# how alcohol affectsTHE TEENAGE BRAIN



## Development

The human brain continues to develop until a person is around 25 years old. A huge burst of brain development occurs during adolescence and drinking alcohol during this crucial brain growth period can damage parts of the brain that control memory, judgment and decision making, impulse control and motor control.<sup>1</sup>

## Relationships

The use of alcohol may disrupt the development of the adolescent brain in unhealthy ways, making it harder for teens to cope with social situations and the normal pressures of life.

Youth under the influence of alcohol are more likely to engage in risky sexual behaviors. In fact, almost one-quarter of all high school students used alcohol or drugs prior to their last sexual experience.<sup>2</sup>





#### **Academics**

When a teen abuses drugs or alcohol, there is an increased risk of:

- lower grades
- school absences
- dropping out of school
- withdrawal from hobbies

Alcohol use in teens can also result in lower scores on vocabulary and memory tests as well as visual spatial tests. Alcohol and other drug use disturbs sleep cycles, which again affects learning and memory.<sup>3</sup>

#### Mental Health

Heavy and frequent alcohol use may interfere with a young person's capacity to make prosocial choices. Frequent, heavy use of alcohol has been associated with low self-esteem, depression, conduct disorders, antisocial behavior, and anxiety in adolescents.<sup>4</sup>





### Violence

Annually, about 5,000 people under age 21 die from alcohol-related injuries involving underage drinking. Approximately:

- 1,900 of the 5,000 deaths involve motor vehicle crashes,
- 1,600 result from homicides Approximately 700,000 students are assaulted by other students who have been drinking and about 100,000 students are victims of alcohol-related sexual assault or date rape.<sup>5</sup>

#### Substance Abuse

More than 67% of young people who start drinking before the age of 15 will try an illicit drug. Compared to children who never drink, children who drink are:

- 7.5 times more likely to use any illicit drug
- More than 22 times more likely to use marijuana
- 50 times more likely to use cocaine<sup>6</sup>



'ojjdp.gov, drugfree.org, Substance Abuse Intervention and Treatment: A Guide for Schools. (2009). Springfield IL: Illinois Division of Alcoholism and Substance Abuse and Prevention First | <sup>2</sup> drugfree.org, cdc.gov, Danice K. Eaton, PhD. Youth Risk Behavior Surveillance - United States, 2005. Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion | <sup>3</sup> ojjdp.gov | <sup>4</sup> Brown, S.A., and Tapert, S.F. 2004. Health consequences of adolescent alcohol involvement. In Reducing Underage Drinking: A Collective Responsibility, edited by R.J. Bonnie and M.E. O'Connell. Washington, DC: The National Academies Press, pp. 383–401 | <sup>5</sup> The Surgeon General's Call to Action To Prevent and Reduce Underage Drinking, a 2007 report from the Office of the Surgeon General | <sup>6</sup> Cigarettes, Alcohol, Marijuana: Gateways to Illicit Drug Use, Center on Addiction and Substance Abuse, Columbia University, 1994.

