 legislative session, the senate and the house passed a study resolution directing the Joint Legislative Audit and Review Commission (JLARC) to study the impact of substance abuse on state and local fiscal expenditures. The study is to consider social problems that are aggravated by substance abuse such as teen pregnancy, sexually-transmitted diseases, domestic violence, fetal alcohol syndrome, poor school performance, homelessness, and crime. The Commission is reviewing existing programs, the need for new programs, and funding initiatives that could possibly save significant sums of money through prevention and treatment of substance abuse. Their findings are to be reported to the General Assembly and the Governor by the first day of the 2009 legislative session. (See separate article, page 12)

Youth Alcohol and Drug Abuse Prevention Project (YADAPP)

YADAPP is a statewide youth leadership project focused on involving teens to assist in making their schools and communities safe and drug-free. Since 1984, approximately 382 different high schools and community organizations have participated in this unique, youth-led leadership project. Since 2002, the Virginia Center for School Safety at the Virginia Department of Criminal Justice Services has served as the lead coordinator for this initiative that was originally a partnership between the Virginia Department of Education, the Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services, and the Virginia Department of Motor Vehicles.

This year YADAPP 2008 will accept 100 teams. The registration deadline is June 23, 2008. The conference will be held July 21-24 at Longwood University in Farmville. At YADAPP 2008, conference participants will work as a team to create an action plan devoted to addressing an important substance abuse or violence prevention issue affecting the lives of their peers. Visit www.yadapp.com/ for more information.

Recent Legislation/Court Rulings

Legislative change has been implemented in the 2008 General Assembly session. HB719 makes it illegal as of July 1, 2008 for any person under the age of 21 to operate a motor vehicle after illegally consuming any amount of alcohol. The Class 1 misdemeanor specifies loss of driver’s license for one year, a minimum mandatory fine of $500 or more and performance of a mandatory minimum of 50 hours of community service.

At a Harrisonburg, Virginia “town meeting” to discuss underage drinking, Clark Ritchie, Assistant Commonwealth’s Attorney for Harrisonburg-Rockingham County, discussed the statutes on underage possession of alcohol. Ritchie noted that “possession” includes any level of drinking for underage persons. “It doesn’t matter whether or not you have alcohol in your hand,” explained Ritchie. “If you are underage and if you have it in your blood, you are possessing alcohol. Under the ‘Use and Lose’ statute, you don’t have to be driving, only using, to have your license suspended for 6 months.”

Ritchie further advised the audience that a DUI (driving under the influence) conviction can cost $8,000 to $10,000 for the average youth. Court costs, attorney fees, paying for a course in the Alcohol Safety Action Program, increased insurance costs, and court-ordered counseling can be expensive.

A recent court decision is a set back for those working to prevent underage drinking. In April, 2008, a federal judge overturned Virginia’s decades-old ban on alcohol-related advertising in college newspapers. The regulations had banned ads for beer, wine, and mixed drinks in student-run publications and banned the phrase “happy hour.” The University of Virginia and Virginia Tech’s Collegiate Times filed the lawsuit. U.S. Magistrate Judge M. Hannah Lauck said the law violated free continued on page 12
continued from page 11

speech and that the Commonwealth failed to show that limiting advertising of alcohol reduced alcohol consumption by students (Daily News Record, April 2, 2008).

Virginia’s Statewide Underage Drinking Initiative

As part of the Prevention Comes First initiative, Governor Tim Kaine has tasked the GOSAP Collaborative with addressing underage drinking in Virginia. The initiative will stress the use of strong interagency collaboration to increase public awareness of the negative consequences of underage drinking. Key products of the initiative are:

- The Governor’s Underage Drinking Prevention Grant Program – Grants will be available to communities that use a collaborative, interagency team to develop and implement a comprehensive, multi-strategy approach to assess and address underage drinking in their community. Communities must employ evidence-based programs and strategies with proven effectiveness and make free and low-cost materials and programs to provide accurate information on the consequences of underage drinking.
- The GOSAP Collaborative will provide resources (see page 18) that include: Community Guide for Prevention and Reducing Underage Drinking; a Parent Guide for Preventing Underage Drinking; an Epidemiological Community Profile; and a Community Template that localities can customize to disseminate local prevalence and cost data as well as local resources.

As it becomes available, additional information on the initiative and its progress will be posted on GOSAP’s website at: www.gosap.virginia.gov

Spotlight: Joint Legislative Audit and Review Commission (JLARC)

In 2007, the General Assembly directed JLARC to study the monetary impact of substance abuse on the local and state-wide budgets. HJR 683 and SJR 395 directed JLARC to do the impact study, determine potential savings from enhanced substance abuse services, and recommend funding initiatives to provide needed services.

Nathalie Molliet-Ribet, JLARC Chief Legislative Analyst, is the project leader. She explains that there was interest in having a nonpartisan group compile data specific to Virginia. This information can then be used to guide future legislation.

The research has relied on several methods. Site visits were arranged to 10 different regions in Virginia. For each visit, local experts in criminal justice and in mental health offered their perspectives on major issues to the research group. The group undertook a survey of all Virginia providers of substance abuse treatment and prevention services, and of the agencies which they serve. The delivery systems of other states were examined. Finally, the research is analyzing the extent to which existing substance abuse treatment generates savings in Virginia. Molliet-Ribet explains, “We are examining multiple outcomes for those who have used services in Virginia. For example, one measure we are considering is changes in health care costs before and after treatment.”

On December 10, 2007 JLARC presented an interim status briefing. Relying heavily on an approach developed by the National Institute on Drug Abuse, JLARC made some preliminary estimates of the costs of substance abuse to the State and local governments. They divided the estimate into categories of “definite”; “probable”; “credible”; and “potential” (because certain costs are difficult to quantify precisely). The best estimate offered by JLARC is $693 million dollars which encompasses the categories of “definite” and “probable.” This estimate includes only the costs of substance abuse to the Commonwealth and localities, in accordance with the study mandates. It excludes other costs that are borne by individuals and the federal government.

JLARC determined that drug abuse accounts for 82% of the cost while alcohol accounts for 4% and 14% of the cost can’t be split. The Commonwealth absorbs the greatest cost of the $693 million (61%) while the localities shoulder 39% of the cost.

The largest expense for the Commonwealth and local governments is public safety ($586 million) and half of that budget is for incarceration. Treatment expenses are $94 million and health care costs are $27 million. In addition to these costs are effects that can’t be precisely quantified. These include the link between alcohol and violent crimes; longer hospital stays for persons with a secondary diagnosis of substance abuse; and the contribution substance abuse makes to foster care placements and cases of child abuse and neglect.

Certain costs of substance abuse cannot be quantified at all. Lack of data precludes calculating the fiscal impact of persons dually-diagnosed with both mental illness and substance abuse; domestic violence costs linked to substance abuse; risky sexual behaviors; teenage pregnancies; and homelessness. Substance abuse also imposes additional costs for Virginia families. These include lost earnings; family dissolution; impact of premature deaths; poor school performance; debts; and bankruptcy. Employers suffer because of staff turnover, reduced productivity, and workforce shortages due to failed drug tests.

The second part of the study contains the analysis of savings generated by existing services, review of the issues facing the delivery of substance abuse services in Virginia, and the development of recommendations that will help improve services, shift priorities, and expand services that are cost-effective.

A final report is due in June, 2008. More information is available from: Nathalie Molliet-Ribet, Chief Legislative Analyst, JLARC, General Assembly Building, Suite 1100, Capitol Square, Richmond, VA 23219 (804)786-1258, FAX: (804) 371-0101, E-mail: nmolliet@leg.state.va.us Website: http://jlarc.state.va.us

Reducing Underage Drinking: A Collective Responsibility, Richard J. Bonnie & Mary Ellen O’Connell (Eds.), 2004, 317 pages, $44.96 (hard); $38.50 PDF download; $1.70 PDF download per chapter.

Available from: The National Academies Press, 500 Fifth Street, N. W., Washington, D. C. 20418 (800) 624-6242 or (202) 334-3313, E-mail: Web site: http://www.nap.edu

The National Academies is a private, nonprofit society of distinguished scholars engaged in scientific research and dedicated to the furtherance of science and technology and to their use for the general welfare. A group of scientists formed the Committee on Developing a Strategy to Reduce and Prevent Underage Drinking. Their work formed the foundations for this volume. The book outlines a 10-component strategy for a broad societal commitment to reducing underage drinking. The 10 components are: a national adult-oriented media campaign; a partnership with the alcohol industry; changes in alcohol advertising; changes in the entertainment media; limiting access of youth to alcohol; a national youth-oriented media campaign; community mobilization; alcohol excise taxes; government organization and leadership; and research and evaluation. The volume also reviews the consequences of underage drinking and the challenges of the problem.

Special Thanks to

Brian Kelley, Ph.D.
Department of Psychology
Bridgewater College
Resources From Virginia Department of Alcoholic Beverage Control,

Virginia’s Guide for Parents of First-Year College Students, 2006, 12 pages
This booklet explains the effects of alcohol on the brain and alcohol poisoning. It covers the laws in Virginia and explains the roles of parents in their college student’s lives.

Reviews the Virginia laws and offers tips for hosting alcohol-free events.

Explains what BAC is, how it is obtained, and what factors affect BAC.

Explains Virginia laws, the impact of drinking and driving, and how to prevent it.

Fake IDs, brochure
Reviews the consequences of using fake identification to buy alcohol.

Project Sticker Shock, 2005, pamphlet
Warns adults that it is illegal to provide or purchase alcohol for underage persons.

Parental Guide to Hosting Responsible Teen Parties
Provides parents with up-to-date information every parent should know before hosting a teen party or allowing a teen to attend a party.

Play It Safe Spring Break, brochure
Safety tips and legal information for students while traveling in the U.S.A. or abroad.

Solving the Puzzle of Underage Drinking
A compilation of “best practices” for developing and implementing programs that target underage drinking.

Available from: Virginia Department of Alcoholic Beverage Control, P.O. Box 27491, Richmond, VA 23261-7471, (804) 213-4400, E-mail: education@abc.virginia.gov
Web site: www.abc.virginia.gov

RAND Report

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. All RAND reports undergo rigorous peer review to ensure they meet high standards for research quality and objectivity.

Near the end of 2006, Congress passed the Sober Truth on Preventing Underage Drinking (STOP) Act. One of the more effective ways to prevent underage drinking is to use environmental strategies, defined as strategies that impact alcohol access and availability, policy and enforcement, community norms, and media messages.

While research has created an evidence base for environmental strategies, more guidance is needed to implement those strategies with quality. This report presents practical “how to” guidance that can help states and communities. The report synthesizes the research on environmental strategies and provides descriptions of how to plan, implement, and evaluate ten environmental strategies with the strongest evidence base. Of particular interest is the Strategic Prevention Framework, pages 11 to 45, which details how communities can determine their needs and strategies that are likely to be effective.

The report will be invaluable for helping communities understand the needs and conduct a community assessment. It provides guidance for developing goals and choosing the most effective strategies. It outlines how to develop and implement a plan and then conduct an outcome evaluation. It assists in helping communities set a continuous quality improvement process and sustain successful interventions.

Leadership to Keep Children Alcohol Free
Leadership to Keep Children Alcohol Free is a unique coalition of Governors’ spouses, Federal agencies, and public and private organizations. It is the only national effort that focuses on preventing the use of alcohol by children ages 9 to 15.

The group has made a guide of strategies available. The methods described were chosen by a panel of scientists convened by the National Institute on Alcohol Abuse and Alcoholism (part of the National Institutes of Health). The guide is available on the web at: www.alcoholfreechildren.org/en/pubs/html/prev.htm

More information is available from: The Leadership to Keep Children Alcohol Free, 7500 Old Georgetown Road, 9th Floor, Bethesda, MD 20814, (301) 654-6740, FAX: (301) 656-4012, E-mail: leadership@alcoholfreechildren.org
In March 2001, a group of parents, youth, school officials, law enforcement, government representatives, and community leaders formed a partnership in order to promote healthy development of Roanoke County’s youth. The Roanoke County Prevention Council seeks to prevent alcohol and illicit drug use and other high risk behaviors in youth. They use five strategies to accomplish these goals. First is educating the community about the risks facing youth and families. Second is strengthening families by providing education and parenting classes that encourage family communication about the risks of drug and alcohol abuse. Third, the Council promotes coordination and partnership between community organizations serving youth. Fourth is strengthening neighborhood connections. Finally, the Council promotes opportunities for youth development.

The Council receives most of its funding from a Drug-Free Communities Grant administered by the U.S. Department of Health and Human Services Administration. It is located in a suburban community of about 86,000 in southwest Virginia. The Council serves several rural areas, the county of Roanoke and the town of Vinton. There are 27 schools within the county (5 high schools; 5 middle schools; 17 elementary schools).

The Council collaborates closely with the Roanoke County School system. Since 2002 the two entities have partnered to administer the Youth Risk Behavior Survey (YRBS) with all youth in 6th through 12th grades. Approximately 7,500 youth complete the biannual survey which has been administered in 2002, 2004, and 2006, and most recently in February, 2008. Evaluators at both Virginia Tech and Radford University assist with the data analysis. In 2004, an additional instrument, the Communities That Care survey, was administered.

Youth in Roanoke County report high levels of protective factors. These include: faith; positive belief systems; and social skills. Youth also report significant challenges. A number of problem areas were identified as at or above the national average. These included: the number of youth who began alcohol use and who had tried marijuana prior to age 13; youth perception of harm from use of substances; and youth’s perception of parental disapproval of substance use.

The Council has implemented many activities. Youth involvement is very strong with core Youth Leadership Teams in all five high schools. These teams plan events and make presentations to adults, peers and younger youth. They attend regional, state, and national conferences and create prevention messages that are shared with the wider community. Red Ribbon Week activities are held at all high schools and middle schools. Courts and local doctors distribute materials that target parents regarding social hosting laws and the importance of talking with youth before middle school about risky behaviors.

The Council supports the SAP (Student Assistance Program) Saturday Morning Substance Use Program for middle and high school students who have violated athletic policy or demonstrated other indicators of substance use. Guiding Good Choices (reported on in VCPN, Volume 80) is offered to over 150 parents each year. “Let’s Talk” community forums attracted over 400 parents and viewers within 25 counties in the southwest region of Virginia.

In the fall of 2007, the Council launched a partnership of pediatricians, parents, schools and courts to educate parents about the risks of underage drinking. The partnership was formed because parent communication is a key aspect in prevention of underage drinking, yet many parents fail to realize that underage drinking can begin as early as middle school years.

Roanoke Valley pediatricians are leading the effort to better educate parents by providing information during the sixth-grade check up. They distribute a one-page guide developed by the Partnership for a Drug Free America and approved by the American Academy of Pediatrics entitled “Silence Isn’t Golden, Its Permission.” In November, 2007, Carilion graciously printed 5,000 copies for family physicians, nurse practitioners, and the health department.

The Council has used the concept of collaboration as the guiding principle and as a powerful tool to work towards achieving the goals. Media relations continue to grow and news of the Council’s events reaches 450,000 viewers within 25 counties in the southwest region of Virginia.

For more information, contact: Nancy Hans, Council Coordinator, Roanoke County Prevention Council, P.O. Box 21503, 3241 Electric Road- Building D, Roanoke, VA 24018 (540) 772-4341 E-mail: nhans@fsrv.org Web site: www.preventioncouncil4youth.org

Resources From The National Institute of Health


What Colleges Need to Know Now: An Update on College Drunking Research, available at: www.collegedrinkingprevention.com

National Institute of Health, 9000 Rockville Pike, Bethesda, MD 20892 (301) 496-4000, E-mail: NIHinfo@od.nih.gov

Website: www.nih.gov
likely to begin use of alcohol at an early age, use alcohol with greater frequency, and use alcohol at higher levels than other adolescents (Bloebaum & Anderson, 2006).

Dr. Kelley feels that parent education is crucial to preventing underage drinking. In a talk at a recent “town meeting” on underage drinking in Harrisonburg, Virginia, Dr. Kelley commented, “Teens need a very clear ‘Do Not Drink’ message. While it may appear effective to tell teens to ‘just give us a call if you are intoxicated and we will pick you up, no questions asked’ actually teens who hear this message drink more and drink more than teens who are told not to drink at all.”

Likewise, parents who allow teens to drink at home or who believe that drinking is “better than drugs” create a permissive climate that encourages drinking. Dr. Kelley notes that teens drink large volumes of alcohol very quickly in order to achieve intoxication, which is a different drinking pattern than adults who use alcohol as a beverage or with a meal.

How Effective are Educational Strategies?

Studies Examining Media Campaigns

A review by Holder (1999) concluded that publicity alone has rarely produced lasting changes in safety behaviors, whether the desired behavior is reducing underage drinking or encouraging people to use seat belts. However, in conjunction with enforcement, there can be significant changes in knowledge, attitudes, and behaviors due to media campaigns. Still, over time the behavioral changes from media messages erode and people revert to prior behaviors.

Bonnie and O’Connell (2004) concluded that there was no evidence that any evaluated media campaigns had been successful in reducing youth alcohol use. The negative messages, they claim, “likely pale before the pro-alcohol onslaught that surrounds youth” (p.188). Indeed, the Center on Alcohol Marketing and Youth (2007) notes that advertising promoting alcohol use outnumber ads about alcohol responsibility 32 to 1. On television, from 2001 to 2003, youth were 96 times more likely per capita to view a commercial promoting alcohol use than to see an industry-funded ad about alcohol responsibility and underage drinking. The competing media messages about alcohol consumption suggest that a focused and long-term effort might be needed to counterbalance the pro-alcohol messages.

More encouraging findings are reported in a review by Sullivan and Risler (2002). They cite a study by Haines & Spear (1996) that contrasted a traditional educational intervention with a media social marketing approach. The traditional intervention did not have an impact. However, the varied media campaign showed an 18% drop in the perception that binge drinking was the norm and an 8% drop in self-reported binge drinking.

It may be that information and public knowledge is a necessary, but not sufficient factor to induce change. Simply changing knowledge and perceptions is not sufficient to change behaviors (Pentz, 1999). However, public awareness can lead to support for preventative action such as changes in public policy that have scientific evidence of effectiveness.

Studies Examining Advertising Reforms

According to the Center on Alcohol Marketing and Youth, in September, 2003, the Distilled Spirits Council of the United States and the Beer Institute tightened standards for advertising so that ad placements would reach 70% adults and 30% youth (replacing a 50% standard). In examining the data from 2001 to 2005, they say the new standard had an immediate effect of lowering youth exposure by 30%. However, over the same time period, youth exposure to alcohol advertising on television increased by 48% due to the industry placing more ads on cable television. Thus, while spending and ads in magazines fell, the ads and dollars were simply shifted to television. Overall, there has been no decline in youth exposure to alcohol advertising.

Long-term studies have shown that youth who are exposed to more alcohol advertising are more likely to consume alcohol and to drink more heavily than their peers (studies cited in The Center on Alcohol Marketing and Youth, 2005). The status report discusses the first national longitudinal study of youth drinking and alcohol advertising exposure (Snyder, Milici, Slater, Sun & Strizhakova, 2006). These researchers found that for underage drinkers, exposure to an additional alcohol ad was correlated with a 1% increase in drinking. For every additional dollar per capita spent on alcohol advertising in a local market, underage drinkers consumed 3% more alcohol. Findings of other studies were similar. The Center further cites research that suggests that youth are influenced by exposure to drinking in movies. New alcohol products, such as “Alcopops” and other sweetened alcohol drinks are most popular among younger drinkers and may appear similar to non-alcoholic drinks such as lemonade.

After considering all the research and the information submitted by the alcohol industry, Bonnie and O’Connell conclude, “We believe industry efforts to prevent and reduce underage drinking, however sincere, should be redirected and strengthened” (2004, p. 130). They suggest that private and public partners unite and form an independent nonprofit foundation with the sole mission of reducing and preventing underage drinking.

Studies Examining Education of Youth

According to Bonnie and O’Connell (2004) school-based interventions vary widely in their ability to change alcohol-related outcomes with most positive effects being “small to modest” (p. 193).

Single study evaluations can be informative, but increasingly, analysis of the overall impact of prevention strategies is being judged by larger, multi-site evaluations.

The Center for Substance Abuse Prevention (CASP) recently published a multi-site evaluation (MSE) of 48 substance abuse prevention programs with 5,934 youth participants and 4,539 comparison youth (Sambrano et al., 2005). MSE has the potential to identify intervention features that characterize more effective and less effective programs. This study used a common instrument for data collection, the CSAP National Youth Survey, and collected data at four points in time, including two follow-up points after program exit. They also collected data about exposure to prevention services for all subjects and collected program-level information.

Researchers identified five characteristics of design intervention and implementation that distinguished program effectiveness at a statistically significant level. These characteristics were: 1) behavioral skills emphasis; 2) use of introspective learning; 3) connection-building focus; 4) coherent program implementation practices; and 5) high service intensity. Programs with four or more of these characteristics had average size effects that were dramatically higher than other programs, and that produced significant lasting reductions in substance use relative to comparison youth for both males and females.

A behavioral skills emphasis focuses on social skills and basic life skills development such as refusal skills, anger management, conflict resolution, decision-making, and academic enrichment. Introspective learning is self-reflective learning. Program coherence refers to the extent to which program theory is explicit, articulated, and is used to focus multiple activities on achieving program objectives. Achieving coherence is related to staff training so the program objectives, procedures, and rationale are understood and implemented on a daily basis. Program intensity is the number of hours a week dedicated to the program with higher intensity programs offering 3.3 hours a week or more. Less effective programs were information-focused, recreational-focused or affective-focused (focusing on the youth’s personal concerns and sense of self-esteem).

The findings of CASP fit other research on resiliency. Epstein, Griffin & Botvin (2002), for example, found that adolescents who were continued on page 16
highly competent and who reported greater psychological wellness reported lower rates of substance use. Others (Botvin, 1996; Komro & Toomey, 2002) also underscored the importance of teaching of practical social resistance skills and life skills. Bonnie and O’Connell (2004) add that the promotion of social and emotional skills must begin with elementary students for maximum effect.

Interactive learning can contribute to program effectiveness (Bonnie & O’Connell, 2004; Komro & Toomey, 2002). Techniques such as role playing, discussions, and small group activities promote active student participation.

Materials need to be developmentally appropriate (Komro & Toomey, 2002). There is a need for programs targeted specifically for youth with lower cognitive skills, according to research by Abbey et al. (2006). Students with less cognitive reserve are particularly likely to make risky decisions while intoxicated. However, Bonnie and O’Connell (2004) caution against congregating high-risk youth for prevention training as these youth may reinforce each other in a negative fashion and the intervention could have a “boomerang” effect, negatively impacting the youth.

The importance of norms that support nonuse is also a key component to effective prevention programs, say Bonnie and O’Connell (2004). Youth grossly overestimate the prevalence of alcohol use among peers. Knowing that many youth do not use or abuse alcohol can be a deterrent and can support youth in deciding to abstain.

Program consistency is also vital. Funding for prevention should not be through temporary or short-term mechanisms. Rather, well-trained professionals should plan for sustained implementation (Bonnie & O’Connell, 2004). Another method for examining program effectiveness is the growth curve modeling approach (Taylor, Graham, Cumsille, & Hansen, 2000). This model uses a longitudinal repeated measures design that examines trends and how educational interventions change the expected trajectory of youth substance abuse over time. For example, onset of substance abuse is slow at younger ages, and then shows a more rapid increase followed by a slower increase as youth become older. Using analyses over a 5-year time period, Taylor et al. found that educational programs had beneficial effects by changing the rate of growth of substance use as measured by five variables (recent alcohol use; lifetime alcohol use; lifetime drunkenness; recent cigarette use; lifetime cigarette use). Students receiving the educational program had significantly lower average levels of reported cigarette and alcohol use and lower rates of growth for reported cigarette and alcohol use compared with the control group. However, the effects of a “one-shot” program were not maintained indefinitely.

Studies Examining Education of College Students

While a “main-stay” of campus-based prevention programs has been peer education (such as the BACCHUS and GAMMA Peer Education Network), there is little evidence to support the effectiveness of such programs, according to Safe Lanes on Campus (2003). Knowledge appears insufficient for behavior change. For example Abbey et al. (2006) found that college students performed well on tests of basic HIV/AIDS knowledge, however, they had difficulty applying the knowledge to their own personal decisions. Still, in combination with other prevention programs (especially environmental management), peer-education efforts can be part of an effective prevention program.

One interesting finding concerns attitudes and views of alcohol prevention strategies. Saltz (2007) surveyed 1648 college students at the University of California. In general, Asian students and females were more supportive of strategies to prevent underage drinking. However, all students demonstrated higher approval for prevention than their perceived idea of the approval of their peers.

The report discussed earlier, A Call to Action: Changing the Culture of Drinking at U.S. Colleges (NIAA, 2002) details the most effective strategies for institutions of higher education.

Studies Examining Efforts to Educate Parents

Few studies have examined the effectiveness of family-directed programs. Family programs have promise because families can have profound influence on youth. Family Matters is a family-directed program aimed at preventing adolescent alcohol and tobacco use. It involves successively mailing four booklets to families and conducting telephone discussions with health educators after each mailing. A study by Bauman et al. (2001) found positive effects in reducing smoking onset for non-Hispanic Whites, but not for other populations.

Project Northland (discussed below) showed that colorful, engaging, and interactive programs implemented as homework assignments with fun incentives are promising strategies to reach parents in palatable ways and can reduce amount and onset of alcohol and tobacco use as well as reduce significant youth behavioral problems (Williams et al., 1999). A secondary analysis of Project Northland’s data showed that the parent involvement program had the most consistent and most positive effects when compared to the other program components. Thus, parent involvement contributed the most to Project Northland’s success.

Two successful parent training programs cited in a review by Kormo & Toomey are Preparing for the Drug-Free Years (PDYF) and the Iowa Strengthening Families Program (ISFP).

Treatment Interventions

According to the Surgeon General’s Call to Action (2007), 5.5% of youth ages 12 to 17 meet the diagnostic criteria for alcohol abuse or dependence. Thus, despite prevention efforts, some youth require treatment intervention.

VCPP has examined treatment effectiveness for substance abuse in greater detail in prior issues (see for example, Volume 79). Substance abuse treatment programs are characterized by high dropout rates. According to the Commission on Adolescent Substance and Alcohol Abuse (2005) the completion rates for outpatient programs are estimated at 50% and at 20% for therapeutic communities. High co-morbidity (presence of another serious disorder) is noted as well. Treatment for both disorders is essential but often courts order only the substance abuse treatment.

Adolescents who are most in need of treatment appear reluctant to seek treatment on a voluntary basis. For example, D’Amico (2005) found that adolescents who reported more regular involvement with alcohol or cigarettes reported weaker inclination to use services. They have not yet experienced many negative consequences of drinking and their motivation to change is low. These findings are similar to studies of college students where it has been found that those students who are most in need of alcohol interventions may be the least likely to participate (NIAAA, 2007).

Treatment can be difficult for practical reasons as well. High school students may lack transportation or the ability to pay for treatment. College students may be far from home and only available to the treatment provider during the time the college or university is in session. It can also be difficult for courts to enforce treatment requirements with college students who are only part-time residents of the locality.

The interest in brief interventions is understandable, given the difficulties in working with youth who have offenses such as DUI. According to a review by Sullivan & Risler (2002), brief interventions were more effective than no interventions and, in certain populations, were as effective as more extensive interventions. Key elements to brief interventions include: an emphasis on personal responsibility; feedback; empathy; teaching
The Parenting Education and Support Program (PEAS) is a comprehensive parenting program available to the Harrisonburg and Rockingham County community. PEAS is offered 3 times a year for 12 week sessions in the evenings. It is funded by the Drug-Free Communities Support Grant, class fees, and fundraising efforts.

Adult and children classes are offered simultaneously. The adult parenting programs include: “All About Baby” for parents of infants 0-2 years; “The Incredible Years” for parents of children ages 2-11 years; and “Staying Connected With Your Teens” for parents of children ages 12-18 years. While the parents attend classes, elementary, middle, and high school children participate in parts of the Boys & Girls Club SMART Moves program. Children ages 3-5 participate in “Milestones,” an early literacy program which is focused on preparing children to be ready to learn when they start school. Also, a nursery is available for children under 2 years of age.

Over 300 people in the Harrisonburg and Rockingham County area have participated in “The Incredible Years” program. Outcome data shows that the program has decreased the frequency with which these children display problem behaviors as well as the perception by the parents about whether or not their child exhibits problem behaviors. A pre-and post- session survey for parents in the Spanish-language “Incredible Years” program have found positive changes in the responses to questions that assess parental-child understanding, communication, misbehavior, and house rules. Over 132 people have participated in the “Staying Connected With Your Teen” program since the class began in 2001. Data shows improvements in parent-adolescent communication, family rules, conflict, supervision, and the parents’ understanding of puberty and peer pressure.

Each of the programs through Parenting Education and Support (PEAS) focuses on strengthening families within the community. By educating parents, PEAS hopes to increase protective factors and reduce risk factors in youth by encouraging positive and nurturing parenting and improving problem-solving skills, anger management, and communication skills.

More information is available from: La Jeune Stone, Program Coordinator, Surry County Office on Youth, (757) 294-5278, E-mail: ldstone@co.surry.state.va.us

Protecting You/ Protecting Me

Available from: MADD National Office 511 E. John Carpenter Freeway. Suite 700 Irving, TX 75062 (800) GET-MADD (438-6233) FAX: 972-869-2206/07 Email: ppyminfo@madd.org Website: www.pypm.org

Protecting You/Protecting Me is a 5-year alcohol abuse prevention program sponsored by Mothers Against Drunk Driving (MADD). It is intended for students in grade 1 to 5 (6-11 years old). This program reaches younger children with the hope of preventing underage consumption of alcohol that generally starts by sixth grade.

Protecting You/Protecting Me is curriculum-based and teacher-friendly. It can be taught by teachers and trained high school students. A series of eight scripted lessons for each grade level focus on the effects of alcohol on the developing brain and on growth and development. Lessons provide useful tips for children about how to resist peer pressure and how to make responsible decisions. Communication strategies and problem-solving skills are also taught.

Protecting You/Protecting Me has been proven to increase the knowledge base of elementary school students (Bohman et al., 2004), while also helping to decrease the alcohol consumption by high school students who teach the lessons (Bell, Kelley-Baker, Falb, & Roberts-Gray, 2004). Additionally, students who participate in the program feel more connected to their community and family and feel more self-confident in their actions and decision-making skills.

Gwen Bohn, MT, LCSW is a Prevention Consultant with Chesterfield Mental Health Support Services in Chesterfield, VA. Her experience with Protecting You/Protecting Me is very positive. She has used the curriculum in an after school program with 4th grade students. There were two groups of children with about 12 children in each group. “The program is well-received and it is easy to teach because it is scripted,” Bohn explained. “There is room for active learning and sharing,” she added. Bohn explained that she chose the program because it is a SAMSHA Model Program. She is hoping to offer the program again next year.

La Jeune Stone, Program Coordinator for the Surry County Office on Youth, is equally enthusiastic. “I like the program because it is so easy to use!” she exclaims. Stone taught the program to approximately 70 second-grade students in school health classes. She likes to use the worksheets as “homework” for children and parents to complete together. “I receive very positive feedback from both the children and the parents. The concepts taught are very easy to understand,” notes Stone. She especially likes the safety lesson where children learn how to cope if they are forced to ride with someone who is drinking and driving. Stone is planning to continue the program next year.

More information is available from: Gwendolyn L. Bohn, M.T., L. C. S. W., Prevention Consultant, Chesterfield Mental Health Support Services, P. O. Box 92, Chesterfield, VA 23832, (804) 768-7747, E-mail: BOHING@chesterfield.gov

La Jeune Stone, Program Coordinator, Surry County Office on Youth, (757) 294-5278, E-mail: ldstone@co.surry.state.va.us
Laws in Virginia

- All states and the District of Columbia have laws making 21 the minimum age to purchase or consume alcohol. Virginia’s zero tolerance law makes driving under the influence of any amount of alcohol or drugs a serious criminal offense for those under the age of 21.
- Young adults (ages 18-20) who purchase, possess or drink alcohol, upon conviction, may lose their privilege to drive for not less than six months (and up to one year maximum). They face a mandatory minimum fine of $500 or must perform a mandatory minimum of 50 hours of community service.
- Using a fake ID to buy alcohol means that in addition to the penalties listed above for possession of alcohol, anyone convicted will lose their privilege to drive for not less than 30 days (and up to one year maximum).
- A motor vehicle operator, age 20 or younger, with a blood or breath alcohol level between .02 and .07 could lose his or her privilege to drive for up to one year and incur fines starting at a mandatory minimum of $ 500 or be required to perform 50 hours community service (new legislation effective 07/01/08).
- Anyone (adult or minor) possessing or consuming alcohol on public school property may face up to $ 1,000 in fines and spend up to six months in jail.
- It is illegal for any person to purchase alcoholic beverages for someone who is less than 21 years of age. If convicted, the court may order up to 12 months of jail time and/or fines of up to $ 2,500.
- Parental notification has been part of the law since 1998. Congress gave colleges and universities the ability to disclose alcohol or substance violations to parents. The law permits but does not require schools to notify parents any time a student under age 21 violates drug or alcohol laws.

Comprehensive Strategies

Comprehensive programs combine both educational strategies and environmental management or they employ a classroom component as a foundation, and then add components to more broadly address the social environment of youth (parents; system-wide school change; community). A comprehensive approach acknowledges that even young adolescents have social environments that extend beyond their classrooms and families and include the larger commu-
Students Against Destructive Decisions (SADD) is a peer-led organization that was founded in 1981 in Wayland, Massachusetts. The name changed in 1997 to Students Against Destructive Decisions because student members of the organization expressed that there are more peer pressures than drinking and driving. They believed that positive peer pressure and good role models could help youth to “Say No” to the variety of pressures that teens face, including resisting drinking and drug use as well as developing social competency skills. Currently, there are 10,000 schools with an active chapter and over 350,000 active members. More than 43,000 schools across the nation receive SADD’s newsletter.

“ar provides students with the best prevention and intervention tools possible to deal with the issues of underage drinking, other drug use, impaired driving and other destructive decisions,” is SADD’s mission statement. SADD conforms to a “no use” policy, in which no one under the age of 21 should consume alcohol; however they do not want to alienate youth who have used in the past. SADD attempts to inform, educate, support, and empower young people to make positive, healthy decisions. Peers participate in projects such as classes, forums, workshops, conferences, rallies, legislative work, and leadership activities.

For more information contact: SADD 255 Main Street, Marlborough, MA 01752, (877) SADD-INC, Fax: (508) 481-5759, Website: www.sadd.org

In April, 2002, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) released a series of comprehensive reports from its groundbreaking Task Force on College Drinking. Findings were summarized in the report, A Call to Action: Changing the Culture of Drinking at U.S. Colleges. Central to the findings was a recognition that interventions must operate at several levels simultaneously to reach individual students, the student body as a whole, and the greater college community. The Task Force members grouped commonly used interventions into four tiers, based on the degree of scientific evidence supporting them. NIAAA continues to monitor research on college drinking prevention. NIAAA estimates 1,700 alcohol-related unintentional injury deaths among students 18 to 24; 2.8 million DWI (driving while intoxicated) arrests, more than 696,000 assaults by a student who has been drinking; and more than 97,000 students between 18 and 24 who are victims of alcohol-related sexual assault or date rape.

The following resources are available at: www.collegedrinkingprevention.gov

College Drinking – Changing the Culture
This section of the NIAAA website describes the recommended strategies, organized into Tiers according to effectiveness. Click on the section on NIAAA College Materials

Alcohol 101 Plus: Making Safe and Responsible Decisions on Campus
In the spring of 2003, The Century Council released Alcohol 101 Plus, an innovative program that aims to help college students make safe and responsible decisions about alcohol use. Set in a virtual campus, the program has segments to address specific at-risk populations (First-year students: Greeks; Athletes: Judicial policy offenders). The online format offers tutorials, surveys and downloadable educational materials. Available at: http://www.alcohol101plus.org/

Virginia’s Guide for Parents of First-Year College Students – see Virginia Department of Alcohol Beverage Control at www.abc.virginia.gov

For the past 28 years, the nonprofit organization, Mothers Against Drunk Driving (MADD) has made it their mission to help those who have been affected by drunk driving. During May of 1980, Candy Lightner’s 13-year-old daughter, Cari, was killed by a drunk driver during a hit-and-run accident. Once Lightner discovered that the driver was drunk, she made it her mission to try to stop drinking and driving and to support victims of this violent crime. Before 1980, drinking and driving was the norm, and the legal system did not prosecute violators vigorously.

MADD supports several prevention programs that cover all grades, including a college prevention program which is called UMADD. UMADD works with the community and campus to implement and complement existing prevention programs for underage drinking.

MADD has received numerous awards. In 2001, Worth magazine named MADD one of the top 100 best charities in America. MADD received the 2004 award for Charity of the Year. Also in 2004, MADD received the Haddon Award from the International Council on Alcohol, Drugs, and Traffic Safety.

In 2005 a 24-hour victim/survivor helpline was established to provide immediate support and to help victims locate a MADD Victim Advocate in their local area. MADD also hosts live victim support forums and chats online every Monday at 7:00 pm, and Thursday at 8:30 pm at http://chat.madd.org/forum/index.cfm?forumid=1.

For more information contact: MADD National Office 511 E. John Carpenter Freeway, Suite 700, Irving, TX 75062, (800) GET-MADD, Victim Services Hotline: (877) MADD-HELP, Fax: 972-869-2206/07, E-mail: office@maddva.org

Web site: www.madd.org/
Recently Stigler et al. (2006) performed secondary analyses of the Project Northland data to try to determine the relative contribution of each component and learn which component(s) were most effective. Overall, the parent involvement program had the most consistent and most positive effect. Youth being a “planner” for one or more of the activities was also a significant variable, as was exposure to the classroom curriculum. Being a peer leader, participating in the extra-curricular activities and community activism did not appear to contribute significantly to the positive changes. It should be noted that all three years of the classroom training utilized interactive teaching methods, skills training and education. While the peer leaders did not independently contribute to success, the curriculum utilized peer leadership and thus it was an intricate part of the classroom component.

The capacity of comprehensive community-based prevention programs to address individual factors, situational factors, and environmental risk factors make comprehensive programs more likely to produce a synergistic or interactive effects rather than simply additive effects (Pentz, 1999).

Pentz proposes a transactional model of behavioral change for underage drinking. There are Personal risk factors such as the youth’s attitudes, motivations, and physiological reactions to alcohol. A second set of factors is the Situation and includes peer influences, social norms, family, and social support. The third set of factors is the Environment which includes access to alcohol, media influence, fiscal resources, and community policy.

Pentz argues that Person-centered approaches do not reduce consumption of alcohol nor delay its use. Changing perceptions is necessary, but not sufficient for behavioral change. Rather, incorporation of Situation factors is necessary. Prevention approaches must incorporate the social influences of peer pressure, adult modeling, availability of alcohol, and community acceptance. Social influence programs such as Life Skills Training (featured in VCPN, Volume 80) or Project ALERT (featured on page 4) teach assertiveness and how to address perceived social norms in the context of resisting peer pressure. Third, adding Environmental factors and combining all three approaches can result in significant reductions in underage drinking as well as maintenance effects over time.

VCPN is on the web – Visit us at: http://psychweb.cisat.jmu.edu/graysojh/

Conclusion

Reducing underage drinking requires changing norms that tolerate youth drinking. It involves overcoming resistance to shifts in policies and practices by powerful economic interests. The complicated interactions that result in adolescent and college student underage drinking can not be addressed through a single program or a narrow approach. However, it is clear that environmental approaches are needed to supplement educational approaches (Parker, 2005).

“It matters what we do for our children!” asserts Dr. Deborah Prothrow-Stith. “If we do not continually reach out and invest in our children, then we have a problem. Our children are doing no more than what we teach them to do and expect them to do. It matters what we believe and what we admire.” The Honorable John W. Marshall, Secretary of Public Safety for the Commonwealth of Virginia, agrees. Speaking to the 2007 Prevention Comes First Conference, he emphasized, “Prevention works. It is the investment we can’t afford NOT to make!”

References Available Upon Request