SECTION 3

Prevention and Reduction of Alcohol Use and Alcohol Use Disorders in Adolescents

To succeed, prevention and reduction efforts must take into account the dynamic developmental processes of adolescence, the influence of an adolescent's environment, and the role of individual characteristics in the adolescent's decision to drink. The goals of interventions aimed at underage alcohol use[12] are to:

- Change societal acceptance, norms, and expectations surrounding underage drinking.
- Prevent adolescents from starting to drink.
- Delay initiation of drinking.
- Intervene early, especially with high-risk youth.[13]
- Reduce drinking and its negative consequences, including progression to AUDs, when initiation already has occurred.

[12] The ultimate goal is to increase the age of initiation to the minimum legal drinking age of 21, thereby eliminating drinking by individuals under 21 and its consequences; however, underage drinking is so strongly embedded in the Nation's culture that the more realistic goals of increasing the average age of initiation and reducing underage drinking and its negative consequences are included as incremental steps.

[13] Examples of high-risk youth include children with externalizing disorders, children from families with a history of alcohol dependence, youth who exhibit a special predilection for sensation seeking, and youth who have experienced trauma. These are risk factors not only for alcohol use but for other substance abuse and mental disorders as well.

- Identify adolescents who have developed AUDs and who would benefit from additional interventions, including treatment and recovery support services.

In essence, these efforts form a continuum designed to help children and adolescents make sound choices about alcohol use. Scientific research provides the foundation for the design of interventions that accomplish these goals and the means for determining which interventions are effective.

Prevention efforts have typically approached the issue of underage drinking through two avenues: by seeking to change the adolescent and by seeking to change the adolescent's environment. Interventions aimed at adolescents themselves seek to change expectations, attitudes, and intentions; impart knowledge and skills; and provide the necessary motivation to better enable adolescents to resist influences that would lead them to drink. Environmental interventions seek to reduce opportunities for underage drinking (i.e., the availability of and access to alcohol for adolescent consumption). Examples include (1) increasing enforcement of and penalties for violating the minimum legal drinking age for youth who drink or attempt to purchase alcohol, for merchants who sell to youth, and for people who provide alcohol to underage youth, and (2) reducing community tolerance for underage alcohol use.

Adopting a Developmental Approach

A developmental approach to interventions retains the same fundamental goals as the traditional approach and, in addition, incorporates an understanding of the dynamic, complex nature of adolescent development. The objective of this approach is to ensure the emergence of a self-reliant, competent, and healthy adult at the end of the adolescent maturation process. It focuses on identifying and countering, weakening, or eliminating risk factors for underage alcohol use while identifying and strengthening

protective factors—all based on the adolescent's maturational stage, internal characteristics, and the characteristics of the external environment.

The developmental approach addresses the multilayered environment, or social systems, in which adolescents exist. It promotes creating opportunities for positive growth and development by recognizing youth for their assets and abilities and by engaging them in their communities through such activities as volunteering, sports, music, academics, and leadership (Benson et al. 1998; Lerner 2002; Scales et al. 2000). There is evidence that youth who spend more time engaged in these types of activities are less likely to engage in risky behaviors, such as alcohol use.

Integrated Structures to Protect the Adolescent

A scaffold is a temporary, supportive structure used in the construction of buildings and other large structures. In this context, the term "scaffolding" (Gauvain 2001; Vygotsky 1978; Wood et al. 1976) is used to represent the structured process through which positive development is facilitated and risk is minimized by providing protection from the natural risk-taking, sensation-seeking tendencies of the adolescent. It is a fitting metaphor for the supports and protections that parents and society provide children and youth to help them function in a more mature way until they are ready to function without that extra support. Through scaffolding, parents and societies can provide young people—who can be viewed as "adults under construction"—with supports that ensure their safe and healthy maturation from birth to adulthood (e.g., curfews that change as children get older and are ready for greater responsibility).

Throughout childhood and especially during adolescence, effective scaffolding requires frequent readjustment because individuals and their situations are continually changing. This external support system, or scaffold, around the adolescent promotes healthy development and provides protection

from alcohol use and other risky behaviors by facilitating good decision-making, mitigating risk factors, and buffering against potentially destructive outside influences that draw adolescents to alcohol use. *Buffering* refers to protecting adolescents by intercepting or moderating adverse pressures or influences on them so that they are not overwhelmed and can rely on their own adaptive capacities for self-protection.

Ideally, effective scaffolding is:

- *Developmentally based and culturally appropriate:* The protective extent of the scaffold matches the child's developmental stage and maturation level, is culturally appropriate, and is modified as needed, especially during significant transition points in the adolescent's life.
- *Comprehensive:* Scaffolding is multifaceted, consisting of elements constructed by parents, school, community, and society. Scaffolding is the responsibility of the Nation as a whole, for which underage alcohol use is a public health and safety problem.
- *Integrated:* The various components of the scaffold (e.g., community, school, and parents) are aligned, complement and reinforce each other, and create synergy. When some weaken, others are strengthened.
- *Evolving:* The scaffold is modified as the child matures to remain developmentally appropriate to the adolescent's maturational level to encourage the development of autonomy and, ultimately, the adoption of adult roles. The scaffold should protect, but not suffocate, allowing adolescents to interact with, and contribute to, the world in which they live and ultimately achieve the developmental goals of independence and self-reliance.
- *Initiated early:* The scaffold is initiated early, before puberty begins. However, it is better to construct a scaffold later than not at all.

- *Long-term:* Some form of scaffold should remain in place throughout adolescence, but elements should be carefully removed to facilitate the development of independence and self-reliance.

A shift in significant support structures, such as parental divorce or a move to a new town, can increase the risk for alcohol use and may require that additional elements be added to strengthen the scaffolding, at least temporarily.

A developmental approach to underage drinking recognizes that not all adolescents drink, and those who do drink differ in their drinking patterns (the way in which they tend to drink—e.g., daily drinking, bingeing, weekends only) and their drinking trajectories (how and when they started drinking and how their drinking plays out over time). No single trajectory or pattern of consumption describes the course of alcohol use for all or even most young people (Schulenberg et al. 1996*a*, 1996*b*). The trajectories and patterns of consumption vary considerably as adolescents grow into young adults and may be altered by their experiences, including treatment for AUDs (Chung et al. 2003). Developmental differences in consumption trajectories and patterns may have important implications for interventions, determining, for example, what types of messages are relevant to specific groups of young people. Some interventions have proved effective for youth who have not initiated alcohol use but not for youth who have (Perry et al. 1996, 2002).

Intervening With Adolescents Who Have Alcohol Problems, Including AUDs

Based on their responses to a survey conducted in 2004, approximately 3.7 million or 9.8 percent of American youth ages 12–20 met criteria for AUDs and/or received treatment at a specialty facility[14] for an alcohol problem. Interventions for youth with AUDs are an essential component

[14] *Specialty treatment* is defined as treatment received at hospitals (inpatient only), drug or alcohol rehabilitation facilities (inpatient or outpatient), or mental health centers. It excludes treatment in an emergency room, private doctor's office, self-help group, prison or jail, or hospital as an outpatient.

of the protective structure society should provide for its adolescents and one end of the continuum of interventions that prevents and reduces underage alcohol use. Of the 3.7 million, only 232,000 received treatment in a specialty facility, suggesting an unmet need for screening,[15] referral, and treatment of adolescent AUDs and associated behavioral problems. Contributing factors may include the cost of intervention, lack of insurance coverage, limited access to care, and lack of awareness of the problem. For example, not all pediatricians systematically screen adolescent patients for substance abuse (Kulig and American Academy of Pediatrics Committee on Substance Abuse 2005). Furthermore, pediatric health care providers underestimate alcohol use and AUDs among adolescents (Wilson et al. 2004). In addition, a subset of young people receives much of their medical care in an emergency department where it is unlikely they will be asked about their alcohol use. Further, limited availability of developmentally and culturally appropriate treatment and, in rural areas, the need to travel long distances to receive care may present additional barriers to intervention.

When adequate screening is in place, adolescents with alcohol-related problems, including those who do not meet formal diagnostic criteria, can be identified, referred for, and provided with appropriate interventions (including brief interventions) to prevent them from progressing to deeper alcohol involvement. However, diagnosing AUDs among adolescents is a challenging task. Criteria used to diagnose AUDs in adolescents were derived largely from clinical and research experience with adults (Chung et al. 2005). Yet, numerous developmental differences between adolescents and adults may affect the applicability of AUD criteria to youth. Developmental differences in alcohol use patterns indicate the need to adapt existing criteria to make them relevant to, and properly scaled for, an adolescent's stage of maturation (Brown 1999; Chung and Martin 2001, 2005; Martin et al. 1996). Current diagnostic criteria may overestimate problems in some adolescents while failing to capture hazardous

[15] *Screening* refers to the process of evaluating members of a population (e.g., all patients in a physician's practice) to estimate their likelihood of using alcohol and/or having alcohol-related problems.

practices in others (Martin and Winters 1998). Of primary importance is the need for a more valid diagnostic system for assessing the nature and magnitude of adolescent problem drinking that is appropriate to an adolescent's stage of maturation.

Early evidence on the effectiveness of brief motivational interventions in reducing or eliminating alcohol-related problems in adolescents indicates that they may be effective in reducing both drinking and its consequences, such as drunk driving (reviewed in Larimer and Cronce 2002; see also Tevyaw and Monti 2004). However, further analysis is necessary to determine both the duration of effects and which adolescents are likely to benefit from this type of intervention based on their drinking patterns, trajectories, and behaviors. As appropriate, adolescents can be referred for more extensive and/or intensive treatment for their AUDs.

Most current specialized treatment services are not optimally designed for access and engagement by youth (Brown 2001). Consequently, alternative treatment formats, attention to developmental transitions, and social marketing are needed to more adequately address alcohol use and alcohol-related problems emerging in adolescence (Brown 2001; Kypri et al. 2004; O'Leary et al. 2002). Further, treatment for adolescents frequently requires integrating interventions for alcohol use, other drug use, mental disorders, and family problems. Some of the most promising interventions for adolescents with AUDs have incorporated multiple components and systems, such as family-based intervention, group or individual cognitive–behavioral therapy, and therapeutic community interventions (see, e.g., Swensen et al. 2005 and Waldron and Kaminer 2004).