

Alcohol

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1.

"When an alcoholic beverage is consumed, approximately 20% of the alcohol is absorbed in the stomach and 80% is absorbed in the small intestine (Freudenrich, 2001). After absorption, alcohol enters the bloodstream and dissolves in the water of the blood where it is quickly distributed to body tissues. When alcohol reaches the brain, it affects the cerebral cortex first, followed by the limbic system (hippocampus and septal area), cerebellum, hypothalamus, pituitary gland, and lastly, the medulla, or brain stem. Some of these regions are similar to those affected by cannabis, but alcohol also affects sexual arousal/function and increases urinary output. When BAC is near toxic levels, lower order brain regions are affected, which is often followed by sleepiness, lack of consciousness, coma, or death."

Source:

Laberge, Jason C., Nicholas J. Ward, "Research Note: Cannabis and Driving -- Research Needs and Issues for Transportation Policy," *Journal of Drug Issues*, Dec. 2004, pp. 973.

2.

"Combined data from 2002 to 2006 indicated that an annual average of 9.4 percent of persons aged 12 to 20 (3.5 million persons in that age range) met the diagnostic criteria for an alcohol use disorder (dependence or abuse) in the past year."

Source:

Pemberton, M. R., Colliver, J. D., Robbins, T. M., & Gfroerer, J. C. (2008). Underage alcohol use: Findings from the 2002-2006 National Surveys on Drug Use and ealth (DHHS Publication No. SMA 08-4333, Analytic Series A-30). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, p. 3.

<http://www.oas.samhsa.gov/underage2k8/underage.pdf>

3.

"In 2006, more than half (53.9 percent) of persons aged 12 to 20 (20.6 million persons) had used alcohol in their lifetime, almost half (46.1 percent, 17.6 million) had used it in the past year, and more than a quarter (28.3 percent, 10.8 million) had used it in the past month (current use). One in five persons in this age group (19.0 percent, 7.2 million) engaged in binge

alcohol use, meaning they had consumed five or more drinks of alcohol on at least one occasion in the past month. This includes 2.4 million (6.2 percent of persons aged 12 to 20) who drank heavily, defined as 5 or more days of binge alcohol use in the past month."

Source:

Pemberton, M. R., Colliver, J. D., Robbins, T. M., & Gfroerer, J. C. (2008). Underage alcohol use: Findings from the 2002-2006 National Surveys on Drug Use and Health (DHHS Publication No. SMA 08-4333, Analytic Series A-30). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, p. 1

<http://www.oas.samhsa.gov/underage2k8/underage.pdf>

4.

(2006) "The rate of past year alcohol use disorder among persons aged 12 to 20 was higher for American Indians or Alaska Natives (14.9 percent) than for whites (10.9 percent), blacks (4.6 percent), Hispanics (8.7 percent), and Asians (4.9 percent). One in eight Native Hawaiians or Other Pacific Islanders (12.7 percent) met the criteria for an alcohol use disorder."

Source:

Pemberton, M. R., Colliver, J. D., Robbins, T. M., & Gfroerer, J. C. (2008). Underage alcohol use: Findings from the 2002-2006 National Surveys on Drug Use and Health (DHHS Publication No. SMA 08-4333, Analytic Series A-30). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, p. 3.

<http://www.oas.samhsa.gov/underage2k8/underage.pdf>

5.

2006! : "In 2006, a total of 22,073 persons died of alcohol-induced causes in the United States (Tables 23 and 24). This category includes not only deaths from dependent and nondependent use of alcohol, but also accidental poisoning by alcohol. It excludes unintentional injuries, homicides, and other causes indirectly related to alcohol use as well as deaths due to fetal alcohol syndrome."

Source:

Heron MP, Hoyert DL, Murphy SL, Xu JQ, Kochanek KD, Tejada-Vera B. Deaths: Final data for 2006. National vital statistics reports; vol 57 no 14. Hyattsville, MD: National Center for Health Statistics. 2009, p, 11.

http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf

6.

(2005) "Slightly more than half of Americans aged 12 or older reported being current drinkers of alcohol in the 2005 survey (51.8 percent). This translates to an estimated 126 million people, which is higher than the 2004 estimate of 121 million people (50.3 percent).

"More than one fifth (22.7 percent) of persons aged 12 or older participated in binge drinking at least once in the 30 days prior to the survey in 2005. This translates to about 55 million people, comparable with the estimates reported since 2002.

"In 2005, heavy drinking was reported by 6.6 percent of the population aged 12 or older, or 16 million people. This percentage is similar to the rates of heavy drinking in 2002 (6.7 percent), 2003 (6.8 percent), and 2004 (6.9 percent)."

These categories are defined as:

"Current (past month) use - At least one drink in the past 30 days (includes binge and heavy use).

"Binge use - Five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days (includes heavy use).

"Heavy use - Five or more drinks on the same occasion on each of 5 or more days in the past 30 days."

Source:

Substance Abuse and Mental Health Services Administration. (2006). Results from the 2005 National Survey on Drug Use and Health: National Findings (Office of Applied Studies, NSDUH Series H-30, DHHS Publication No. SMA 06-4194). Rockville, MD. p. 27.

<http://www.oas.samhsa.gov/nsduh/2k5nsduh/2k5results.pdf>

7.

(2002 + 2003) "Lifetime alcohol users aged 21 or older had a significantly higher rate of past year illicit drug use (13.7 percent) compared with lifetime nondrinkers (2.7 percent). In addition, lifetime alcohol users had significantly higher rates of past year use across all illicit drug categories, with the exception of inhalants (Table 1). Nonmedical use of pain relievers was the illicit drug used most often by lifetime nondrinkers, whereas lifetime alcohol users reported using marijuana most frequently."

Source:

"Illicit Drug Use Among Lifetime Nondrinkers and Lifetime Alcohol Users," Office of Applied Programs, Substance Abuse & Mental Health Services Administration, US Dept. of Health and Human Services, June 14, 2005, p. 2.

<http://www.drugabusestatistics.samhsa.gov/2k4/alcDU/alcDU.pdf>

8.

Federal statistics show that a large percentage of criminal offenders were under the influence of alcohol alone when they committed their crimes (36.3%, or a total of 1,919,251 offenders). Federal research also shows for more than 40% of convicted murderers being held in either jail or State prison, alcohol use was a factor in the crime.

Source:

Greenfield, Lawrence A., Alcohol and Crime: An Analysis of National Data on the Prevalence of Alcohol Involvement in Crime (Washington, DC: US Department of Justice, April 1998), pp. 20-21.

<http://www.ojp.usdoj.gov/bjs/pub/pdf/ac.pdf>

9.

"Table 9 provides the reported instances in each offense record in which the offenders were suspected of using alcohol, computers, and/or drugs.²² The data show that such use was minimal in situations occurring at schools during the 5-year study period. Of the 589,534 offense records, reports of offenders suspected of using drugs totaled 32,366, while reports of alcohol

use totaled 5,844."

Source:

Noonan, James H., Vavra, Malissa C., "Crime in Schools and Colleges: A Study of Offenders and Arrestees Reported via National Incident-Based Reporting System Data," United States Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services Division (Washington DC: October 2007), p. 14.

<http://www.fbi.gov/ucr/schoolviolence/2007/schoolviolence.pdf>

10.

(2002 + 2003) "In 2002 and 2003, an estimated 88.2 percent of persons aged 21 or older (175.6 million) were lifetime alcohol users, whereas an estimated 11.8 percent (23.5 million) were lifetime nondrinkers. Over half of lifetime alcohol users (52.7 percent) had used one or more illicit drugs at some time in their life, compared to 8.0 percent of lifetime nondrinkers. Among persons who had used an illicit drug in their lifetime, the average age at first illicit drug use was 19 years for lifetime alcohol users, versus 23 years for lifetime nondrinkers."

Source:

"Illicit Drug Use Among Lifetime Nondrinkers and Lifetime Alcohol Users," Office of Applied Programs, Substance Abuse & Mental Health Services Administration, US Dept. of Health and Human Services, June 14, 2005, p. 2.

<http://www.drugabusestatistics.samhsa.gov/2k4/alcDU/alcDU.pdf>

11.

Adolescents - Alcohol

"In 2006, more than one third (35.8 percent) of persons aged 12 to 20 who used alcohol in the past month also had used an illicit drug in the past month, and 16.0 percent of underage drinkers used an illicit drug within 2 hours of using alcohol on their last occasion of alcohol use.

Marijuana was the illicit drug most used by underage drinkers, with nearly one third (30.0 percent) having used marijuana in the past month, and 15.0 percent having used marijuana within 2 hours of their last alcohol use."

Source:

Pemberton, M. R., Colliver, J. D., Robbins, T. M., & Gfroerer, J. C. (2008). Underage alcohol use: Findings from the 2002-2006 National Surveys on Drug Use and Health (DHHS Publication No. SMA 08-4333, Analytic Series A-30). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, p. 4.

<http://www.oas.samhsa.gov/underage2k8/underage.pdf>

12.

"Juveniles using drugs or alcohol committed 1 in 10 of the nonfatal violent victimizations against older teens. This was 2-1/2 times higher than the percentage of victimizations against younger teens perceived to be committed by a juvenile who was using drugs or alcohol.

"Younger teens were more likely than older teens to report that their juvenile offender was not using drugs or alcohol. In about 4 in 10 victimizations against younger and older teens committed by juveniles, the victim could not ascertain whether or not the offender was using drugs or alcohol."

Source:

Baum, Katrina, PhD, "Juvenile Victimization and Offending, 1993-2003" (Washington, DC: US Dept. of Justice, Bureau of Justice Statistics, Aug. 2005), p. 8.

<http://www.ojp.usdoj.gov/bjs/pub/pdf/jvo03.pdf>

13.

"Among all underage current drinkers, 31.0 percent paid for the alcohol the last time they drank, including 9.3 percent who purchased the alcohol themselves and 21.6 percent who gave money to someone else to purchase it. Underage persons who paid for alcohol themselves consumed more drinks on their last drinking occasion (average of 5.9 drinks) than did those who did not pay for the alcohol themselves (average of 3.9 drinks).

More than one in four underage drinkers (25.8 percent) indicated that on their last drinking occasion they were given alcohol for free by an unrelated person aged 21 or older. One in sixteen (6.4 percent) got the alcohol from a parent or guardian, 8.3 percent got it from another family member aged 21 or older, and 3.9 percent took it from their own home."

Source:

Pemberton, M. R., Colliver, J. D., Robbins, T. M., & Gfroerer, J. C. (2008). Underage alcohol use: Findings from the 2002-2006 National Surveys on Drug Use and Health (DHHS Publication No. SMA 08-4333, Analytic Series A-30). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, p. 4.

<http://www.oas.samhsa.gov/underage2k8/underage.pdf>

14.

"Combined data from 2002 to 2006 indicated that rates of current (past month) alcohol use were 7.0 percent for youths aged 12 to 14, 27.5 percent for youths aged 15 to 17, and 51.3 percent for 18 to 20 year olds. Binge alcohol use rates for these age groups were 3.3, 17.8, and 36.3 percent, respectively."

Source:

Pemberton, M. R., Colliver, J. D., Robbins, T. M., & Gfroerer, J. C. (2008). Underage alcohol use: Findings from the 2002-2006 National Surveys on Drug Use and Health (DHHS Publication No. SMA 08-4333, Analytic Series A-30). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, p. 2.

<http://www.oas.samhsa.gov/underage2k8/underage.pdf>

15.

"The presence of alcohol in almost all of the polydrug-use repertoires and among all of the different populations addressed is one of the key findings of this 'Selected issue'. Alcohol is almost always the first drug with strong psychoactive and mind-altering effects used by young people, and its widespread availability makes it the ever-present drug in substance combinations among young adults, particularly in recreational settings."

Source:

European Monitoring Centre for Drugs and Drug Addiction, "Polydrug Use: Patterns and Responses" (Lisboa, Portugal: 2009), p. 26.

http://www.emcdda.europa.eu/attachements.cfm/att_93217_EN_EMCCDDA_SI09_po...

16.

(1992) "Differences in earnings among those employed were generally greater than differences in employment by alcohol and drug use patterns. Men who had never used alcohol had the lowest average annual earnings (\$29.0 thousand), while men who had used in moderate amounts (\$37.1 thousand) had the highest earnings. Those with alcohol problems at some point in their lifetime (\$33.0 thousand) fell in between. Interestingly, those with current (last 12 months) alcohol problems had on average about the same annual earnings as non drinkers, but current moderate alcohol users had the highest annual earnings of any group (\$38.0 thousand)."

Source:

Zuvekas S, Cooper PF, Buchmueller TC. Health Behaviors and Labor Market Status: The Impact of Substance Abuse. Agency for Healthcare Research and Quality Working Paper No. 05013, April 2005, p. 12.

http://www.meps.ahrp.gov/mepsweb/data_files/publications/workingpapers/...

17.

"When compared to alcohol, cannabis is detected far less often in accident-involved drivers. Drummer et al. (2003) cited several studies and found that alcohol was detected in 12.5% to 79% of drivers involved in accidents. With regard to crash risk, a large study conducted by Borkenstein, Crowther, Shumate, Zeil and Zylman (1964) compared BAC in approximately 6,000 accident-involved drivers and 7,600 nonaccident controls. They determined the crash risk for each BAC by comparing the number of accident-involved drivers with detected levels of alcohol at each BAC to the number of nonaccident control drivers with the same BAC. They found that crash risk increased sharply as BAC increased. More specifically, at a BAC of 0.10, drivers were approximately five times more likely to be involved in an accident.

"Similar crash risk results were obtained when data for culpable drivers were evaluated. Drummer (1995) found that drivers with detected levels of alcohol were 7.6 times more likely to be culpable. Longo et al. (2000) showed that drivers who tested positive for alcohol were 8.0 times more culpable, and alcohol consumption in combination with cannabis use produced an odds ratio of 5.4. Similar results were also noted by Swann (2000) and Drummer et al. (2003)."

Source:

Laberge, Jason C., Nicholas J. Ward, "Research Note: Cannabis and Driving -- Research Needs and Issues for Transportation

Policy," *Journal of Drug Issues*, Dec. 2004, pp. 981.

18.

According to a literature review of the effects of alcohol on driving, "As with cannabis, alcohol use increased variability in lane position and headway (Casswell, 1979; Ramaekers et al., 2000; Smiley et al., 1981; Stein et al., 1983) but caused faster speeds (Casswell, 1977; Krueger & Vollrath, 2000; Peck et al., 1986; Smiley et al., 1987; Stein et al., 1983). Some studies also showed that alcohol use alone and in combination with cannabis affected visual search behavior (Lamers & Ramaekers, 2001; Moskowitz, Ziedman, & Sharma, 1976). Alcohol consumption combined with cannabis use also worsened driver performance relative to use of either substance alone. Lane position and headway variability were more exaggerated (Attwood et al., 1981; Ramaekers et al., 2000; Robbe, 1998) and speeds were faster (Peck et al., 1986).

"Both simulator and road studies showed that relative to alcohol use alone, participants who used cannabis alone or in combination with alcohol were more aware of their intoxication. Robbe (1998) found that participants who consumed 100 g/kg of cannabis rated their performance worse and the amount of effort required greater compared to those who consumed alcohol (0.05 BAC). Ramaekers et al. (2000) showed that cannabis use alone and in combination with alcohol consumption increased self-ratings of intoxication and decreased self-ratings of performance. Lamers and Ramaekers (2001) found that cannabis use alone (100 g/kg) and in combination with alcohol consumption resulted in lower ratings of alertness, greater perceptions of effort, and worse ratings of performance."

Source:

Laberge, Jason C., Nicholas J. Ward, "Research Note: Cannabis and Driving -- Research Needs and Issues for Transportation Policy," *Journal of Drug Issues*, Dec. 2004, pp. 978.

19.

"The data are quite consistent with the view that Prohibition at the state level inhibited alcohol consumption, and an attempt to explain correlated residuals by including omitted variables revealed that enforcement of Prohibitionist legislation had a significant inhibiting effect as well. Moreover, both hypotheses about the effects of alcohol and Prohibition are supported by the analysis. Despite the fact that alcohol consumption is a positive correlate of homicide (as expected), Prohibition and its enforcement increased the homicide rate."

Source:

Jensen, Gary F., "Prohibition, Alcohol, and Murder: Untangling Countervailing Mechanisms," *Homicide Studies*, Vol. 4, No. 1

(Sage Publications: Thousand Oaks, CA, February 2000), p. 31.

<http://www.ncjrs.gov/App/Publications/abstract.aspx?ID=170654>

20.

In the "Drug Use Among Youths, by Exposure to Prevention Messages" section of its 1998 National Household Survey on Drug Use, SAMHSA concluded "youths' exposure to prevention messages outside school, such as through the media, was fairly widespread but appeared to be unrelated to illicit drug use or being drunk on 51 or more days in the past year. Nearly 80% of youths who used illicit drugs and more than three-fourths of youths who were drunk on 51 or more days in the past year reported being exposed to prevention messages outside school."

Source:

Office of Applied Studies, National Institute on Drug Abuse, National Household Survey on Drug Abuse: Main Findings 1998
Rockville, MD: SAMHSA, US Department of Health and Human Services, March 2000!, p. 174.

<http://www.oas.samhsa.gov/NHSDA/98MF.pdf>

Related Chapters:

- [Overdose](#)