

The Toll of Underage Drinking

DRUNK DRIVING, ALCOHOL DEPENDENCE, RISKY SEXUAL BEHAVIOR, AND HEALTH CONSEQUENCES.

Deaths:

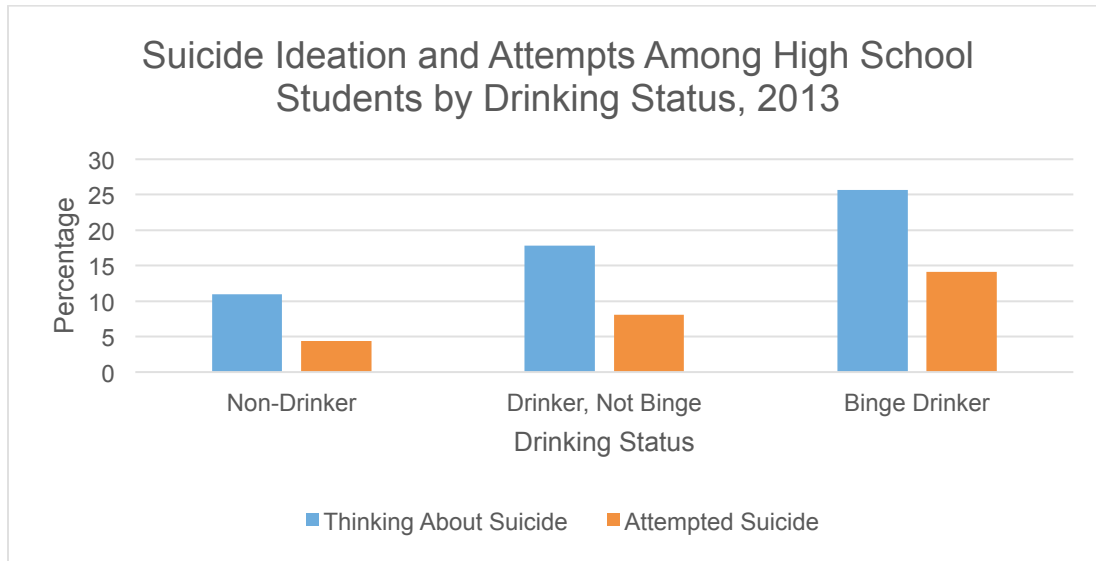
- The Centers for Disease Control and Prevention (CDC) estimates that 4,358 deaths of person under age 21 each year are caused by alcohol use.¹
- Alcohol use plays a substantial role in all three leading causes of death among youth - unintentional injuries (including motor vehicle fatalities and drownings), suicides, and homicides.²

Injuries:

- Youth who begin drinking before the age of 14 are 5 times more likely to ever be injured while under the influence of alcohol, 6.3 times more likely to ever be in a motor vehicle crash, 6 times more likely to ever be in a fight as compared to than youth who begin drinking after the age of 21.³
- A National Trauma Data Bank analysis of over 30,000 injured youth age 12-18 who were screened for alcohol use from 2009-2012 found the mortality rate for youth under the influence of alcohol was significantly higher when compared to youth who had not drank prior to injury.⁴
- Underage youth who only drink pre-mixed or ready-to-drink alcoholic beverages are more likely to get in fights than are youth who only drink flavored alcoholic beverages (FABs) or malt beverages or youth who never drink FABs.⁵

Suicide and Self-Harm:

- Youth who drink heavily have 23.6 times greater odds of intentionally injuring themselves by means such as self-cutting, attempted hanging, or self-poisoning as compared to youth who don't drink heavily.⁶
- Among young people, drinkers and binge drinkers are more likely than non-drinkers to contemplate or attempt suicide:⁷



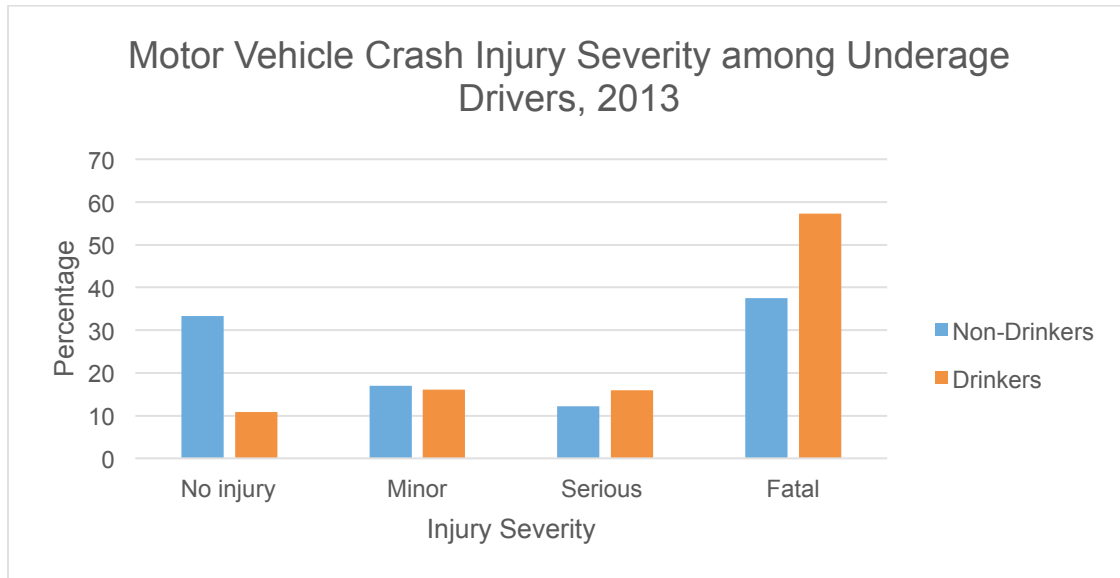
- States that passed "zero tolerance" laws to reduce youth drinking-driving also experienced statistically significant reductions in suicide deaths among 15- to 20-year-olds, compared to states that did not pass such laws.⁸

Brain Development:

- A longitudinal study showed heavy underage drinkers had reduced volume in three brain regions as compared to nondrinkers, and the gaps between the two groups widened over the next 3 years as the underage drinkers showed greater volume reductions.⁹ The brain regions in this study are associated with executive control, including inhibitory functioning, attention, impulsivity, and self-regulation.¹⁰
- Evidence suggests alcohol use prior to age 21 impairs crucial aspects of youthful brain development. One study found heavy-drinking adolescents who had been sober for 3 weeks still scored 10% lower than non-drinking peers on tests requiring verbal and nonverbal recall and skills needed for map reading, geometry, and science.^{11, 12}

Drinking Driving:

- Drivers age 16-20 have the largest risk for fatal car crashes; they are 17 times more likely to get in a car crash when they are legally drunk than when they are sober.¹³
- In 2013, 3,883 young people ages 16-20 died in motor vehicle crashes. Seventeen percent of these drivers were legally drunk at the time of the crash.¹⁴
- A longitudinal study of 1,124 youth in Los Angeles found 14 year olds who drank alcohol but did not smoke marijuana in the past month had a three-fold greater odds of driving under the influence or riding with a driver who was under the influence 2 years later.¹⁵
- The severity of underage motor vehicle crashes increases with alcohol involvement:¹⁶



- In 2013, 1 in 10 (10.0%) high school students drove a car after drinking alcohol in the past month.¹⁷ However, 1 in 5 (21.9%) high school students reported riding in the car with a driver who had been drinking in the past month.¹⁸

Alcohol Abuse or Dependence:

- Americans who began drinking before the age of 15 are five times more likely to develop alcohol dependence than those who wait until the age of 21.¹⁹
- In 2014, approximately 4.3 million young adults aged 18 to 25 (12.3% of this age group) had an alcohol use disorder (alcohol abuse or dependence) in the past year.²⁰
- An analysis published in the November 15, 2004 issue of *Biological Psychiatry* stated that the incidence of onset of alcohol dependence peaks by 18 years of age.²¹
- In November 2004, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) concluded that alcohol abuse and dependence are "developmental disorders."²²

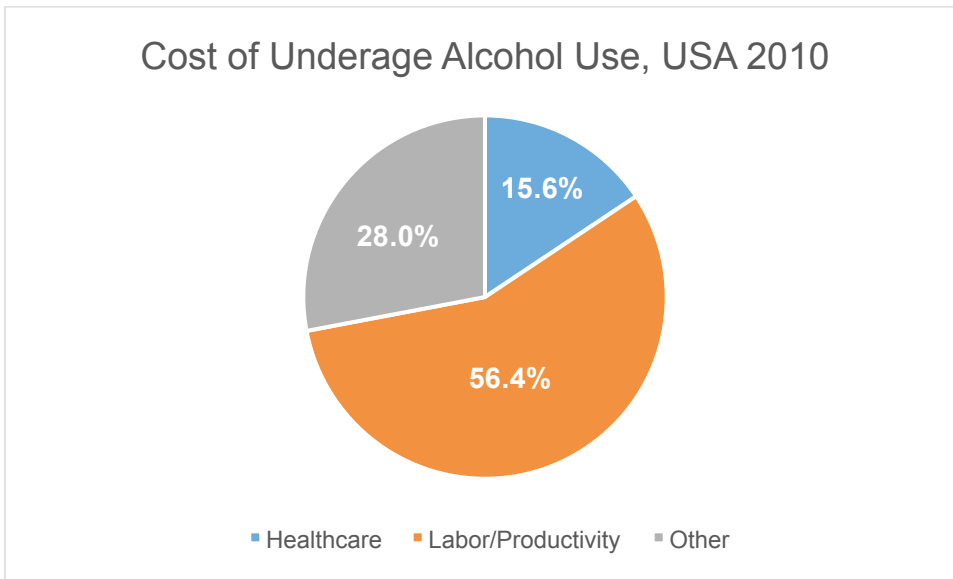
Risky Sexual Behavior:

- In a study of 1,034 students from Brooklyn, NY, females who reported alcohol use by the fall of seventh grade were almost twice as likely as their alcohol-delaying peers to have initiated sexual intercourse or engaged in recent sexual intercourse by the tenth grade.²³
- Young adult drinkers are twice as likely as non-drinkers to have had a sexually-transmitted disease during the past year. Heavy drinking males are almost four times as likely, and heavy drinking females are three and a half times as likely.²⁴
- In 2013, 1 in 10 (11.4%) current high school drinkers, and 1 in 8 (13.6%) high school binge drinkers reported being physically forced to have sexual intercourse. Drinkers are more than twice as likely to report this as non-drinkers.⁷
- First year college students are 13% more likely to experience negative sexual consequences like unplanned/unprotected sex, regretted sex, or unwanted sexual

attention on heavier drinking occasions, that is on occasions when they drink higher than their own self-reported average alcohol consumption.²⁵

Cost:

- In 2010, underage drinking cost approximately \$24.3 billion in the United States. Of this, \$3.8 billion was healthcare costs, \$13.7 billion was lost labor/productivity, and \$6.8 billion was other costs such as alcohol-related crime, motor vehicle crashes, and fetal alcohol syndrome costs.²⁶



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Notes

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