

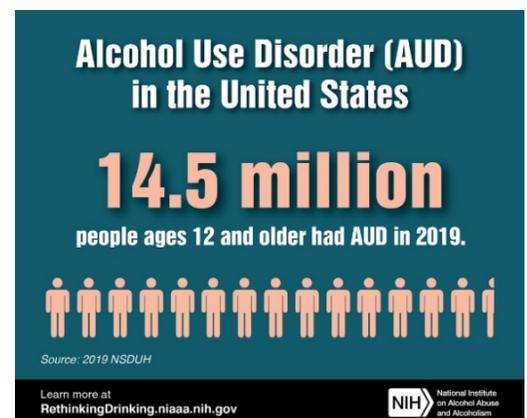
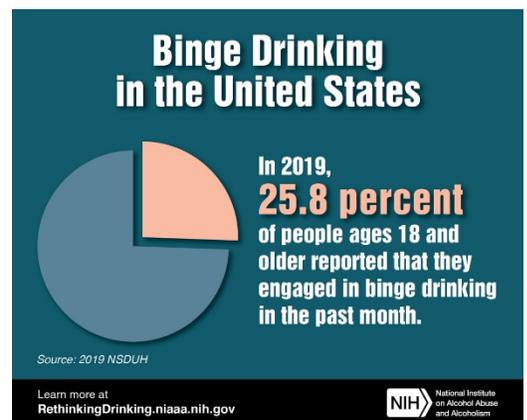
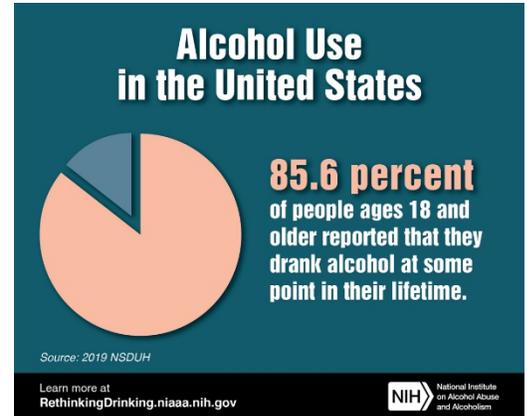


## Alcohol Use in the United States

- » **Prevalence of Drinking:** According to the 2019 National Survey on Drug Use and Health (NSDUH), 85.6 percent of people ages 18 and older reported that they drank alcohol at some point in their lifetime,<sup>1</sup> 69.5 percent reported that they drank in the past year,<sup>2</sup> and 54.9 percent (59.1 percent of men in this age group and 51.0 percent of women in this age group<sup>3</sup>) reported that they drank in the past month.<sup>3</sup>
- » **Prevalence of Binge Drinking and Heavy Alcohol Use:** In 2019, 25.8 percent of people ages 18 and older (29.7 percent of men in this age group and 22.2 percent of women in this age group<sup>4</sup>) reported that they engaged in binge drinking in the past month,<sup>4</sup> and 6.3 percent (8.3 percent of men in this age group and 4.5 percent of women in this age group<sup>5</sup>) reported that they engaged in heavy alcohol use in the past month.<sup>5</sup> (See glossary for definitions of binge drinking and heavy alcohol use.)
- » **Emerging Trend—High-Intensity Drinking:** High-intensity drinking is defined as consuming alcohol at levels that are two or more times the gender-specific binge drinking thresholds (See glossary for additional details about the definition of high-intensity drinking). Compared with people who did not binge drink, people who drank alcohol at twice the gender-specific binge drinking thresholds were 70 times more likely to have an alcohol-related emergency department (ED) visit, and those who consumed alcohol at 3 times the gender-specific binge drinking thresholds were 93 times more likely to have an alcohol-related ED visit.<sup>6</sup>

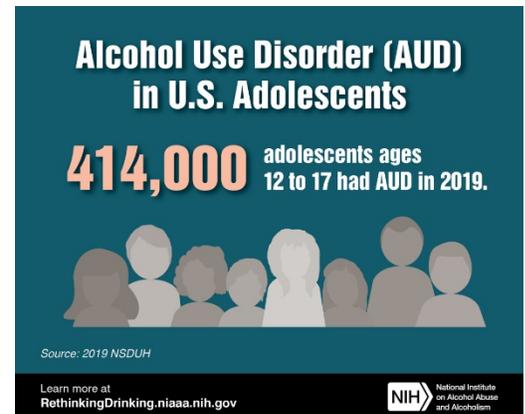
## Alcohol Use Disorder (AUD) in the United States

- » **People Ages 12 and Older:** According to the 2019 NSDUH, 14.5 million (nearly 15 million) people ages 12 and older<sup>7</sup> (5.3 percent of this age group<sup>8</sup>) had AUD. This number includes 9.0 million men<sup>7</sup> (6.8 percent of men in this age group<sup>8</sup>) and 5.5 million women<sup>7</sup> (3.9 percent of women in this age group<sup>8</sup>).
- » **Youth Ages 12 to 17:** According to the 2019 NSDUH, an estimated 414,000 adolescents ages 12 to 17<sup>7</sup> (1.7 percent of this age group<sup>8</sup>) had AUD. This number includes 163,000 males<sup>7</sup> (1.3 percent of males in this age group<sup>8</sup>) and 251,000 females<sup>7</sup> (2.1 percent of females in this age group<sup>8</sup>).



## Treatment of AUD in the United States

- » According to the 2019 NSDUH, about 7.2 percent of people ages 12 and older who had AUD in the past year received any treatment in the past year. This includes about 6.9 percent of males and 7.8 percent of females with past-year AUD in this age group.<sup>9</sup>
- » According to the 2019 NSDUH, about 6.4 percent of adolescents ages 12 to 17 who had AUD in the past year received any treatment in the past year. This includes about 6.4 percent of males and 6.4 percent of females with past-year AUD in this age group.<sup>9</sup>
- » According to the 2019 NSDUH, about 7.3 percent of adults ages 18 and older who had AUD in the past year received any treatment in the past year. This includes about 6.9 percent of males and 7.9 percent of females with past-year AUD in this age group.<sup>9</sup>
- » Less than 4 percent of people with AUD were prescribed a medication approved by the U.S. Food and Drug Administration (FDA) to treat their disorder.<sup>10</sup>
- » People with AUD were more likely to seek care from a primary care physician for an alcohol-related medical problem, rather than specifically for drinking too much alcohol.<sup>11,12</sup>



## Alcohol-Related Emergencies and Deaths in the United States

- » The rate of all alcohol-related ED visits increased 47 percent between 2006 and 2014, which translates to an average annual increase of 210,000 alcohol-related ED visits.<sup>13</sup>
- » Alcohol contributes to about 18.5 percent of ED visits and 22.1 percent of overdose deaths related to prescription opioids.<sup>14</sup>
- » An estimated 95,000 people (approximately 68,000 men and 27,000 women) die from alcohol-related causes annually,<sup>15</sup> making alcohol the third-leading preventable cause of death in the United States. The first is tobacco, and the second is poor diet and physical inactivity.<sup>16</sup>
- » Between 2011 and 2015, the leading causes of alcohol-attributable deaths due to chronic conditions in the United States were alcohol-associated liver disease, heart disease and stroke, unspecified liver cirrhosis, upper aerodigestive tract cancers, liver cancer, supraventricular cardiac dysrhythmia, AUD, breast cancer, and hypertension.<sup>15</sup>
- » In 2019, alcohol-impaired driving fatalities accounted for 10,142 deaths (28.0 percent of overall driving fatalities).<sup>17</sup>

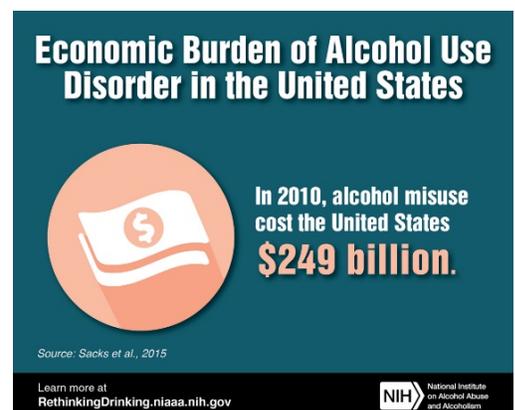


## Economic Burden in the United States

- » In 2010, alcohol misuse cost the United States \$249.0 billion.<sup>18</sup>
- » Three-quarters of the total cost of alcohol misuse is related to binge drinking.<sup>18</sup>

## Global Burden

- » In 2016, 3 million deaths, or 5.3 percent of all global deaths (7.7 percent for men and 2.6 percent for women), were attributable to alcohol consumption.<sup>19</sup>



- » Globally, alcohol misuse was the seventh-leading risk factor for premature death and disability in 2016.<sup>20</sup>
- » According to a 2014 World Health Organization (WHO) report, among people ages 15 to 49, alcohol misuse was the first-leading risk factor for premature death and disability.<sup>20</sup>
- » In 2016, approximately 14 percent of total deaths among people ages 20 to 39 are alcohol attributable.<sup>21</sup>
- » In 2016, 5.3 percent of the burden of disease and injury worldwide (134 million disability-adjusted life-years [DALYs]) was attributable to alcohol consumption.<sup>19</sup>
- » In 2018, WHO reported that alcohol contributed to more than 200 diseases and injury-related health conditions, ranging from liver diseases, road injuries, and violence, to cancers, cardiovascular diseases, suicides, tuberculosis, and HIV/AIDS.<sup>22</sup>
- » In 2016, of all deaths attributable to alcohol consumption worldwide, 28.7 percent were due to injuries, 21.3 percent were due to digestive diseases (primarily cirrhosis of the liver and pancreatitis), 19 percent were due to cardiovascular diseases, 12.9 percent were due to infectious diseases (including tuberculosis, pneumonia, and HIV/AIDS), and 12.6 percent were due to cancers (most prominently those of the upper aerodigestive tract.)<sup>21</sup>

## Consequences for Families in the United States

- » Approximately 10.5 percent (7.5 million) of U.S. children ages 17 and younger live with a parent with AUD, according to a 2017 report.<sup>23</sup>

## Underage Drinking in the United States

### » Prevalence of Underage Alcohol Use

- **Prevalence of Drinking:** According to the 2019 NSDUH, 39.7 percent of 12- to 20-year-olds reported that they have had at least 1 drink in their lives.<sup>25</sup> About 7.0 million people ages 12 to 20<sup>24</sup> (18.5 percent of this age group<sup>25</sup>) reported drinking alcohol in the past month (17.2 percent of males and 19.9 percent of females<sup>25</sup>).
- **Prevalence of Binge Drinking:** According to the 2019 NSDUH, approximately 4.2 million people ages 12 to 20<sup>24</sup> reported binge drinking in the past month. This represents 11.1 percent of people in this age group (10.4 percent of males ages 12 to 20 and 11.8 percent of females ages 12 to 20<sup>25</sup>).
- **Prevalence of Heavy Alcohol Use:** According to the 2019 NSDUH, approximately 825,000 people ages 12 to 20<sup>24</sup> reported heavy alcohol use in the past month. This represents 2.2 percent of this age group<sup>25</sup> (2.1 percent of males ages 12 to 20 and 2.3 percent of females ages 12 to 20<sup>25</sup>).

### » Trend in Underage Alcohol Use

- NSDUH findings have demonstrated a decline in underage drinking. From 2002 to 2019, the prevalence of past-30-day alcohol use decreased 41.1 percent for 16- to 17-year-olds, 54.7 percent for 14- to 15-year-olds, and 61.9 percent for 12- to 13-year-olds.<sup>26</sup>

### » Consequences of Underage Alcohol Use

- Research indicates that alcohol use during the teenage years can interfere with normal adolescent brain development and increase the risk of developing AUD. In addition, underage drinking contributes to a range of acute consequences, such as injuries, sexual assaults, alcohol overdoses, and deaths—including those from motor vehicle crashes.<sup>27</sup>
- Alcohol is a factor in the deaths of thousands of people younger than age 21 in the United States each year. This includes:
  - 1,092 from motor vehicle crashes<sup>28</sup>
  - 1,000 from homicides<sup>29</sup>
  - 208 from alcohol overdose, falls, burns, and drowning<sup>29</sup>
  - 596 from suicides<sup>29</sup>



## Alcohol and Young Adults Ages 18 to 22

### » Prevalence of Alcohol Use

- **Prevalence of Drinking:** According to the 2019 NSDUH, 47.1 percent of adults ages 18 to 22 drank alcohol in the past month. Within this age group, 52.5 percent of full-time college students ages 18 to 22 and 44.0 percent of other persons of the same age drank alcohol in the past month.<sup>30</sup>
- **Prevalence of Binge Drinking:** According to the 2019 NSDUH, 29.6 percent of adults ages 18-22 reported binge drinking in the past month. Within this age group, 33.0 percent of full-time college students ages 18 to 22 and 27.7 percent of other persons of the same age reported binge drinking in the past month.<sup>30</sup>
- **Prevalence of Heavy Alcohol Use:** According to the 2019 NSDUH, 7.0 percent of adults ages 18-22 reported heavy alcohol use in the past month. Within this age group, 8.2 percent of full-time college students ages 18 to 22 and 6.4 percent of other persons of the same age reported heavy alcohol use in the past month.<sup>30</sup>

### » Consequences of Alcohol Use

- Alcohol is a factor in the deaths of thousands of people ages 18 to 22 every year in the United States. The most recent NIAAA statistics estimate that this includes 1,519 college students ages 18 to 24 die who from alcohol-related unintentional injuries, including motor vehicle crashes.<sup>31</sup>
- According to the 2019 NSDUH, 8.1 percent of adults ages 18 to 22 met the criteria for past-year AUD. Within this age group, 8.7 percent of full-time college students ages 18 to 22 and 7.7 percent of other persons the same age met the criteria for AUD.<sup>32</sup>

## Alcohol and Pregnancy in the United States

- » According to the 2019 NSDUH, 9.5 percent of pregnant women ages 15 to 44 in the United States used alcohol in the past month.<sup>33</sup>
- » The prevalence of fetal alcohol syndrome in the United States was estimated by the Institute of Medicine in 1996 to be between 0.5 and 3.0 cases per 1,000.<sup>34</sup>
- » An NIAAA-supported study of more than 6,000 first graders across four U.S. communities estimated that as many as 1–5 percent of first-grade children have fetal alcohol spectrum disorders (FASD).<sup>35</sup>

## Alcohol and the Human Body

- » In 2019, of the 85,688 liver disease deaths among individuals ages 12 and older, 43.1 percent involved alcohol. Among males, 53,486 liver disease deaths occurred, and 45.6 percent involved alcohol. Among females, 32,202 liver disease deaths occurred, and 39.0 percent involved alcohol.<sup>36</sup>
- » Among all cirrhosis deaths in 2015, 49.5 percent were alcohol related. The proportion of alcohol-related cirrhosis deaths was highest (76.8 percent) among persons ages 25 to 34, followed by persons ages 35 to 44, at 72.7 percent.<sup>37</sup>
- » From 2010 to 2016, alcohol-related liver disease was the primary cause of almost 1 in 3 liver transplants in the United States, replacing hepatitis C virus infection as the leading cause of liver transplantation due to chronic liver disease.<sup>38,39</sup>
- » Research has shown that people who misuse alcohol have a greater risk of liver disease,<sup>40</sup> heart disease, depression, stroke, and stomach bleeding, as well as cancers of the oral cavity, esophagus, larynx, pharynx,<sup>41,42</sup> liver, colon, and rectum.<sup>43</sup> These individuals may also have problems managing conditions such as diabetes, high blood pressure, pain, and sleep disorders. They may increase their likelihood of unsafe sexual behavior.

- » Alcohol consumption is associated with increased risk of drowning<sup>44</sup> and injuries from violence,<sup>45,46</sup> falls,<sup>46</sup> and motor vehicle crashes.<sup>46,47</sup> Alcohol consumption is also associated with an increased risk of female breast cancer,<sup>43,48</sup> oropharyngeal cancer,<sup>43,48</sup> esophageal cancer (especially in individuals who inherit a deficiency in an enzyme involved in alcohol metabolism),<sup>38,43,49</sup> and harmful medication interactions.<sup>50,51,52,53</sup> Alcohol consumption has been linked to risk for FASD in the offspring of women who consume alcohol during pregnancy.<sup>54</sup>

## Glossary

**Alcohol-impaired driving fatality:** A fatality in a crash involving a driver or motorcycle rider (operator) with a blood alcohol concentration (BAC) of 0.08 g/dL or more.\*

**Alcohol misuse:** Drinking in a manner, situation, amount, or frequency that could cause harm to users or to those around them. For individuals younger than the legal drinking age of 21, or for pregnant females, any alcohol use constitutes alcohol misuse.

**Alcohol use disorder:** A chronic brain disorder marked by compulsive drinking, loss of control over alcohol use, and negative emotions when not drinking. AUD can be mild, moderate, or severe. Recovery is possible regardless of severity. The DSM-IV, published by the American Psychiatric Association, described two distinct disorders—alcohol abuse and alcohol dependence—with specific criteria for each. The fifth edition, DSM-5, integrates the two DSM-IV disorders into a single disorder called AUD, with mild, moderate, and severe subclassifications.

**Any treatment:** Treatment received at any location, such as a hospital (inpatient), rehabilitation facility (inpatient or outpatient), mental health center, ED, private doctor's office, self-help group, or prison/jail.

### Binge drinking:

- » The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines binge drinking as a pattern of drinking that brings BAC levels to 0.08 g/dL or higher. This typically occurs after a woman consumes 4 or more drinks or a man consumes 5 or more drinks—in about 2 hours.<sup>55</sup>
- » The Substance Abuse and Mental Health Services Administration (SAMHSA), which conducts the annual NSDUH, defines binge drinking as consuming 5 or more alcoholic drinks for males or 4 or more alcoholic drinks for females 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 month.<sup>56</sup>
- » The Monitoring the Future (MTF) survey defines binge drinking as having 5 or more drinks in a row in the past 2 weeks.<sup>57</sup>

**Disability-adjusted life-years:** A measure of years of life lost or lived in less than full health.

### Heavy alcohol use (or heavy drinking):

- » NIAAA defines heavy drinking as follows:
  - For men, consuming more than 4 drinks on any day or more than 14 drinks per week.
  - For women, consuming more than 3 drinks on any day or more than 7 drinks per week.
- » SAMHSA defines heavy alcohol use as binge drinking on 5 or more days in the past month.

### High-intensity drinking:

- » Consumption of 2 or more times the gender-specific thresholds for binge drinking, which is to say 10 or more standard drinks (or alcoholic drink-equivalents) for males and 8 or more for females. High-intensity drinking is consistent with drinking at binge levels II and III. The levels correspond to one to two times (I), two to three times (II), and three or more times (III) the standard gender-specific binge thresholds.<sup>6</sup>
- » The MTF survey defines high-intensity drinking as consuming 10 or more or 15 or more drinks in a row in the last two weeks.

**Patterns of drinking associated with AUD:** Binge drinking and heavy alcohol use can increase an individual's risk of AUD. According to the *Dietary Guidelines for Americans, 2020–2025*, adults of legal drinking age can choose not to drink or to drink in moderation by limiting intake to 2 drinks or less in a day for men and 1 drink or less in a day for women, when alcohol is consumed. Drinking less is better for health than drinking more. [Some individuals should avoid alcohol completely.](#)

**Underage drinking:** Alcohol use by anyone under the age of 21. In the United States, the legal drinking age is 21.

\*A BAC of 0.08 percent corresponds to 0.08 grams per deciliter, or 0.08 grams per 100 milliliters.

- <sup>1</sup> National Center for Statistics and Analysis, National Highway Traffic Safety Administration. Alcohol-impaired driving. In: *Traffic Safety Facts: 2019 Data*. Washington, D.C.: U.S. Department of Transportation, 2019. <https://crashstats.nhtsa.dot.gov/Api/Public/Publication/813060>. Accessed March 1, 2021.
- <sup>2</sup> SAMHSA, Center for Behavioral Health Statistics and Quality. 2019 National Survey on Drug Use and Health. Table 2.18B – Alcohol Use in Past Year among Persons Aged 12 or Older, by Age Group and Demographic Characteristics: Percentages, 2018 and 2019. <https://www.samhsa.gov/data/sites/default/files/reports/rpt29394/NSDUHDetailedTabs2019/NSDUHDetTabsSect2pe2019.htm#ab2-18b>. Accessed December 8, 2020.
- <sup>3</sup> SAMHSA, Center for Behavioral Health Statistics and Quality. 2019 National Survey on Drug Use and Health. Table 2.19B – Alcohol Use in Past Month among Persons Aged 12 or Older, by Age Group and Demographic Characteristics: Percentages, 2018 and 2019. <https://www.samhsa.gov/data/sites/default/files/reports/rpt29394/NSDUHDetailedTabs2019/NSDUHDetTabsSect2pe2019.htm#ab2-19b>. Accessed December 8, 2020.
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- <sup>5</sup> SAMHSA, Center for Behavioral Health Statistics and Quality. 2019 National Survey on Drug Use and Health. Table 2.21B – Heavy Alcohol Use in Past Month among Persons Aged 12 or Older, by Age Group and Demographic Characteristics: Percentages, 2018 and 2019. <https://www.samhsa.gov/data/sites/default/files/reports/rpt29394/NSDUHDetailedTabs2019/NSDUHDetTabsSect2pe2019.htm#ab2-21b>. Accessed December 8, 2020.
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- <sup>7</sup> SAMHSA, Center for Behavioral Health Statistics and Quality. 2019 National Survey on Drug Use and Health. Table 5.4A – Alcohol Use Disorder in Past Year among Persons Aged 12 or Older, by Age Group and Demographic Characteristics: Numbers in Thousands, 2018 and 2019. <https://www.samhsa.gov/data/sites/default/files/reports/rpt29394/NSDUHDetailedTabs2019/NSDUHDetTabsSect5pe2019.htm#ab5-4a>. Accessed December 8, 2020.
- <sup>8</sup> SAMHSA, Center for Behavioral Health Statistics and Quality. 2019 National Survey on Drug Use and Health. Table 5.4B – Alcohol Use Disorder in Past Year among Persons Aged 12 or Older, by Age Group and Demographic Characteristics: Percentages, 2018 and 2019. <https://www.samhsa.gov/data/sites/default/files/reports/rpt29394/NSDUHDetailedTabs2019/NSDUHDetTabsSect5pe2019.htm#ab5-4b>. Accessed December 8, 2020.
- <sup>9</sup> Population prevalence estimates (%) are weighted by the person-level analysis weight and derived from the data set, defining “any treatment” as treatment or counseling designed to help reduce or stop alcohol use, including detoxification and any other treatment for medical problems associated with alcohol use, as well as defining AUD as alcohol abuse or alcohol dependence according to the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). SAMHSA, Center for Behavioral Health Statistics and Quality. 2019 National Survey on Drug Use and Health (NSDUH-2019-DS0001). Public data set. <https://www.datafiles.samhsa.gov/study-dataset/national-survey-drug-use-and-health-2019-nsduh-2019-ds0001-nid19016>. Accessed December 8, 2020.
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scientific updates to ARDI, estimates of alcohol-attributable deaths or years of potential life lost generated in the current version of ARDI should not be compared with estimates that were generated using the ARDI default reports or analyses in the ARDI Custom Data Portal prior to July 30, 2020.

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