



Making the Link

Underage Drinking and the Future of Children

Early alcohol use is a strong predictor of lifetime alcohol abuse and dependence.

- ⇒ More than 40 percent of individuals who begin drinking before age 13 will develop alcohol abuse or alcohol dependence at some time in their lives.¹
- ⇒ A national study reported that adults who started drinking prior to age 14, compared to those not starting until they were 21 years or older, were three times more likely to report consuming five or more drinks on a single day at least once per week, during the previous year.²
- ⇒ A study of 140 colleges and universities found that the frequency of heavy episodic drinking in high school was predictive of the frequency of heavy episodic drinking in college when controlling for a variety of other individual difference measures.³

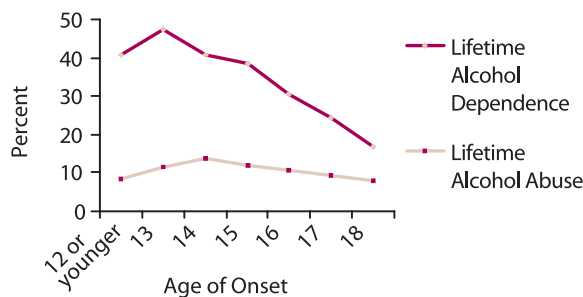
Early alcohol use is linked with health risks.

- ⇒ Adolescent females who drink exhibit higher levels of estradiol (an estrogen) and testosterone than nondrinking girls. High levels of estrogen may contribute to increased risk for specific diseases, including breast cancer; high levels of testosterone are associated with an increased risk of substance use.⁴
- ⇒ Adults who began drinking prior to age 14 were 12 times more likely to have ever been injured while under the influence of alcohol in their lifetime.⁵
- ⇒ Adults who began drinking before 14 were 11 times more likely than those who began drinking after age 21 to report ever being in a fight while drinking or after drinking.⁶

Early alcohol use is linked to academic achievement and future earning power.

- ⇒ Studies indicate that alcohol-dependent teens showed impaired memory, altered perception of spatial relationships, and verbal skill deficiencies.⁷
- ⇒ Seniors' college plans and frequent alcohol use are linked: 4.8 percent of seniors planning on none or under 4 years of college reported *daily drinking*, versus only 3.1 percent of seniors planning to complete 4 years of college. *Binge drinking* was reported by 34 percent of the first group of seniors versus 27.2 percent of the second group.⁸
- ⇒ According to a study on the economic costs of alcohol and drug abuse in the United States, males with a history of alcohol dependence who began drinking before age 15 earned less than those who began drinking later.⁹

Early Onset of Drinking and Lifetime Alcohol Abuse and Dependence



Source: Grant, et al. 1997.

¹ Grant BE, Dawson DA. Age at onset of alcohol use and association with DSM-IV alcohol abuse and dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. *J Subst Abuse* 9:103-110, 1997.

² Hingson RW, Heeren T, Jamaka A, et al. Age of drinking onset and unintentional injury involvement after drinking. *JAMA* 284(12):1527-1533, 2000.

³ Wechsler H, Dowdall GW, Davenport A et al. Correlates of college student binge drinking. *Am J Public Health* 85(7):921- 926, 1995.

⁴ Martin CA, Mainous AG, Curry T, et al.. Alcohol use in adolescent females: Correlates of estradiol and testosterone. *Am J Addiction* 8(1):9-14, 1999.

⁵ Hingson, et al. Age of drinking onset.

⁶ Hingson RW, Heeren T, Zakocs R. Age of drinking onset and involvement in physical fights after drinking. *Pediatrics* 108(4):872:877, 2001.

⁷ Brown SA, Tapert SF, Granholm E, et al. Neurocognitive functioning of adolescents: Effects of protracted alcohol use. *Alcohol Clin Exp Res* 24(2): 164-171.

⁸ Johnston LD, O'Malley PM, Bachman JG. Monitoring the Future national survey results on drug use, 1975-2002. Volume I: Secondary school students. Rockville, MD: National Institute on Drug Abuse, 2003.

⁹ Harwood H, Fountain D, Livermore G. The economic costs of alcohol and drug abuse in the United States – 1992. Bethesda, MD: National Institute on Drug Abuse, 1998.