

# Alcohol Use in Illinois



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# Introduction

Alcohol use in the United States exhibits notable differences across sex, age, socioeconomic status, race/ethnicity, education, sexual and gender orientations. Prolonged alcohol use has well-documented adverse effects on many different health outcomes, including but not limited to liver damage and hypertension, injuries stemming from alcohol-impaired driving or interpersonal violence, and potential cognitive impairments. Additionally, a recent report by the U.S. Surgeon General cited prolonged alcohol use as an attributable cause for at least seven forms of cancer, including liver, breast, colon, and esophageal cancers. In order to effectively and efficiently address adverse health outcomes and subsequent disparities from alcohol use, we must first have a foundational understanding of the prevalence and consumption habits of alcohol in Illinois.

In 2015, the Center for Disease Control and Prevention's (CDC) Council of State and Territorial Epidemiologists (CSTE) established a workgroup to revise and adapt existing guidelines for evaluating behavioral health surveillance systems, including alcohol surveillance (CSTE, 2017). The CSTE alcohol surveillance guidelines suggest the collection and reporting of key surveillance indicators to monitor alcohol use and other related measures: 1) adult binge drinking, 2) youth binge drinking, 3) alcohol-related crash deaths, 4) liver disease and cirrhosis mortality, and 5) state alcohol excise tax, hereafter collectively referred to as the CSTE alcohol surveillance system (Hopkins et al., 2018).

In accordance with guidelines from the CDC and the CSTE surveillance system, this report aims to analyze statewide data surrounding alcohol use and habits, as well as attributable adverse health outcomes, in order to gain a comprehensive understanding of alcohol use and its impacts on Illinois communities.

The data presented in this report is derived from seven main sources including the 2021 Illinois Youth Risk Behavior Surveillance Survey (YRBS), the 2023 Illinois Behavioral Risk Factor Surveillance Survey (BRFSS), the 2023 Illinois County Behavioral Risk Factor Survey (ICBRFS), the Illinois Vital Records System (IVRS), the Illinois Pregnancy Risk Assessment Monitoring System (PRAMS), The Illinois Department of Transportation, and the Alcohol Policy Information System (APIS). Data for this report was also obtained in part from the Fatality Analysis Reporting System (FARS), a database maintained by the National Highway Traffic Safety Administration (NHTSA).

Since this report contains data from multiple data sources across multiple agencies, there are variations in data collected and variables displayed. For example, some data sources may collect data that includes “non-Hispanic (NH)” categories, while others do not specify. Furthermore, some sources may collect information on gender and sexuality orientation, income, or education attainment, while others may not or may have restrictions regarding data suppression. Note that Motor Vehicle Crashes & Fatalities section includes data surrounding polysubstance use on roadways. In recent years, polysubstance with alcohol has become more prevalent on roadways, and therefore was deemed as relevant to report.



# Youth Alcohol Consumption

## ***Youth Alcohol Consumption: Findings from the Youth Risk Behavior Surveillance System, Illinois, 2021***

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### Introduction

In accordance with the CSTE alcohol surveillance system, the YRBS serves as the primary surveillance system for youth drinking and binge drinking across Illinois. The YRBS is a set of surveys administered biannually through the CDC that samples 9<sup>th</sup> through 12<sup>th</sup>-grade high school students from both private and public schools within the U.S. The YRBS uses a complex sampling design and is conducted by departments of health and education at the local, territorial, tribal, and state levels of their respective students (CDC, 2024).

### Methodology

The state-level public use 2021 YRBS dataset was obtained directly from the CDC's YRBS website. The Illinois YRBS asks two questions pertaining to alcohol use, found in Table A1. Note that the binge drinking question was not asked on the 2023 survey and therefore the most recent year of data could not be used for analyses.

Current alcohol use was defined by a “yes” response to 1 or more drinks in the past 30 days. Current binge drinking was defined as a “yes” response to at least once instance in the past month where the individual consumed 4 or more drinks of alcohol in a row within a couple of hours (if they were female) or 5 or more drinks of alcohol in a row (if they were male). Alcohol consumption was analyzed across race/ethnicity, sex, and LGBTQ+ orientation to examine sociodemographic patterns and identify potential differences in use. Sex was dichotomized as either Female or Male. Sample size

restrictions did not allow for analysis by robust racial and ethnic groups. For these reasons, alcohol use was only explored among non-Hispanic Black or African American (NH Black or AA), Hispanic/Latinx, and non-Hispanic White (NH White) identifying individuals. A fourth group was combined representing all other racial and ethnic groups that were non-Hispanic/Latinx and some other race or ethnicity. LGBTQ+ identity was determined by any individual that identified as Lesbian, Gay, Bisexual, Questioning or Unsure about their sexual identity. Note that the 2023 edition of the YRBS and beyond includes a more representative LGBTQ+ variable by asking questions pertaining to both sexual orientation *and* gender identity.

T-tests were used to determine correlation significance. All data was cleaned, and all statistical analyses were performed using SAS statistical software (SAS Institute version 9.4) using survey procedures to account for the complex survey design of the YRBS. More detailed data tables from analyses can be found in Tables 0A-0D in the Appendix. For more information on sampling methodology, detailed reports, or any questions regarding the YRBS, please visit the CDC's [YRBS Survey website](#).

Table A1: Alcohol Drinking and Binge Drinking Questions, Illinois, YRBS 2021

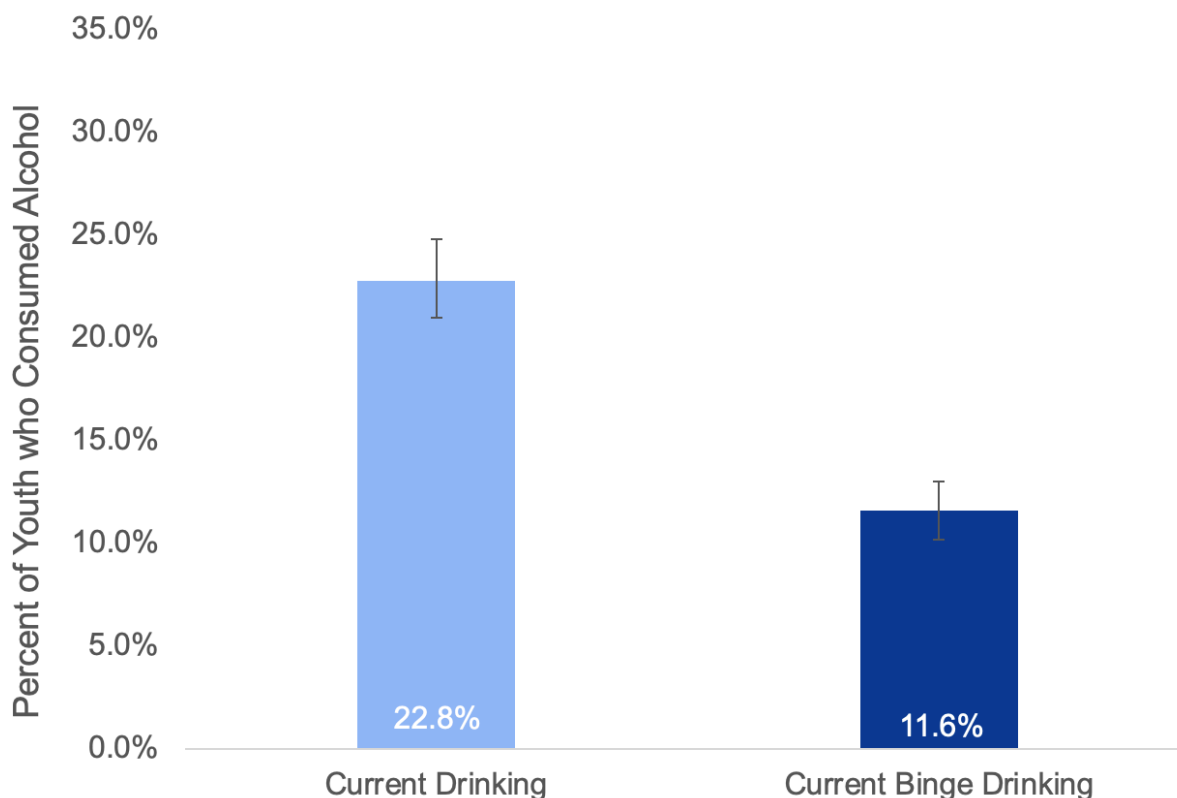
Questions	Response Codes	
Q41: <i>During the past 30 days, on how many days did you have at least one drink of alcohol?</i>	No days or does not drink = No	One or more days = Yes
Q42: <i>During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row, that is, within a couple of hours (if you are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if you are male)?</i>	No days or does not drink = No	One or more days = Yes

## Current Drinking and Binge Drinking

Figure A1 depicts the weighted frequency distributions of current drinking and binge drinking among Illinois high school youth.

As of 2021, 22.8% (95% CI: 21.0%-24.8%) of youth reported consuming at least one alcoholic beverage in the past 30 days. Regarding binge drinking, 11.6% (95% CI: 10.2%-13.0%) of youth reported consuming 4 or more drinks of alcohol in a row within a couple of hours (if they were female) or 5 or more drinks of alcohol in a row (if they were male).

Figure A1: Weighted Percent of Youth Alcohol Consumption Patterns, Illinois, YRBS 2021

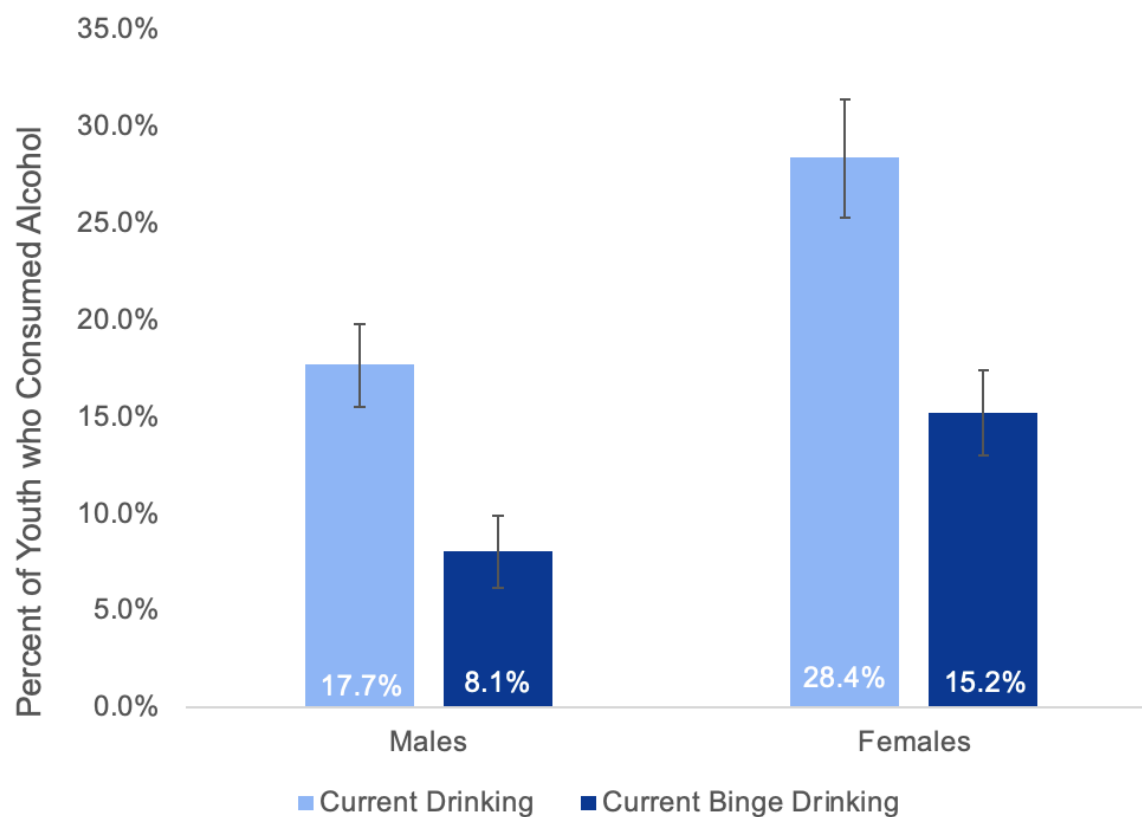


## Current Drinking and Binge Drinking by Sex

Figure A2 depicts the weighted frequency distributions of current drinking and binge drinking among Illinois high school youth by sex.

As of 2021, 17.7% (95% CI: 15.5%-19.8%) of male youth reported consuming at least one alcoholic beverage in the past 30 days and 8.1% (95% CI: 6.2%-9.9%) reported binge drinking in the past 30 days. A statistically significant ( $p < 0.01$ ) higher percentage of female youth reported consuming at least one alcoholic beverage in the past 30 days (28.4%; 95% CI: 25.3%-31.4%) and binge drinking in the past 30 days (15.2%; 95% CI: 13.0%-17.4%).

Figure A2: Weighted Percent of Youth Alcohol Consumption Patterns by Sex, Illinois, YRBS 2021



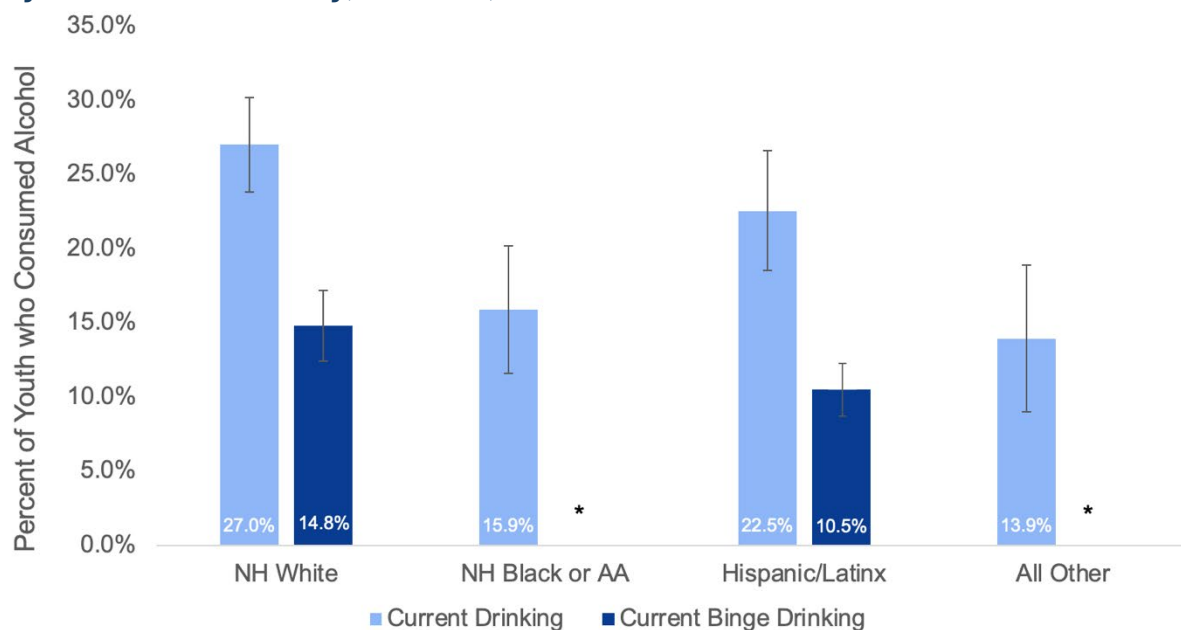
## Current Drinking and Binge Drinking by Race & Ethnicity

Figure A3 depicts the weighted frequency distributions of current drinking and binge drinking among Illinois high school youth by race and ethnicity.

As of 2021, 27.0% (95% CI: 23.8%-30.2%) of NH-White youth reported consuming at least one alcoholic beverage in the past 30 days, followed by 22.5% (95% CI: 18.0%-26.6%) of Hispanic/Latinx youth, 15.9% (95% CI: 11.6%-20.2%) of NH Black youth, and 13.9% (95% CI: 9.0%-18.9%) of youth of all other races and ethnicities.

The highest frequency of binge drinking by race and ethnicity was 14.8% (95% CI: 12.4%-17.2%) among NH white youth compared to 10.5% (95% CI: 8.0%-13.0%) of Hispanic/Latinx youth. Note that due to a limited sample size, binge drinking prevalence for NH Black or African American and all other youth was not able to be reported.

Figure A3: Weighted Percent of Youth Alcohol Consumption Patterns by Race & Ethnicity, Illinois, YRBS 2021



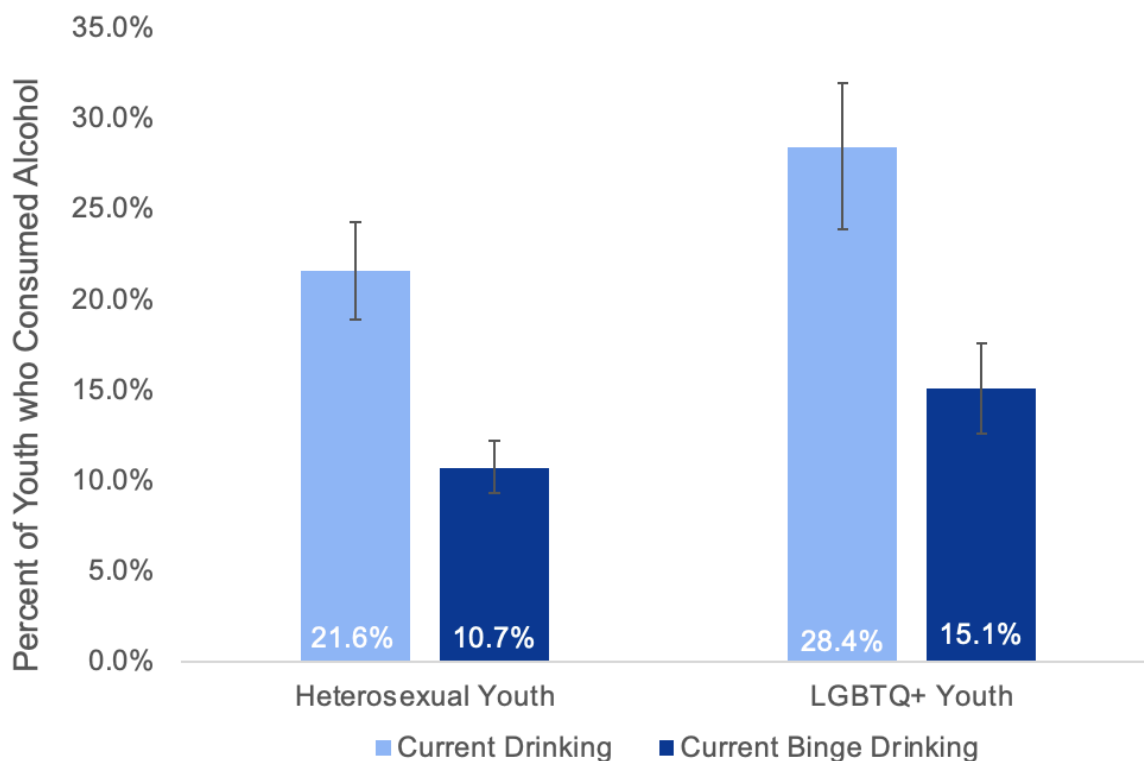
Note: \* data did not meet standards for reliable reporting and was suppressed

## Current Drinking and Binge Drinking by LGBTQ+ Orientation

Figure A4 depicts the weighted frequency distributions of current drinking and binge drinking among Illinois high school youth by LGBTQ+ orientation.

As of 2021, a statistically significant higher percentage of LGBTQ+ youth (28.4%; 95% CI: 23.9%-32.0%;  $p < 0.01$ ) reported consuming alcohol in the past 30 days compared to 21.6% (95% CI: 19.0%-24.3%) of heterosexual youth. Similarly, a statistically significant higher percentage of LGBTQ+ youth (15.1%; 95% CI: 12.6%-17.6%) reported binge drinking alcohol in the past 30 days compared to 10.7% (95% CI: 9.3%-12.2%) of heterosexual youth.

Figure A4: Weighted Percent of Youth Alcohol Consumption Patterns by LGBTQ+ orientation, Illinois, YRBS 2021



# Adult Alcohol Consumption

## ***Adult Alcohol Consumption: Findings from the Behavioral Risk Factor Surveillance System, Illinois, 2020-2022***

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### Introduction

In accordance with CDC/CSTE guidelines, the Behavioral Risk Factor Surveillance System (BRFSS) serves as the primary surveillance method for adult drinking and binge drinking. The BRFSS is a state-based program that gathers information on risk factors among Illinois adults 18 years of age and older through monthly telephone surveys. Established in 1984 as a collaboration between the CDC and state health departments, the BRFSS has grown to be the primary source of information on behaviors and conditions related to the leading causes of death for adults in the general population.

In order to effectively obtain lower geographic estimates of the prevalence and severity of alcohol use on Illinois adults, the Illinois County Behavioral Risk Factor Survey (ICBRFS) was used. Note that the ICBRFS is directly modeled after the BRFSS, and uses the same questions, protocols, and sampling methodology.

### Methodology

Data from both the 2023 BRFSS and ICBRFS (2020-2023) was obtained from the IDPH BRFSS program. Both surveys include four questions which were used for analyses. Questions and their corresponding dichotomized responses are found in Table B1. For the purpose of these analyses, alcohol use was further broken down by age, sex, sexual orientation, race/ethnicity, education attainment, disability status, income, and residential geography.

Weighted, statewide prevalence estimates were obtained for current drinking, current binge drinking, risk of current or binge drinking. An additional, self-reported estimate of having driven after drinking too much was also explored. These prevalence estimates were first obtained at the state level, then subsequently broken down by age, sex, sexual orientation, race/ethnicity, education attainment, disability status, income, and residential geography. Note that for sexual orientation, responses were categorized as either Heterosexual, Lesbian/Gay/Bisexual, or non-LGB, which may indicate an individual that is non-Heterosexual and/or has an identity or orientation not denoted by L, G, or B in the LGBTQIA+ community). All data cleaning and statistical analyses was performed using SPSS (SPSS Version 30.0.0).

For questions regarding sampling methodology, ICBRFS and BRFSS data, or to learn more about the ICBRFS or BRFSS, please visit the CDC's [BRFSS website](#) or visit the Illinois [BRFSS website](#).

Table B1: Alcohol Consumption and Habit Questions, Illinois BRFSS & ICBRFS, 2023

Questions	Response Codes	
Q12.1: <i>During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage? (A 40-ounce beer would count as 3 drinks, or a cocktail drink with 2 shots would count as 2 drinks.)</i>	0 days = No	1 or more days = Yes
*Q12.2: <i>One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?</i>	0 drinks = No	15 or more drinks per week (male) = Yes 8 or more drinks per week (female) = Yes
*Q12.3: <i>Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks for men or 4 or more drinks for women on an occasion?</i>	0 times = No	1 or more times = Yes
Q15.2: <i>During the past 30 days, how many times have you driven when you've had perhaps too much to drink?</i>	0 times = No	1 or more times = Yes

\*Used to calculate binge or chronic drinking risk

## Findings

### *Current Drinking*

Current alcohol consumption was determined by an instance of an individual consuming at least one or more alcoholic beverages in the past 30 days. In 2023, 55.8% (95% CI: 53.9%-57.7%) of Illinois adults reported currently drinking alcohol, approximately 5,154,568 individuals. Statewide prevalence estimates for current drinking are depicted in Figure B1.

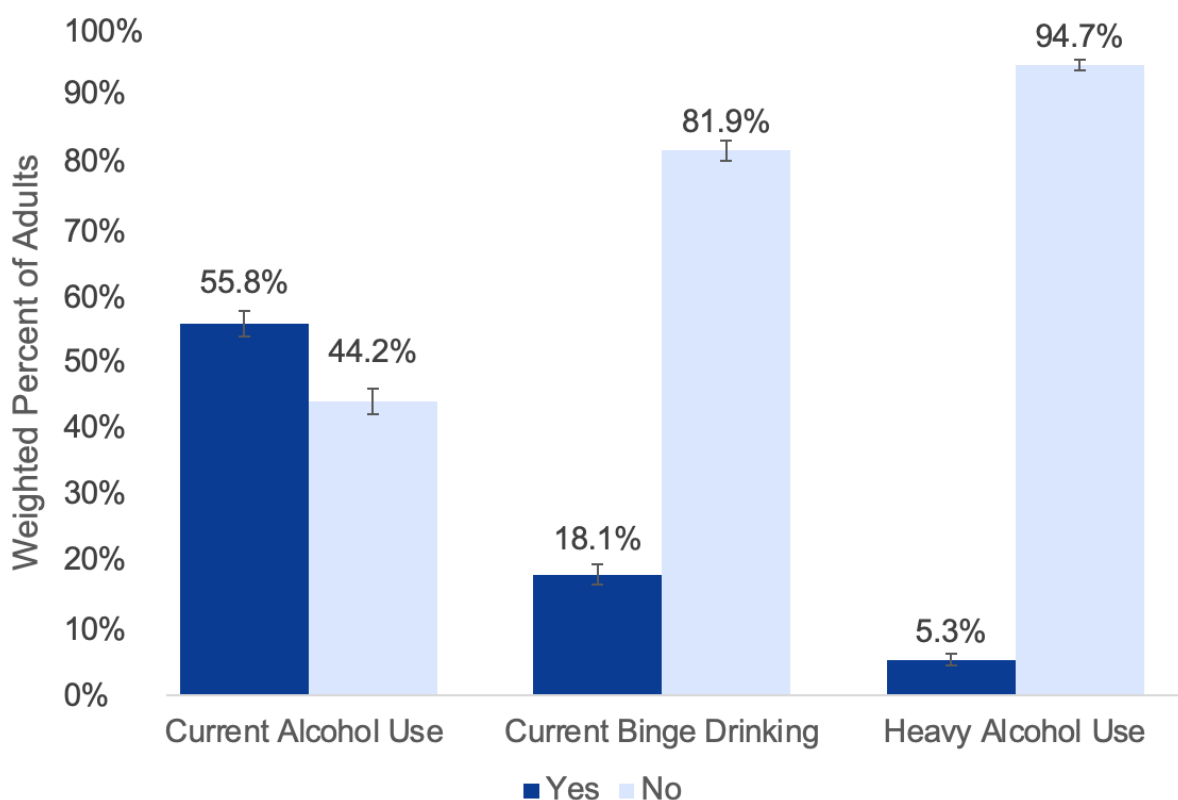
### *Current Binge Drinking*

Current binge drinking was determined by an individual reporting that, in the past 30 days, they drank 5 or more drinks (for men) or 4 or more drinks (for women) on a single occasion. In 2023, 18.1% (95% CI: 16.7%-19.7%) of Illinois adults reported binge drinking in the past 30 days, which represents approximately 1,664,749 people. Statewide BRFSS prevalence estimates for adults currently binge drinking are depicted in Figure B1. ICBRFSS, county-level, estimates for adults currently binge drinking are presented in Figure B2.

### *Heavy Alcohol Consumption*

Heavy alcohol consumption was defined as adult men having more than 15 drinks per week and adult women having more than 8 drinks per week. In 2023, approximately 5.3% (95% CI: 4.5%-6.2%) of Illinois adults reported heavy alcohol consumption, approximately 484,376 people. Statewide BRFSS prevalence estimates for heavy alcohol consumption are presented in Figure B1. ICBRS, county-level, estimates for heavy alcohol consumption are presented in Figure B3.

Figure B1: Percent of Adult Alcohol Consumption, BRFSS 2023, Illinois

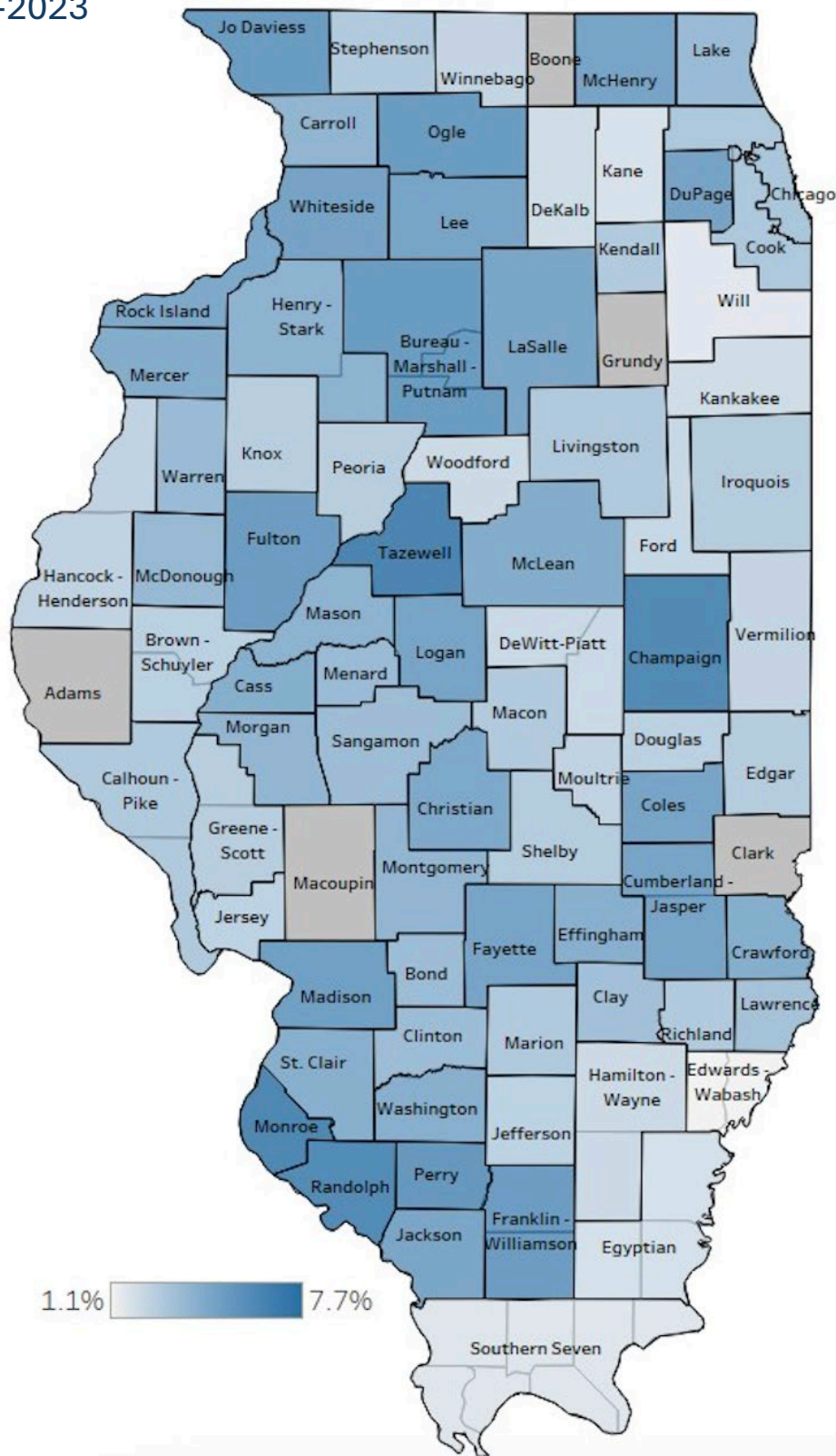


### *Binge or Chronic Drinking Risk*

The Illinois Department of Public Health calculates the risk for binge or chronic drinking using BRFSS data. Binge or chronic drinking risk was determined by an individual reporting one or more instances of either binge drinking *or* heavy drinking (i.e., chronic drinking; determined by 15 or more drinks per week if male, 8 or more drinks per week if female). In 2023, 18.7% (95% CI: 17.2%-20.2%) of Illinois adults were at risk of binge or chronic drinking, approximately 1,714,415 people. The county-level prevalence estimate for binge or chronic drinking risk among Illinois adults is presented Figure B4.



Figure B3: Illinois County-level Rates of Heavy Drinking, ICBRFS, 2020-2023



Note: Counties shaded grey indicate missing or suppressed data.



## Adult Alcohol Consumption by Age

### *Current Drinking*

In 2023, 52.9% (95% CI: 46.8%–59.0%) of adults aged 18–24 reported current alcohol use (N = 605,734). Prevalence was highest among adults aged 25–44 at 64.7% (95% CI: 61.5%–67.7%) (N = 1,963,469), significantly higher than other age groups. Among those aged 45–64, 55.3% (95% CI: 51.9%–58.7%) reported drinking (N = 1,598,910), while adults 65+ had the lowest prevalence at 45.5% (95% CI: 41.8%–49.2%) (N = 986,455). No significant differences were observed between the 18–24, 45–64, and 65+ age groups. Prevalence of current drinking by age is presented in Figure B5.

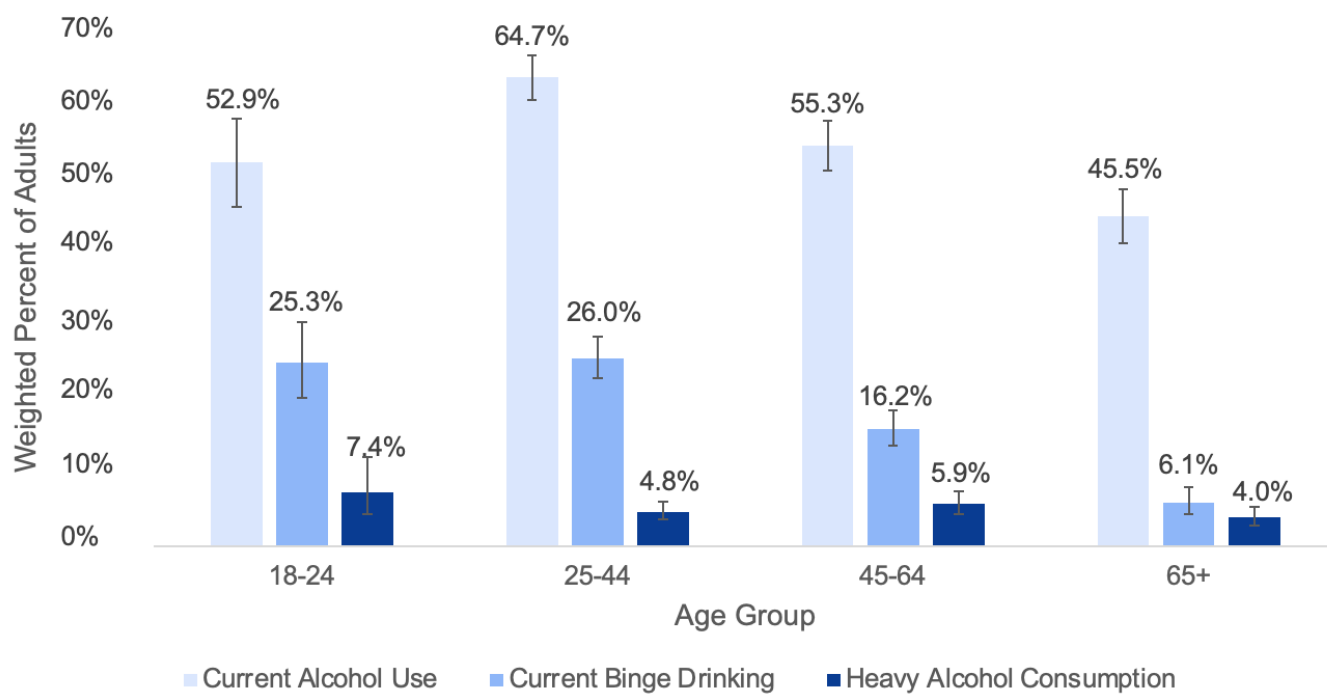
### *Binge Drinking*

Among adults aged 18–24, 25.3% (95% CI: 20.5%–30.9%) reported binge drinking in the past 30 days (N = 287,206), similar to 25–44-year-olds at 26.0% (95% CI: 23.2%–29.0%) (N = 779,755). Prevalence was significantly lower among adults aged 45–64 at 16.2% (95% CI: 13.9%–18.8%) (N = 465,814) and 65+ at 6.1% (95% CI: 4.5%–8.2%) (N = 131,975). Prevalence of binge drinking by age is presented in Figure B5.

### *Heavy Alcohol Consumption*

Heavy drinking was most prevalent among adults aged 18–24 at 7.4% (95% CI: 4.4%–12.3%) (N = 85,142). Among those aged 45–64, 5.9% (95% CI: 4.5%–7.6%) reported heavy drinking (N = 168,291), followed by 25–44 at 4.8% (95% CI: 3.7%–6.2%) (N = 144,840), and 65+ at 4.0% (95% CI: 2.9%–5.5%) (N = 86,103). No statistically significant differences in heavy alcohol consumption were observed between age groups (Figure B5).

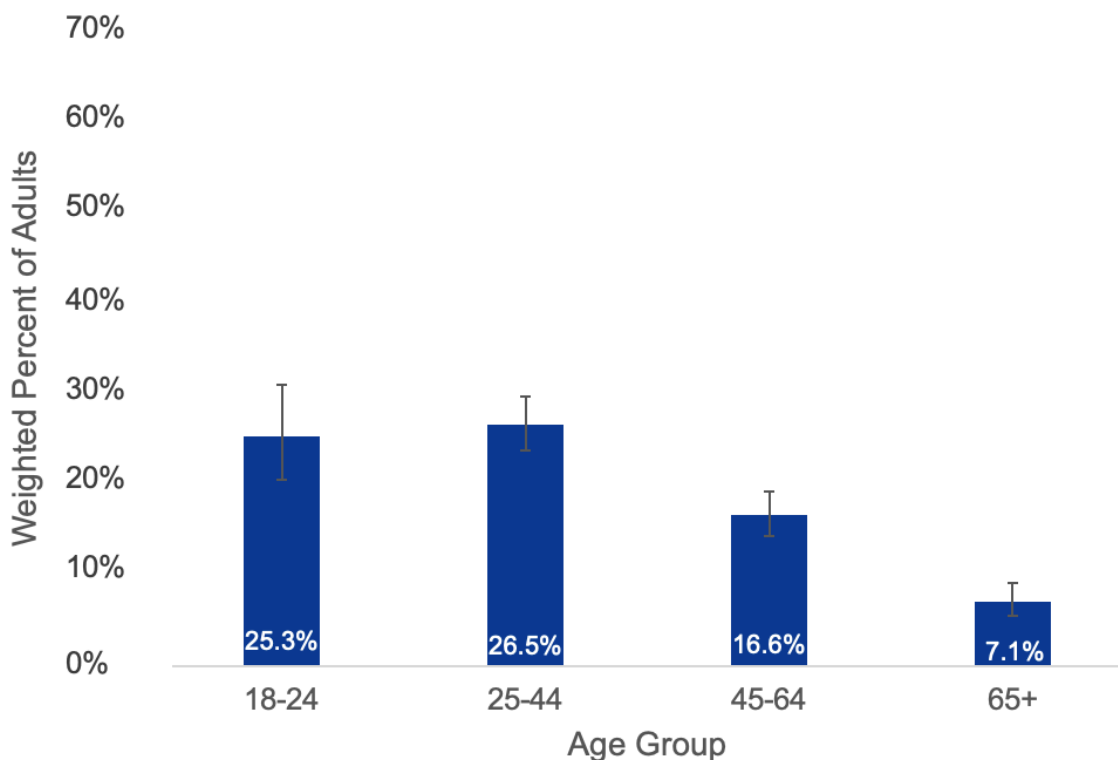
Figure B5: Percent of Adult Alcohol Consumption by Age, BRFSS 2023, Illinois



### *Binge or Chronic Drinking Risk*

Binge or chronic drinking risk was defined as reporting either binge drinking at least once in the past 30 days or heavy alcohol use in at least one week during that period. In 2023, 25.3% (95% CI: 20.5%–30.9%) of adults aged 18–24 were at risk (N = 287,206). Risk was highest among adults aged 25–44 at 26.5% (95% CI: 23.7%–29.6%) (N = 794,860). A significantly lower proportion of adults aged 45–64—16.6% (95% CI: 14.3%–19.2%) (N = 478,300)—were at risk compared to younger age groups. Adults 65+ had the lowest risk at 7.1% (95% CI: 5.5%–9.2%) (N = 154,050), significantly lower than all other cohorts.

Figure B6: Percent of Adult at Risk of Binge or Chronic Drinking Risk by Age, BRFSS 2023, Illinois

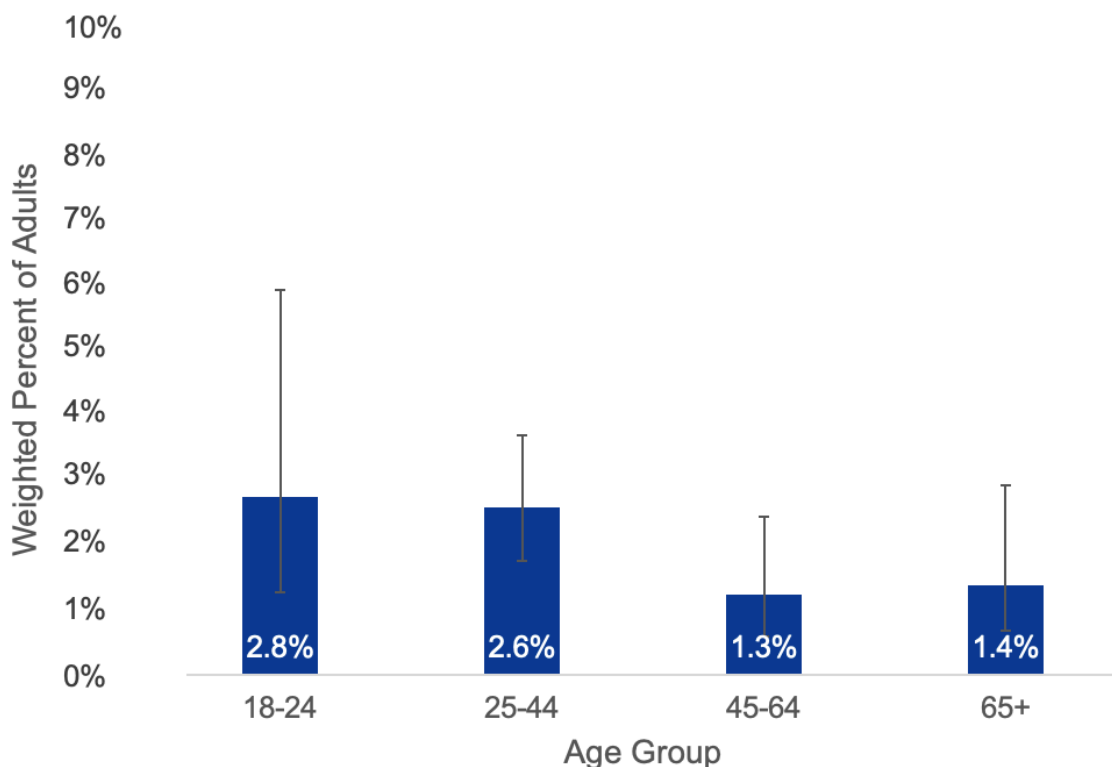


## Drinking and Driving

In 2023, the Illinois BRFSS and ICBRFS asked adults whether they had driven after drinking too much (i.e., after excessive drinking). Note that this is a self-reported measure of drinking and driving behavior and is likely an underestimation of this behavior.

Among adults aged 18–24, 2.8% (95% CI: 1.3%–6.1%) reported driving after excessive drinking (N = 32,143). Similarly, 2.6% (95% CI: 1.8%–3.8%) of adults aged 25–44 reported the same (N = 79,681). Among adults 45–64, 1.3% (95% CI: 0.6%–2.5%) (N = 36,373), and among those 65+, 1.4% (95% CI: 0.7%–3.0%) (N = 30,834) reported driving after drinking too much. No statistically significant differences were observed across age groups. Figure B7 depicts the percent of driving after drinking too much by age.

Figure B7: Percent of Driving After Drinking by Age, BRFSS 2023, Illinois



## Adult Alcohol Consumption by Sex

### *Current Drinking*

In 2023, 61.9% (95% CI: 59.2%-64.5%), or roughly 2,763,862 adult males reported currently drinking alcohol. Compared to males, a statistically significant lower percentage (50.1%; 95% CI: 47.4%-52.8%), or 2,390,706 adult females reported currently drinking alcohol. Statewide prevalence estimates for current drinking, by sex, are presented in Figure B8.

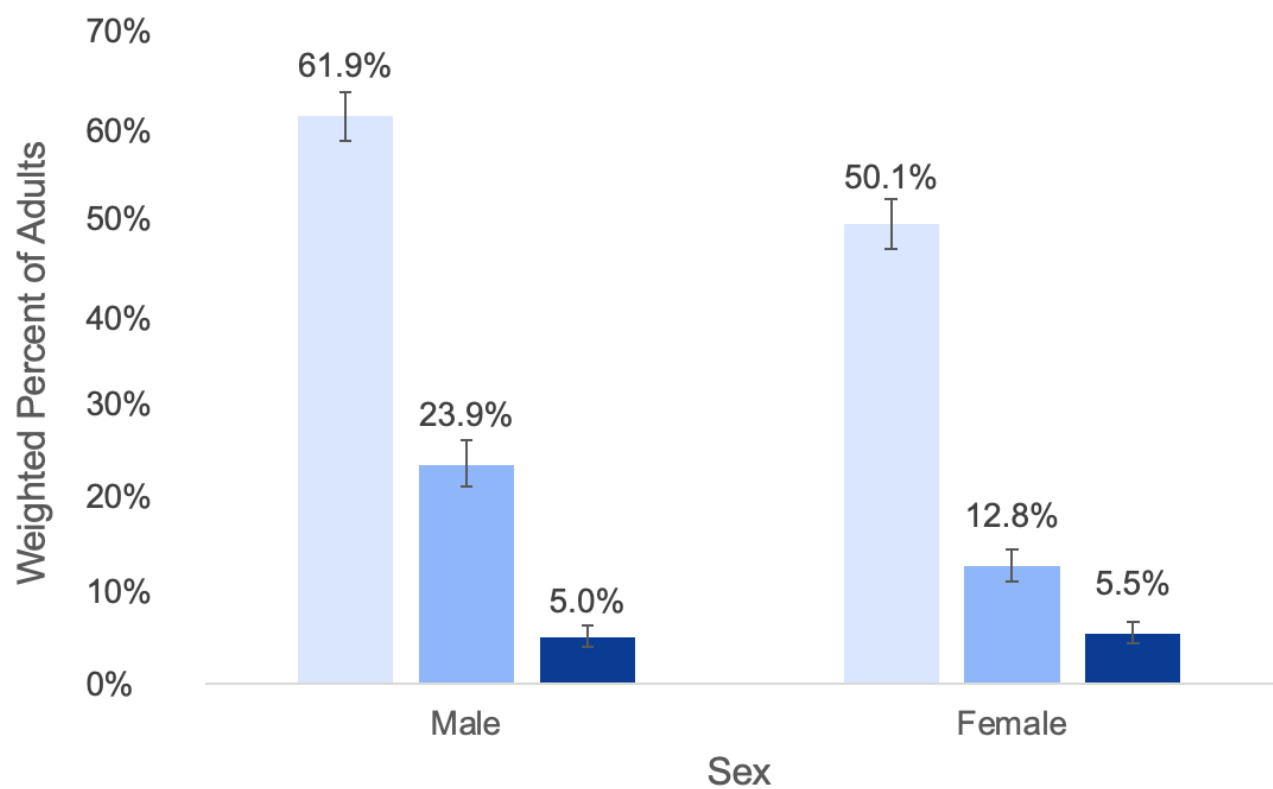
### *Current Binge Drinking*

In 2023, 23.9% (95% CI: 21.5%-26.4%), or 1,056,782 adult males reported binge drinking in the past 30 days. Whereas only 12.8% (95% CI: 11.2%-14.6), or 607,967 adult females reported binge drinking in the past 30 days. A statistically significant lower percentage of adult females binge drank in 2023 as compared to adult males. Statewide prevalence estimates for current binge drinking, by sex, are presented in Figure B8.

### *Heavy Alcohol Consumption*

Recall that heavy alcohol consumption (i.e., heavy drinking) for males was 15 or more drinks per week whereas heavy consumption for females was 8 or more drinks per week. In 2023, 5.0% (95% CI: 4.0%-6.3%), or 222,287 males reported heavy drinking. Comparatively, 5.5% (95% CI: 4.4%-6.8%), or 262,089 adult females reported heavy drinking. A slightly higher, but not statistically significant, percentage of Illinois females reported heavy drinking in 2023 as compared to Illinois males. Statewide prevalence estimates for heavy alcohol consumption, by sex, are presented in Figure B8.

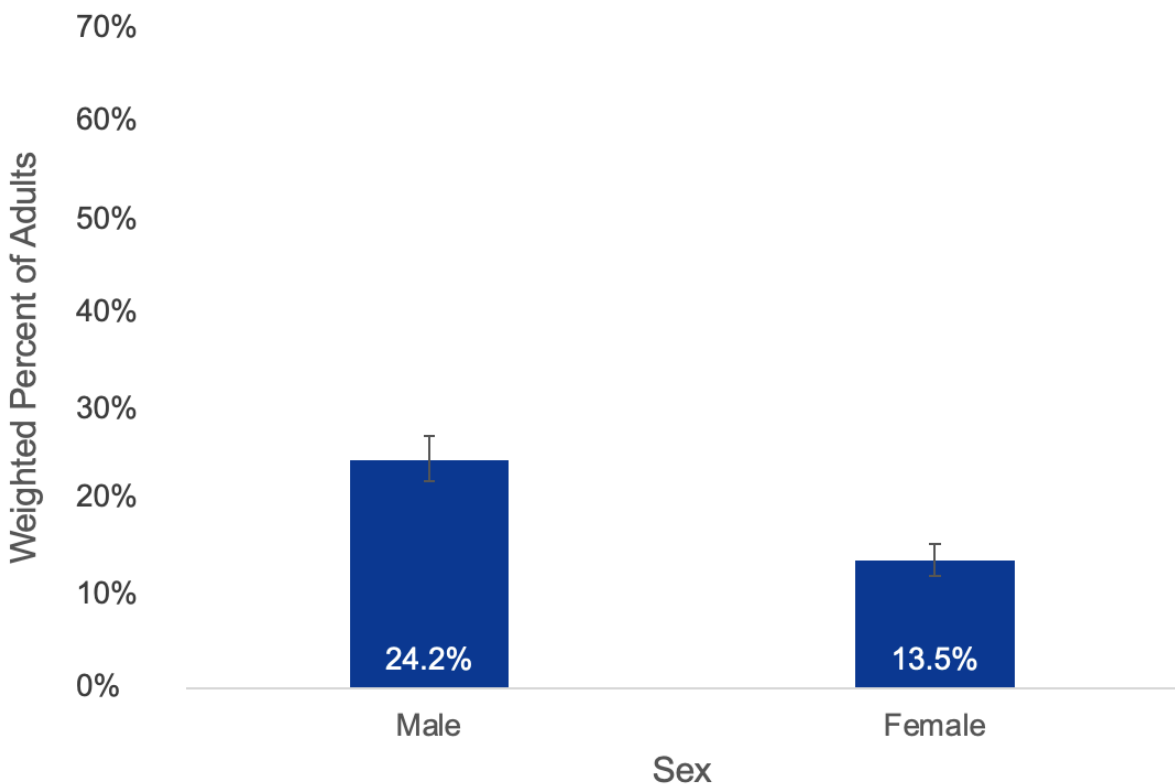
Figure B8: Percent of Adult Alcohol Consumption by Sex, BRFSS 2023, Illinois



### *Binge or Chronic Drinking Risk*

In 2023, 24.2% (95% CI: 21.9%-26.7%) or 1,071,427 adult males were at risk of binge or chronic drinking. Comparatively, a statistically significant lower percentage (13.5%; 95% CI: 11.9%-15.3%), or 642,988 adult females were at risk of binge or chronic drinking. Statewide prevalence estimates for binge or chronic drinking risk, by sex, are presented in Figure B9.

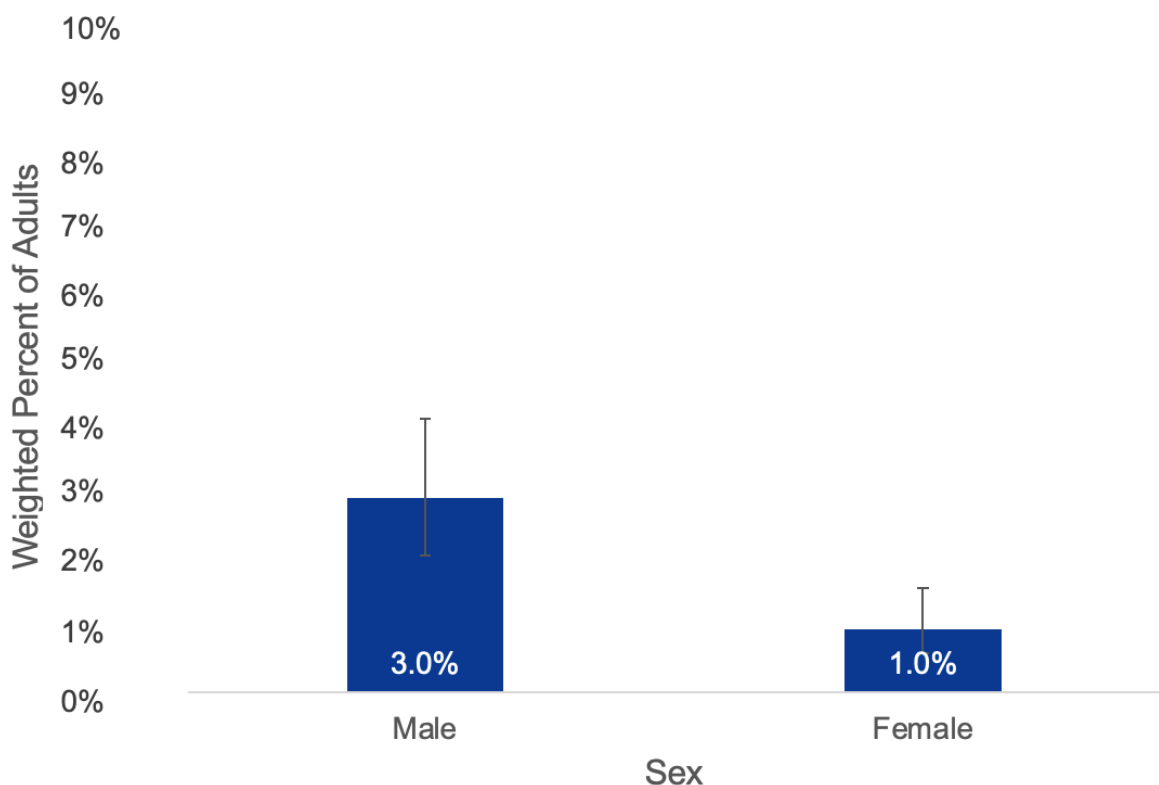
Figure B9: Percent of Binge or Chronic Drinking Risk by Sex, BRFSS 2023, Illinois



## Drinking and Driving

By sex, a statistically significant higher percentage of males reported driving after having drunk too much as compared to females. That is, 3.0% (95% CI: 2.1%-4.2%), or 132,985 adult males self-reported driving after drinking too much. Whereas only 1.0% (95% CI: 0.6%-1.6%), or 46,046 females self-reported driving after drinking too much. The statewide prevalence estimates for driving after drinking by sex are depicted in Figure B10.

Figure B10: Percent of Driving After Drinking by Sex, BRFSS 2023, Illinois



## Adult Alcohol Consumption by Race & Ethnicity

### *Current Drinking*

In 2023, 60.7% (95% CI: 58.3%–63.1%) of NH-White (White) adults reported current drinking (N = 3,399,525), followed by 54.4% (95% CI: 48.8%–59.8%) of NH-Black (Black) adults (N = 680,677), and 48.0% (95% CI: 43.7%–52.3%) of Hispanic/Latinx adults (N = 747,141). A significantly lower percentage of NH-Asian (Asian) adults reported current drinking at 36.4% (95% CI: 29.1%–44.5%) (N = 194,613), compared to White and Black adults. Estimates for all other Racial and Ethnic groups were suppressed due to insufficient sample size (Figure B11).

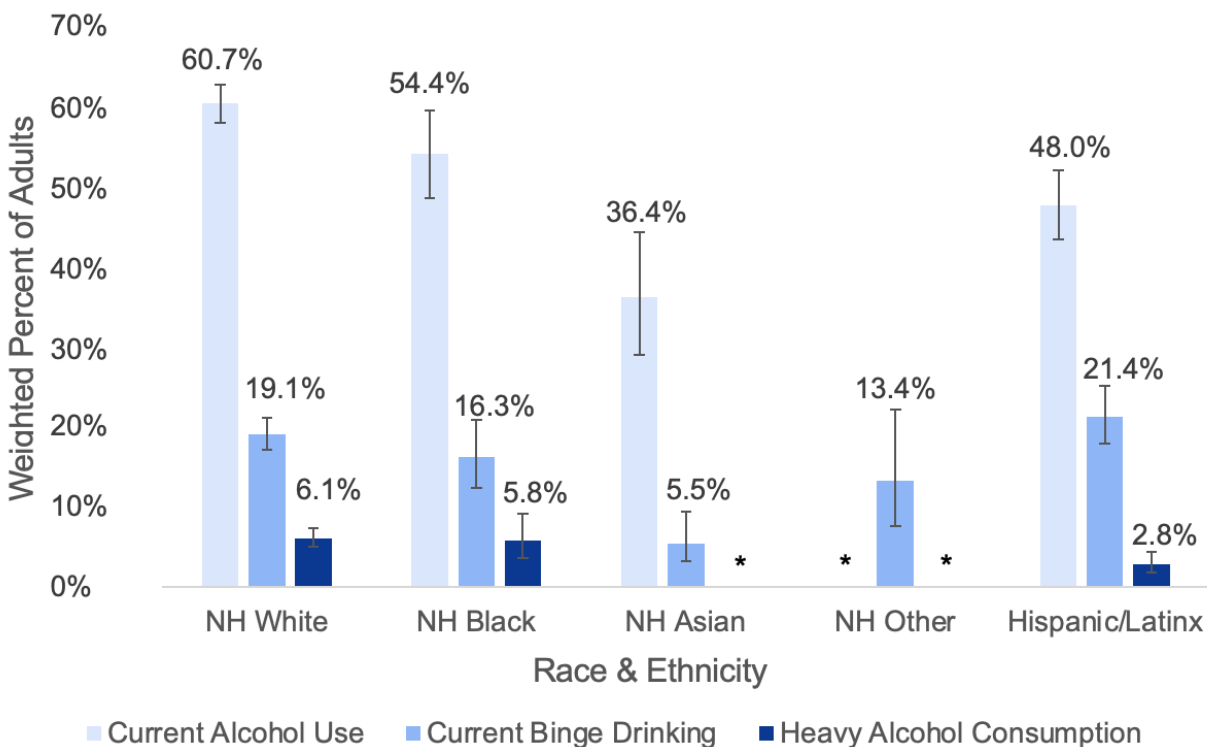
### *Binge Drinking*

Binge drinking was reported by 19.1% (95% CI: 17.2%–21.1%) of White adults (N = 1,066,684), 16.3% (95% CI: 12.5%–21.0%) of Black adults (N = 199,985), and 21.4% (95% CI: 18.0%–25.2%) of Hispanic/Latinx adults (N = 329,038)—the highest prevalence among all groups. A significantly lower rate was observed among Asian adults at 5.5% (95% CI: 3.2%–9.4%) (N = 29,223). The “Other” Racial and Ethnic category reported 13.4% (95% CI: 7.7%–22.3%) (N = 39,819). Figure B11 depicts the binge drinking prevalence by race and ethnicity.

### *Heavy Alcohol Consumption*

Heavy drinking was reported by 6.1% (95% CI: 5.1%–7.4%) of White adults (N = 342,635) and 5.8% (95% CI: 3.6%–9.2%) of Black adults (N = 71,539), with no statistically significant difference between the two. Hispanic/Latinx adults had a significantly lower prevalence at 2.8% (95% CI: 1.8%–4.4%) (N = 43,518) compared to White adults. Data for Asian and "Other" race groups were suppressed due to small sample sizes. Prevalence estimates can be found in Figure B11.

Figure B11: Percent of Adult Alcohol Consumption by Race & Ethnicity, BRFSS 2023, Illinois

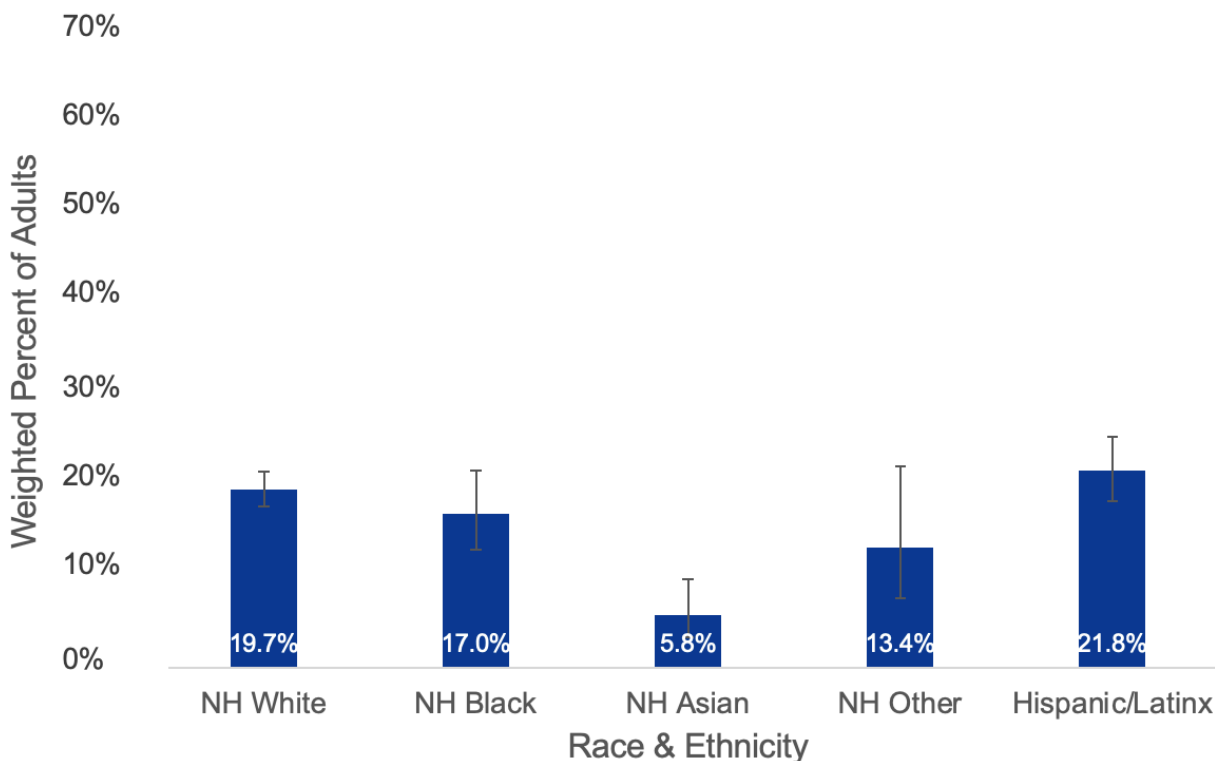


Note: \* data did not meet standards for reliable reporting and was suppressed

### *Binge or Chronic Drinking Risk*

In 2023, Hispanic/Latinx adults had the highest prevalence of binge or chronic drinking risk at 21.8% (95% CI: 18.4%–25.6%) (N = 335,274). White adults followed at 19.7% (95% CI: 17.8%–21.7%) (N = 1,099,636), and Black adults at 17.0% (95% CI: 13.1%–21.8%) (N = 208,659). Adults of all other races/ethnicities reported 13.4% (95% CI: 7.7%–22.3%) (N = 39,819). Asian adults had a statistically significant lower prevalence at 5.8% (95% CI: 3.4%–9.8%) (N = 31,027) compared to all other groups. Figure B12 depicts the prevalence of binge or chronic drinking risk by Racial and Ethnic group.

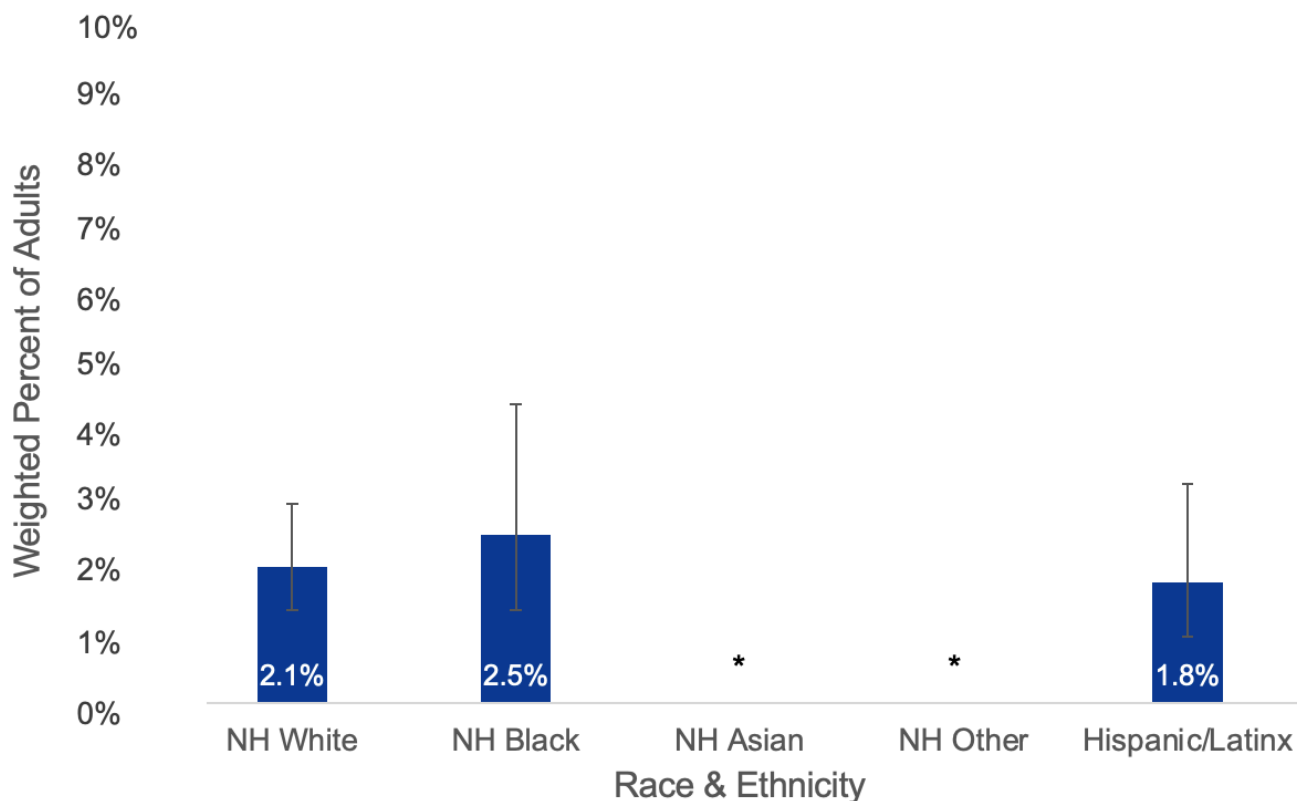
Figure B12: Percent of Binge or Chronic Drinking Risk by Race & Ethnicity, BRFSS 2023, Illinois



## Drinking and Driving

In 2023, the highest self-reported prevalence of driving after excessive alcohol use was among Black adults at 2.5% (95% CI: 1.4%–4.5%) (N = 31,436), followed by White adults at 2.1% (95% CI: 1.4%–3.0%) (N = 114,499). Hispanic/Latinx adults reported the lowest prevalence at 1.8% (95% CI: 1.0%–3.3%) (N = 28,267). Estimates for Asian adults and other Racial/Ethnic groups were suppressed due to insufficient sample sizes. No statistically significant differences were observed across Racial and Ethnic groups (Figure B13).

Figure B13: Percent of Driving After Drinking by Race & Ethnicity, BRFSS 2023, Illinois



Note: \* data did not meet standards for reliable reporting and was suppressed

## Adult Alcohol Consumption by Sexual Orientation

### *Current Drinking*

In 2023, 55.7% (95% CI: 53.6%–57.8%) of heterosexual adults reported current drinking (N = 4,152,920), compared to 58.0% (95% CI: 48.8%–66.7%) of LGB adults (N = 298,150). Estimates for non-heterosexual, non-LGB individuals were suppressed due to insufficient sample size. No statistically significant differences were observed by sexual orientation. The statewide prevalence estimates for current drinking by sexual orientation are depicted in Figure B14.

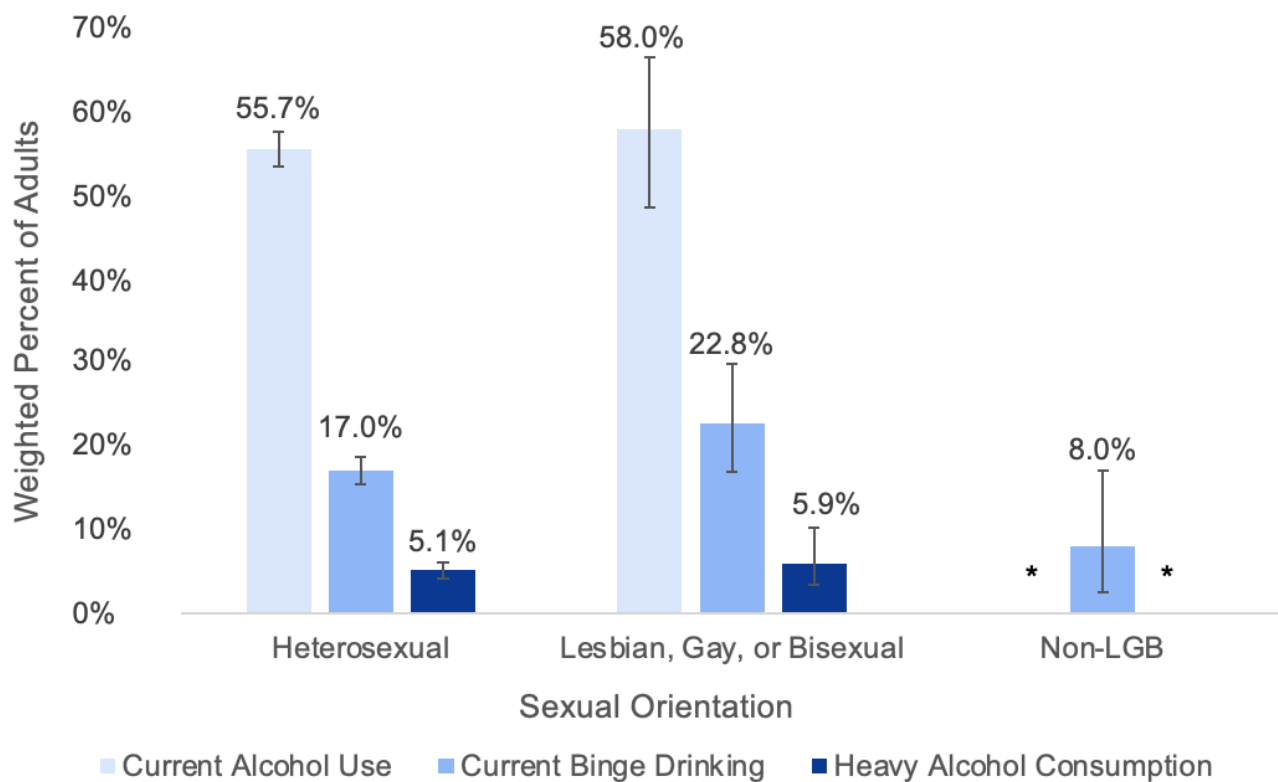
### *Current Binge Drinking*

In 2023, 22.8% (95% CI: 17.0%–29.9%) of LGB adults reported binge drinking (N = 114,668), compared to 17.0% (95% CI: 15.5%–18.7%) of heterosexual adults (N = 1,264,864). Among adults of all other sexual orientations, 8.0% (95% CI: 3.5%–17.1%) reported binge drinking (N = 9,111). No statistically significant differences in binge drinking prevalence were observed by sexual orientation (Figure B14).

### *Heavy Alcohol Consumption*

Among heterosexual adults, 5.1% (95% CI: 4.2%–6.1%), or about 378,294 of these adults reported heavy drinking in 2023. A non-statistically significant higher percentage (5.9%; 95% CI: 3.4%–10.2%), or about 30,531 LGB adults reported heavy drinking. Estimates for non-heterosexual, non-LGB individuals were suppressed due to insufficient sample size. The statewide prevalence estimates for heavy drinking by sexual orientation are depicted in Figure B14.

Figure B14: Percent of Adult Alcohol Consumption by Sexual Orientation, BRFSS 2023, Illinois

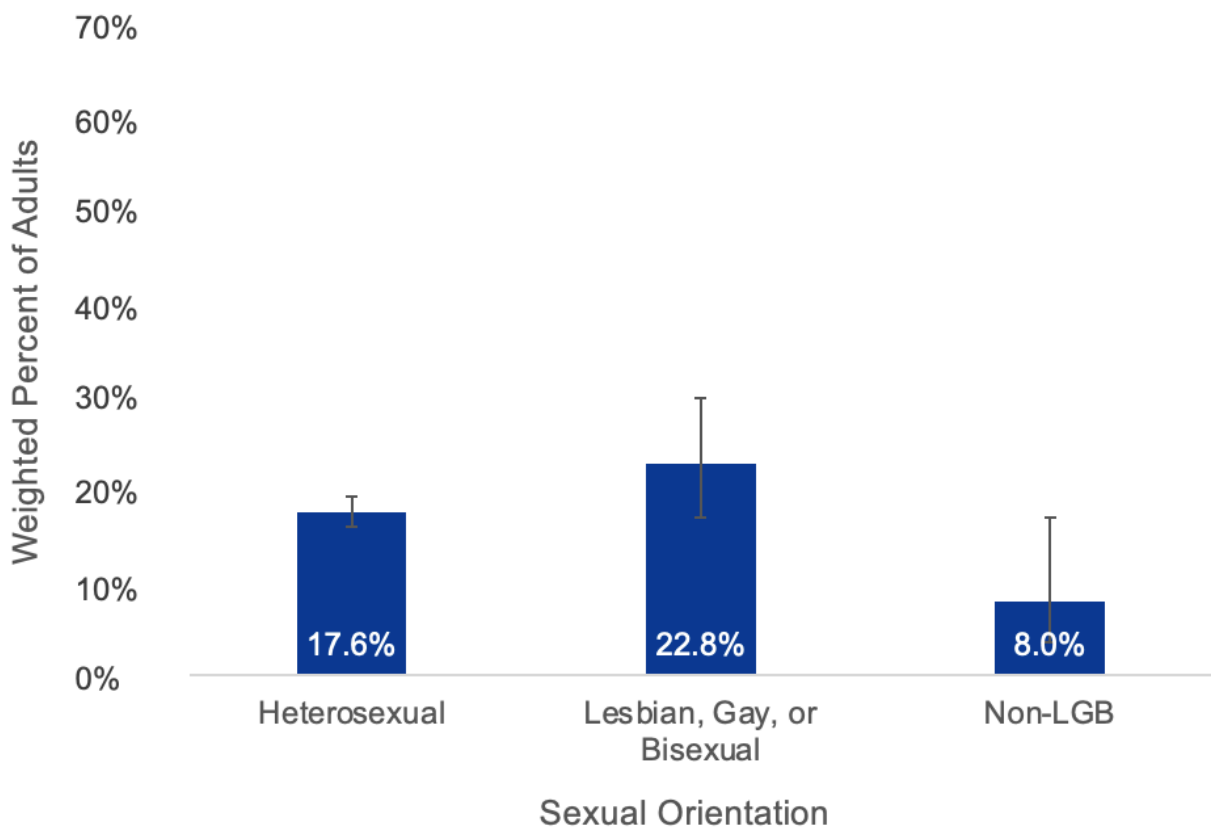


Note: \* data did not meet standards for reliable reporting and was suppressed

### *Binge or Chronic Drinking Risk*

In 2023, LGB adults had the highest prevalence of binge or chronic drinking risk at 22.8% (95% CI: 17.0%–29.9%) (N = 114,668), followed by heterosexual adults at 17.6% (95% CI: 16.0%–19.3%) (N = 1,304,779). Among non-heterosexual, non-LGB individuals, the prevalence was 8.0% (95% CI: 3.5%–17.1%) (N = 9,111). There was no statistically significant difference in the prevalence for binge or chronic drinking risk by sexual orientation among Illinois adults in 2023. The statewide prevalence estimates binge or chronic drinking risk by sexual orientation are depicted in Figure B15.

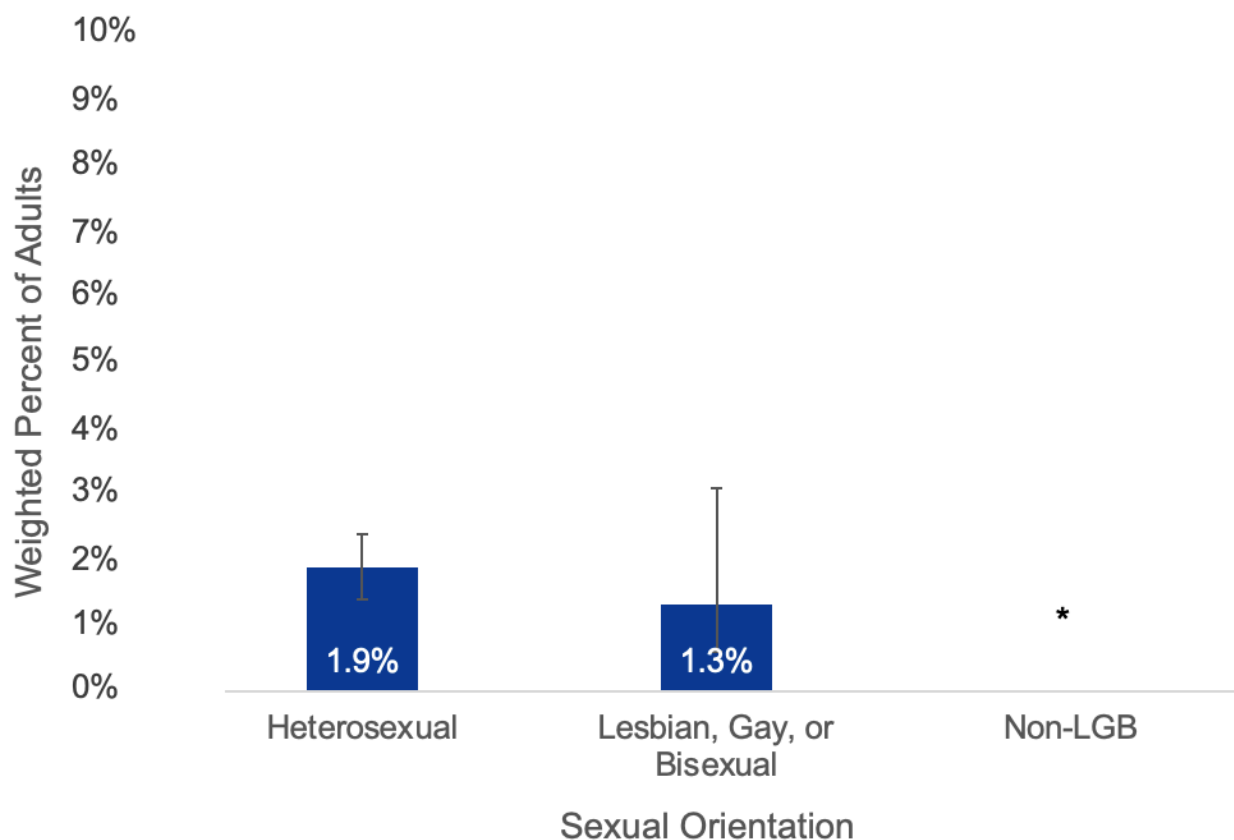
Figure B15: Percent of Binge or Chronic Drinking Risk by Sexual Orientation, BRFSS 2023, Illinois



## Drinking and Driving

In 2023, 1.9% (95% CI: 1.4%–2.7%) of heterosexual adults reported driving after drinking too much (N = 140,894), compared to 1.3% (95% CI: 0.6%–3.1%) of LGB adults (N = 6,752). Estimates for non-heterosexual, non-LGB individuals were suppressed due to insufficient sample size. There was no statistically significant difference in driving after excessive drinking by sexual orientation among Illinois adults in 2023. The statewide prevalence estimates for drinking and driving by sexual orientation are depicted in Figure B16.

Figure B16: Percent of Driving After Drinking by Sexual Orientation, BRFSS 2023, Illinois



Note: \* data did not meet standards for reliable reporting and was suppressed

## Adult Alcohol Consumption by Income Bracket

### *Current Drinking*

In 2023, current drinking prevalence increased linearly with income. Among adults earning less than \$15,000 annually, 35.1% (95% CI: 27.5%–43.5%) reported current drinking (N = 189,934). This rose to 42.7% (95% CI: 37.6%–47.9%) for those earning \$15,000–\$35,000 (N = 593,440), 49.2% (95% CI: 43.9%–54.4%) for \$35,000–\$50,000 earners (N = 587,501), and 58.2% (95% CI: 52.8%–63.4%) among those earning \$50,000–\$75,000 (N = 737,006). The highest prevalence was among adults earning \$75,000 or more annually at 69.0% (95% CI: 66.3%–71.6%) (N = 2,608,400). The statewide prevalence estimates for current drinking by income bracket are depicted in Figure B17.

### *Current Binge Drinking*

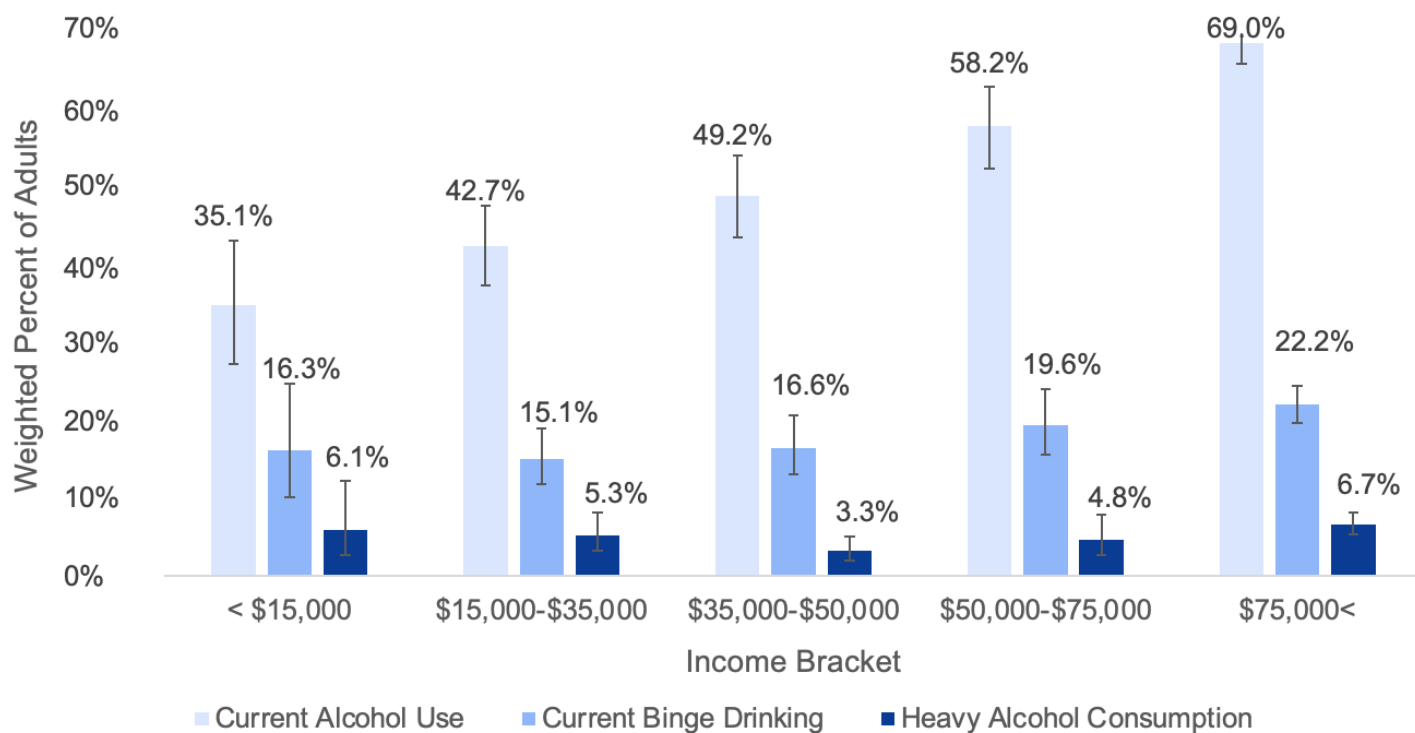
In 2023, adults earning over \$75,000 annually had the highest prevalence of current binge drinking at 22.2% (95% CI: 19.9%–24.7%) (N = 833,953). This was followed by 19.6% (95% CI: 15.7%–24.2%) among those earning \$50,000–\$75,000 (N = 247,544), and 16.6% (95% CI: 13.2%–20.8%) for the \$35,000–\$50,000 income group (N = 197,249). Lower estimates were found for those earning \$15,000–\$35,000 group at 15.1% (95% CI: 11.9%–19.1%) (N = 208,720), and 16.3% (95% CI: 10.2%–24.9%) among those earning less than \$15,000 annually (N = 87,583). There was no statistically significant difference in current binge drinking among Illinois adults by income bracket in 2023. The statewide prevalence estimates for current binge drinking by income bracket are depicted in Figure B17.

### *Heavy Alcohol Consumption*

Adults earning over \$75,000 annually had the highest prevalence of heavy drinking at 6.7% (95% CI: 5.4%–8.2%) (N = 250,131). This was followed by 6.1% (95% CI: 2.8%–12.4%) among those earning less than \$15,000 (N = 32,656), and 5.3% (95% CI: 3.3%–8.3%) for the

\$15,000–\$35,000 group (N = 73,339). Among those earning \$50,000–\$75,000, 4.8% (95% CI: 2.8%–8.0%) reported heavy drinking (N = 60,306), while the lowest prevalence was in the \$35,000–\$50,000 group at 3.3% (95% CI: 2.1%–5.1%) (N = 38,669). The \$35,000–\$50,000 group had a statistically significant lower prevalence compared to those earning over \$75,000 but no other significant differences were observed across income groups. The statewide prevalence estimates for heavy drinking by income bracket are depicted in Figure B17.

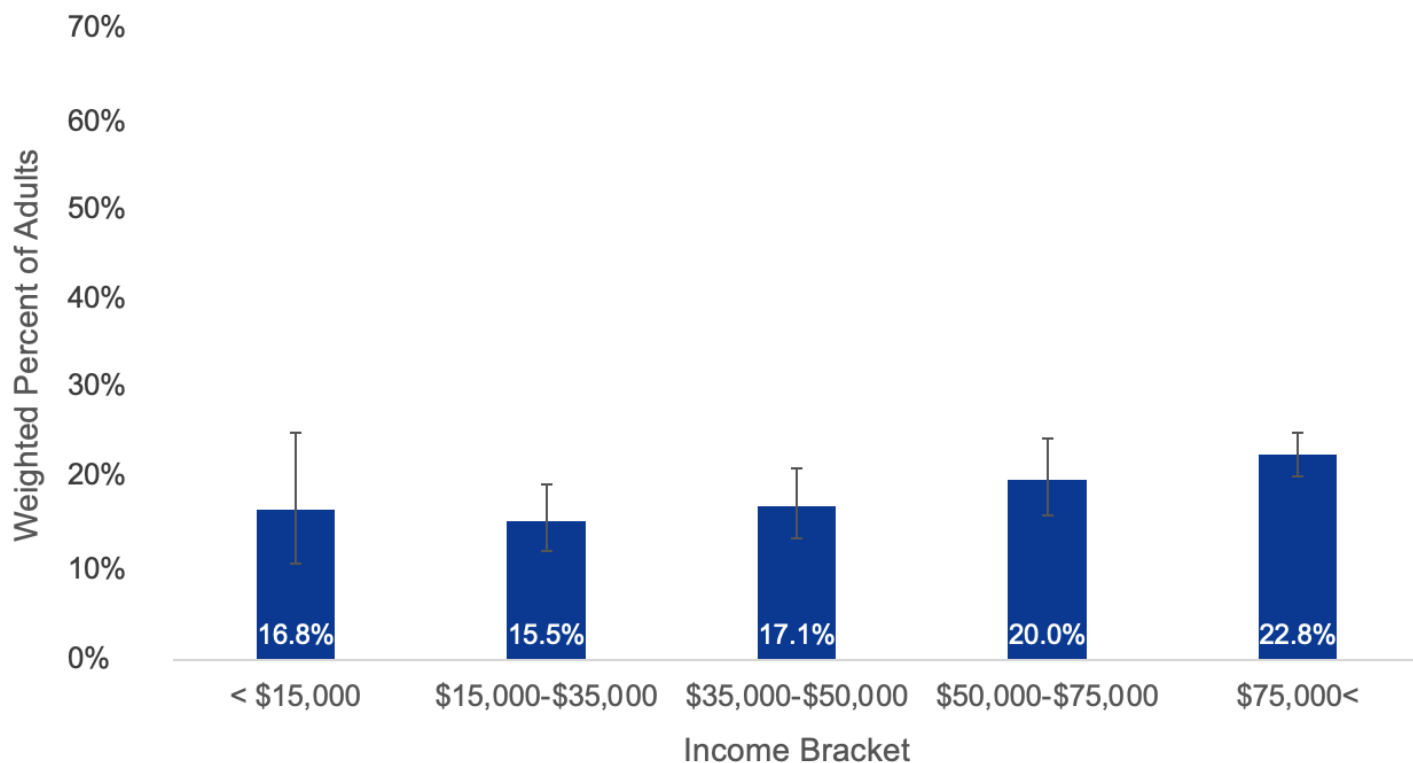
Figure B17: Percent of Adult Alcohol Consumption by Income, BRFSS 2023, Illinois



## Binge or Chronic Drinking Risk

Adults earning over \$75,000 annually had the highest percentage of those at risk at 22.8% (95% CI: 20.5%–25.3%) (N = 857,005). This was followed by 20.0% (95% CI: 16.1%–24.6%) among those earning \$50,000–\$75,000 (N = 253,295), and 17.1% (95% CI: 13.6%–21.3%) for the \$35,000–\$50,000 income group (N = 203,244). Among those earning less than \$15,000, 16.8% (95% CI: 10.7%–25.3%) were at risk (N = 90,309), while the lowest prevalence of those at risk was observed in the \$15,000–\$35,000 group at 15.5% (95% CI: 12.2%–19.5%) (N = 213,133). A statistically significant lower percentage was found among the \$15,000–\$35,000 income group compared to those earning over \$75,000. No other significant differences were observed across income brackets. The statewide prevalence estimates for binge or chronic drinking risk by income bracket are depicted in Figure B18.

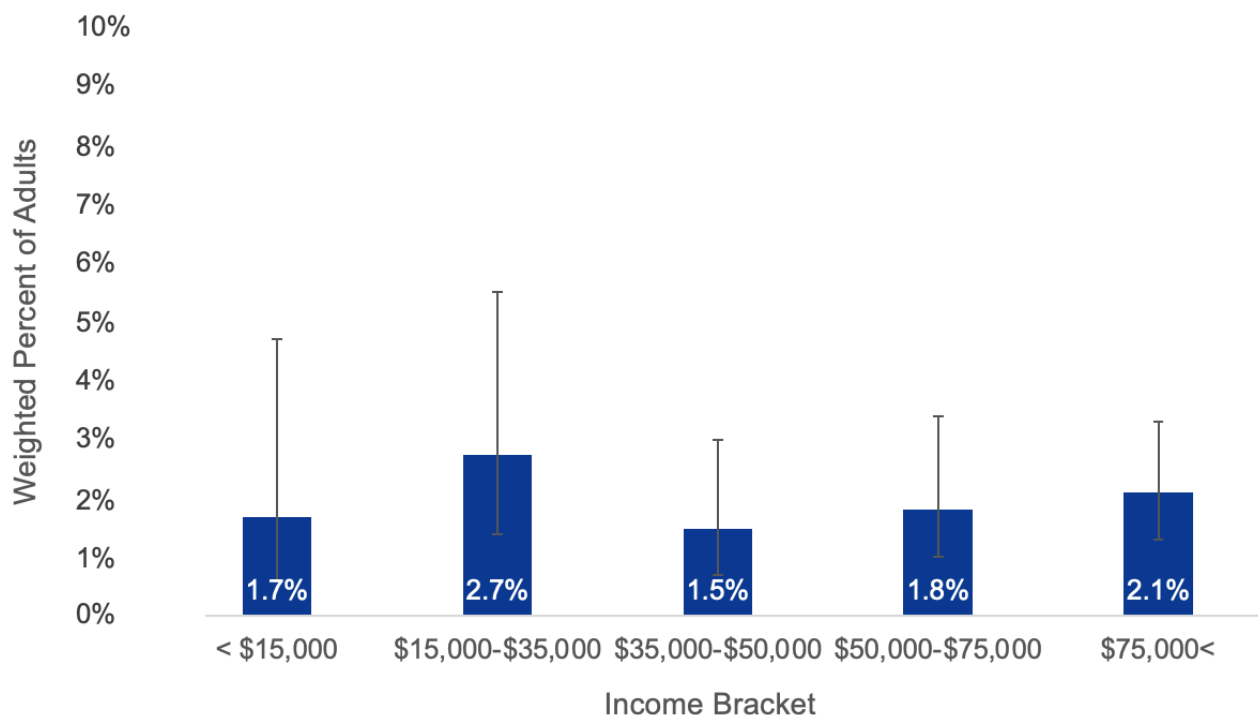
Figure B18: Percent of Binge or Chronic Drinking Risk by Income, BRFSS 2023, Illinois



## Drinking and Driving

In 2023, the highest prevalence of self-reported driving after consuming excessive alcohol was observed among adults with annual incomes between \$15,000 and \$35,000, at 2.7% (95% CI: 1.4%–5.5%), corresponding to an estimated 27,868 individuals. Adults earning \$75,000 or more reported the next highest prevalence at 2.1% (95% CI: 1.3%–3.3%), or approximately 78,826 individuals. Among those with annual incomes between \$50,000 and \$75,000, an estimated 22,757 adults (1.8%; 95% CI: 1.0%–3.4%) reported driving while intoxicated at least once. In the lowest income group (<\$15,000), the prevalence was 1.7% (95% CI: 0.6%–4.7%), or roughly 9,045 individuals. The lowest prevalence was observed in the \$35,000–\$50,000 income group at 1.5% (95% CI: 0.7%–3.0%), representing an estimated 17,778 individuals. There were no statistically significant differences in the prevalence of driving after drinking excessively across income brackets in 2023. Statewide prevalence estimates by income bracket are presented in Figure B19.

Figure B19: Percent of Driving After Drinking by Income, BRFSS 2023, Illinois



## Adult Alcohol Consumption by Education Attainment

### *Current Drinking*

In 2023, the prevalence of adults current drinking had a positive, linear relationship with education attainment. That is, 41.4% (95% CI: 35.0%-48.0%), or 392,941 adults with less than a high school degree reported currently drinking. A non-statistically significant, higher percentage (47.7%; 95% CI: 43.8%-51.6%), approximately 1,146,442 adults with a high school degree reported currently drinking. As compared to those with less than a high school degree, a statistically significant higher percentage of those with some college education or an associate's degree reported, with 54.9% (95% CI: 50.9%-58.8%), or about 1,506,414 adults reporting currently drinking. Compared to all other education attainment levels, a statistically significant higher percentage (67.1%; 95% CI: 64.6%-69.6%), or about 2,108,414 adults with a college degree or higher reported currently drinking. The statewide prevalence estimates for current drinking by education attainment level are depicted in Figure B20.

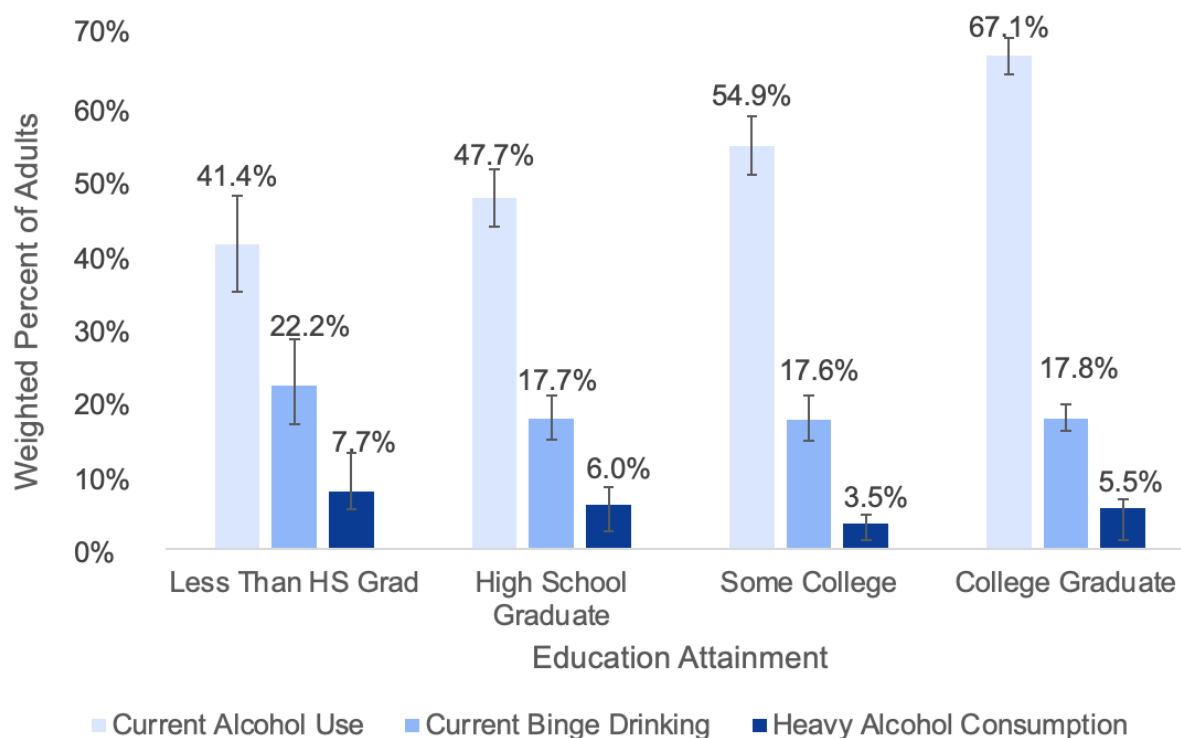
### *Current Binge Drinking*

In 2023, there were no statistically significant differences in binge drinking by education attainment level. The highest prevalence of binge drinking was among those adults with less than a high school degree with about 22.2% (95% CI: 17.0%-28.5%), or 206,460 adults reporting binge drinking. Roughly 17.7% (95% CI: 14.9%-20.9%), or 424,198 adults with a high school degree reported binge drinking. Those with some college education and a college degree reported similar estimates, with 17.6% (95% CI: 14.7%-20.9%) and 17.8% (95% CI: 16.0%-19.7%) reporting binge drinking, respectively. The statewide prevalence estimates for binge drinking by education attainment level are depicted in Figure B20.

## Heavy Alcohol Consumption

In 2023, there were no statistically significant differences in heavy alcohol consumption by education attainment level. Approximately 72,394, or 7.7% (95% CI: 4.5%-13.1%) of adults with less than a high school degree reported heavy drinking, the highest percentage compared to any other education attainment level. Following, 6.0% (95% CI: 4.3%-8.4%), or 144,441 adults with a high school degree reported heavy drinking. Roughly 3.5% (95% CI: 2.6%-4.7%), or 94,742 adults with some college education reported heavy drinking, the lowest of any education attainment group. Among those with a college degree or higher, 5.5% (95% CI: 4.5%-6.8%), or 172,798 adults reported heavy drinking. The statewide prevalence estimates for heavy drinking by education attainment level are depicted in Figure B20.

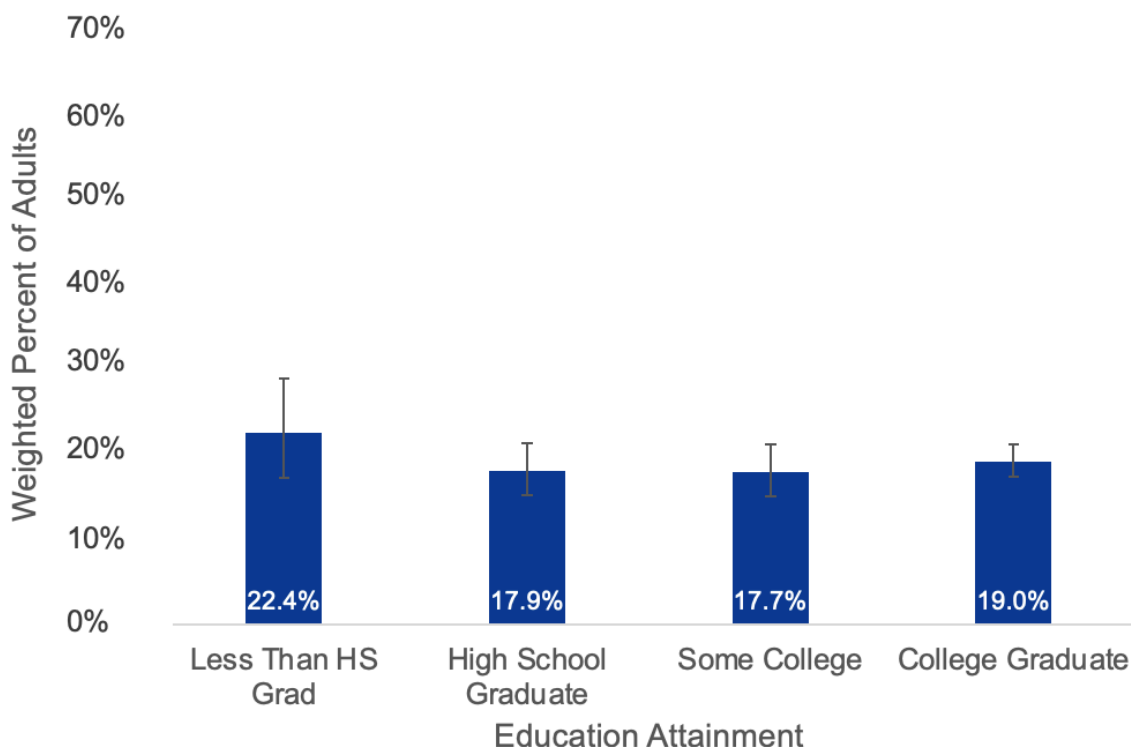
Figure B20: Percent of Adult Alcohol Consumption by Education Attainment Level, BRFSS 2023, Illinois



### *Binge or Chronic Drinking Risk*

In 2023, there was no statistically significant differences in the risk for binge or chronic drinking among Illinois adults by education attainment level. Among those with less than a high school degree, 22.4% (95% CI: 17.1%-28.7%), or about 207,228 adults were at risk for binge or chronic drinking. Following, 19.0% (95% CI: 17.2%-21.0%), or about 594,177 adults with a college degree or higher were at risk of binge or chronic drinking. Roughly 429,560, or 17.9% (95% CI: 15.1-21.1%) of adults with a high school degree were at risk for binge or chronic drinking. A slightly lower percentage (17.7%; 95% CI: 14.9%-21.0%), about 483,449 adults with some college education were at risk for binge or chronic drinking. The statewide prevalence estimates for risk of binge or chronic drinking by education attainment level are depicted in Figure B21.

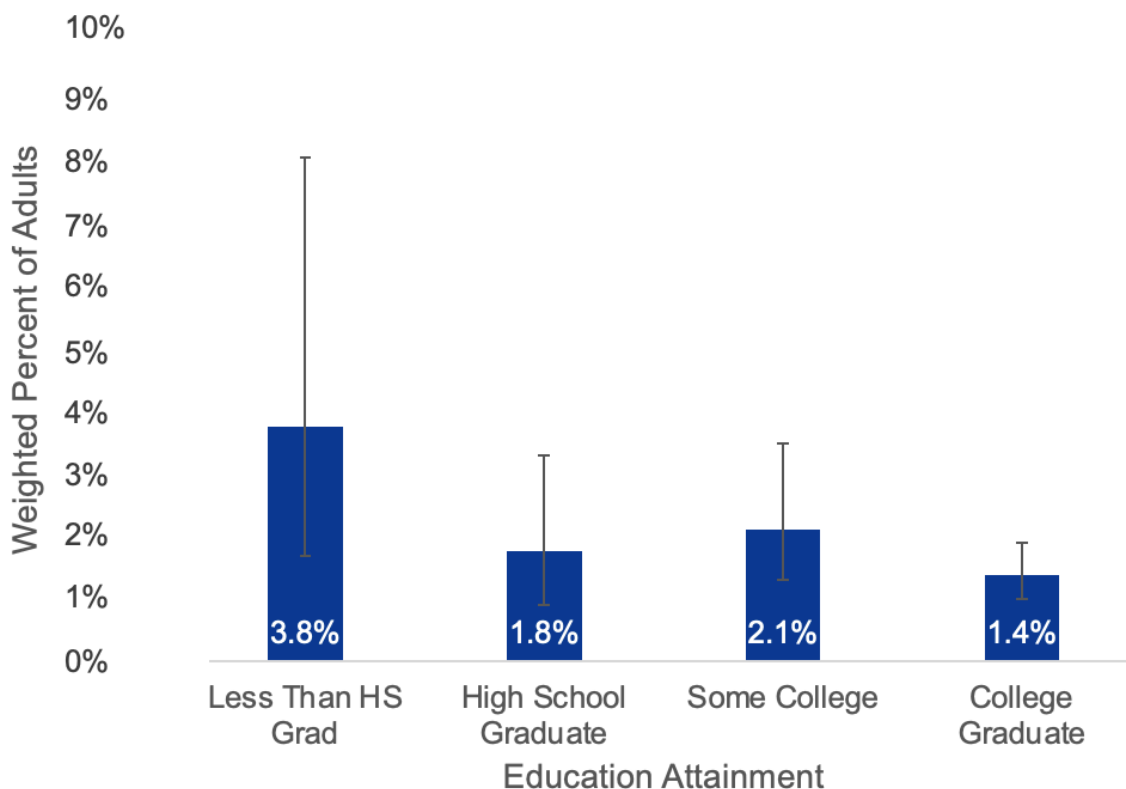
Figure B21: Percent of Binge or Chronic Drinking Risk by Education Attainment Level, BRFSS 2023, Illinois



## Drinking and Driving

In 2023, there were no statistically significant differences in the prevalence of drinking and driving among Illinois adults by education attainment level. The highest prevalence of self-reported drinking and driving was among those with less than a high school degree, with 35,482, or 3.8% (95% CI: 1.7%-8.1%) of these adults reporting having drunk too much and driven. Following, roughly 58,103 adults or 2.1% (95% CI: 1.3%-3.5%) of those with some college education reported drinking and driving. Among those with a high school degree, 42,515 adults, or about 1.8% (95% CI: 0.9%-3.3%) reported drinking and driving. The lowest prevalence was among those with a college degree or higher with 1.4% (95% CI: 1.0%-1.9%) or 42,931 of these adults reporting drinking and driving. The statewide prevalence estimates for drinking and driving by education attainment level are depicted in Figure B22.

Figure B22: Percent of Driving After Drinking by Education Attainment Level, BRFSS 2023, Illinois



## **Adult Alcohol Consumption by Urban vs. Rural Residency**

### *Current Drinking*

In 2023, there was no statistically significant difference in current drinking by resident geography (i.e., urban vs. rural). A non-statistically significant, higher percentage (55.9%; 95% CI: 53.8%-57.9%) of those residing in urban areas reported currently drinking, about 4,295,030 adults. Comparatively, 859,538 adults, or 55.3% (95% CI: 50.1%-60.5%) of those residing in rural areas reported currently drinking. The statewide prevalence estimates for current drinking by resident geography are depicted in Figure B23.

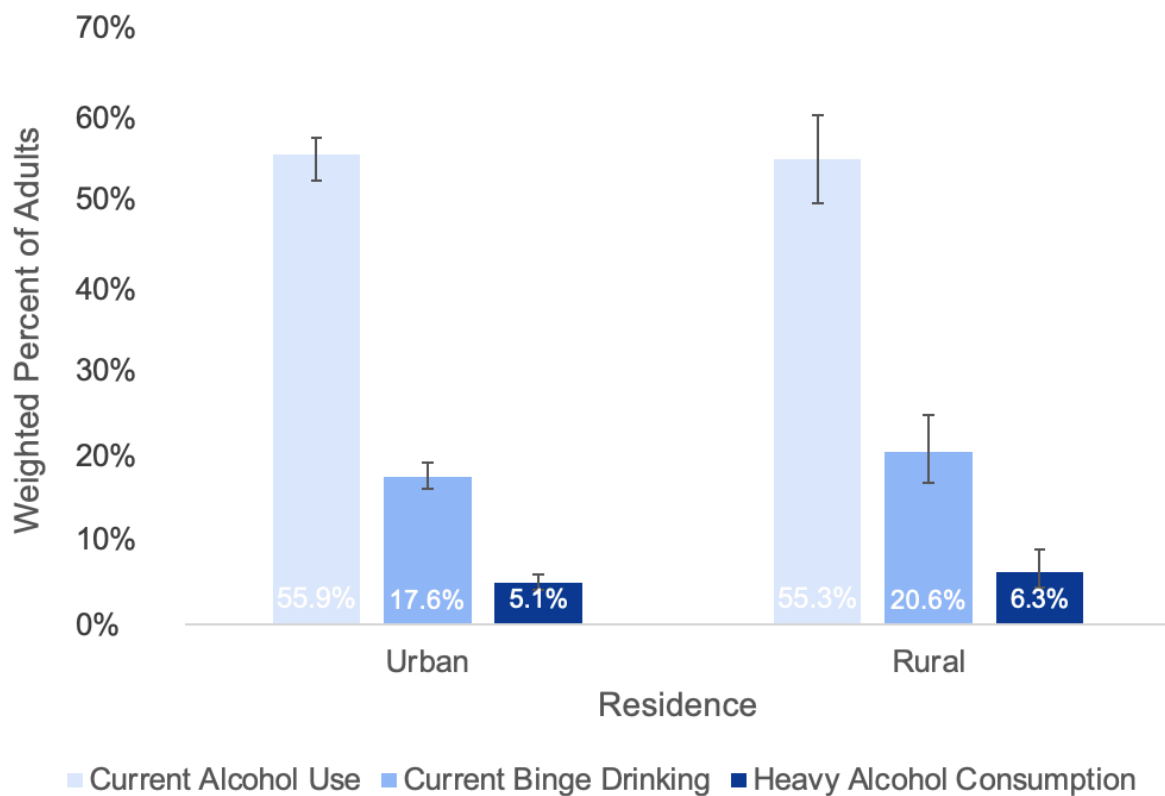
### *Current Binge Drinking*

There was no statistically significant difference in binge drinking by Illinois resident geography. A slightly lower percentage (17.6%; 95% CI: 16.1%-19.3%), or about 1,346,934 urban residents reported binge drinking. Among rural residents, roughly 317,815, or about 20.6% (95% CI: 16.9%-24.9%) reported binge drinking. The statewide prevalence estimates for binge drinking by resident geography are depicted in Figure B23.

### *Heavy Alcohol Consumption*

There was no statistically significant difference in heavy drinking by Illinois resident geography. Roughly 386,789 adults, or 5.1% (95% CI: 4.2%-6.0%) of those residing in urban areas reported heavy drinking. A higher percentage (6.3%; 95% CI: 4.4%-9.0%), about 97,587 adults residing in rural areas reported heavy drinking. The statewide prevalence estimates for heavy drinking by resident geography are depicted in Figure B23.

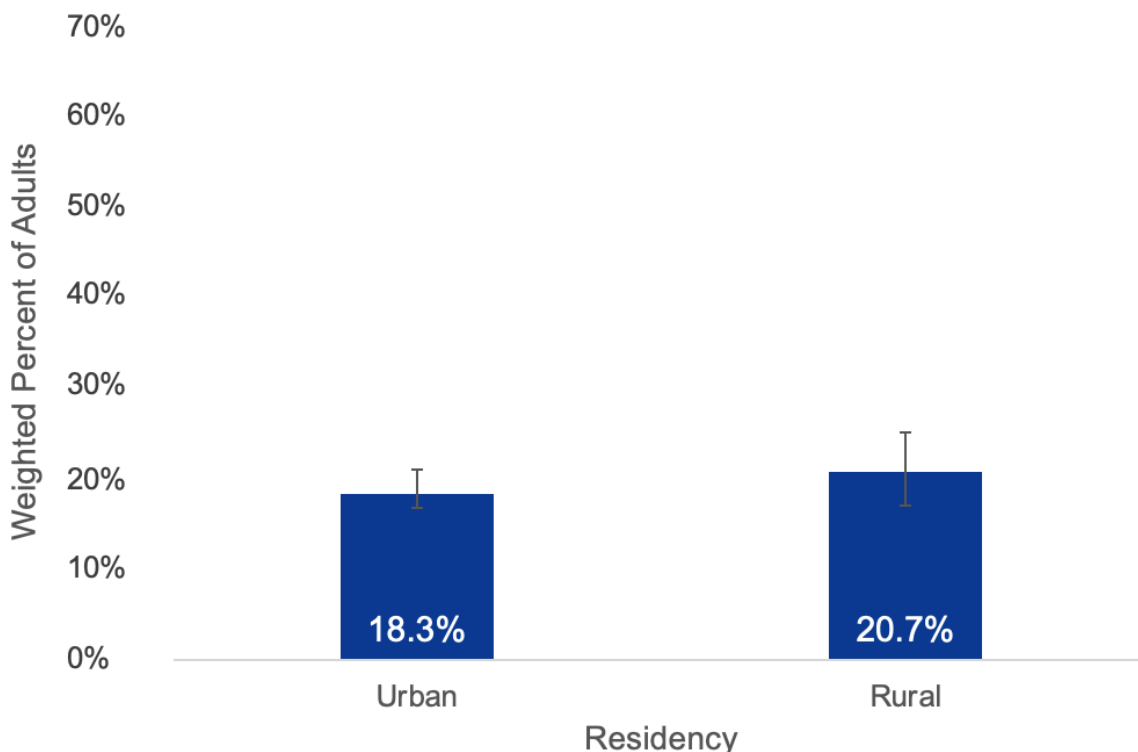
Figure B23: Percent of Adult Alcohol Consumption by Resident Geography, BRFSS 2023, Illinois



### *Binge or Chronic Drinking Risk*

In 2023, there was no statistically significant difference in the risk for binge or chronic drinking among Illinois adults by resident geography. However, a higher percentage of rural residence were at risk for binge or chronic drinking, with roughly 20.7% (95% CI: 17.0%-25.0%), or about 320,108 adults at risk. Comparatively, 18.3% (95% CI: 16.7%-20.9%), or roughly 1,394,307 adults residing in urban areas were at risk for binge or chronic drinking. The statewide prevalence estimates for binge or chronic drinking risk by resident geography are depicted in Figure B24.

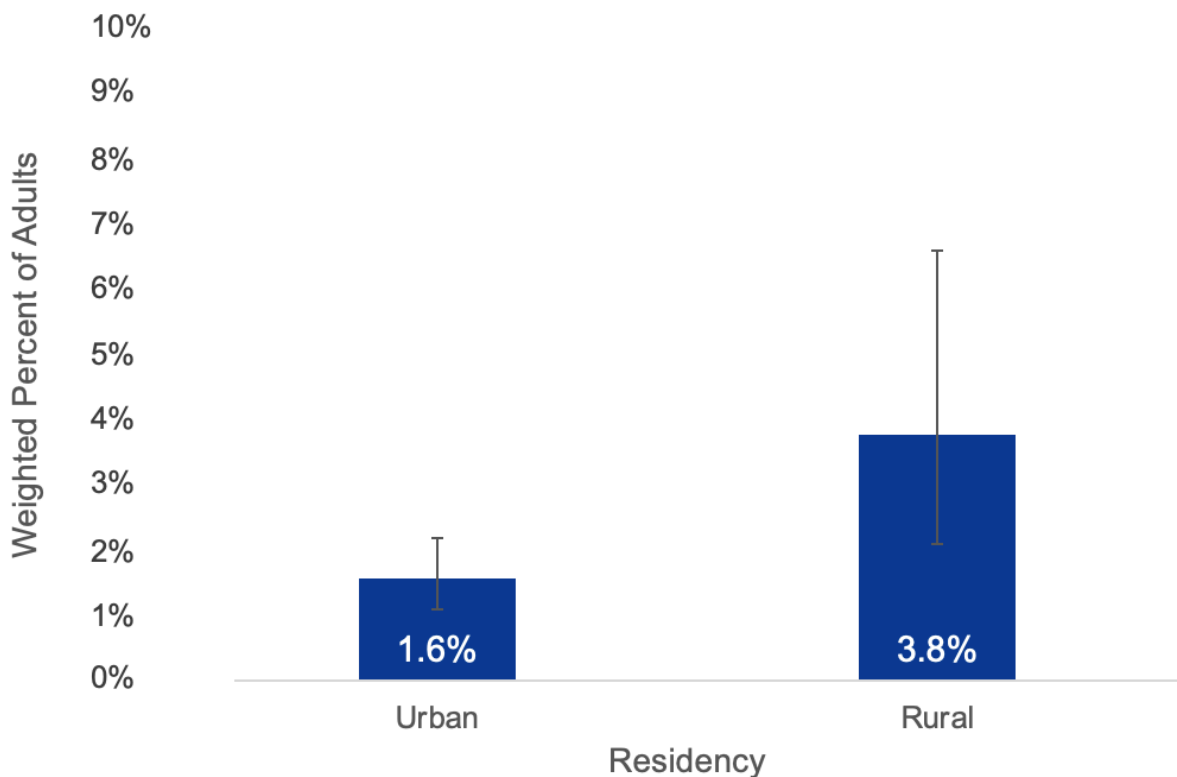
Figure B24: Percent of Binge or Chronic Drinking Risk by Resident Geography, BRFSS 2023, Illinois



## Drinking and Driving

There was no statistically significant difference in self-reported drinking and driving by resident geography. However, a notably higher percentage (3.8%; 95% CI: 2.1%-6.6%), or about 58,423 of adults residing in rural areas reported drinking and driving. Roughly 120,608 adults, or 1.6% (95% CI: 1.1%-2.2%) of those residing in urban areas reported drinking and driving. The statewide prevalence estimates for drinking and driving by resident geography are depicted in Figure B25.

Figure B25: Percent of Driving After Drinking by Resident Geography, BRFSS 2023, Illinois



## Adult Alcohol Consumption by Disability Status

### *Current Drinking*

In 2023, adults with a disability have a significantly lower rate of alcohol consumption (59.8%; 95% CI: 57.6%-62.0%) as compared to adults with no functional disability 44.9% (95% CI: 41.1%-48.7%). Statewide prevalence estimates for current drinking by disability status are depicted in Figure B26.

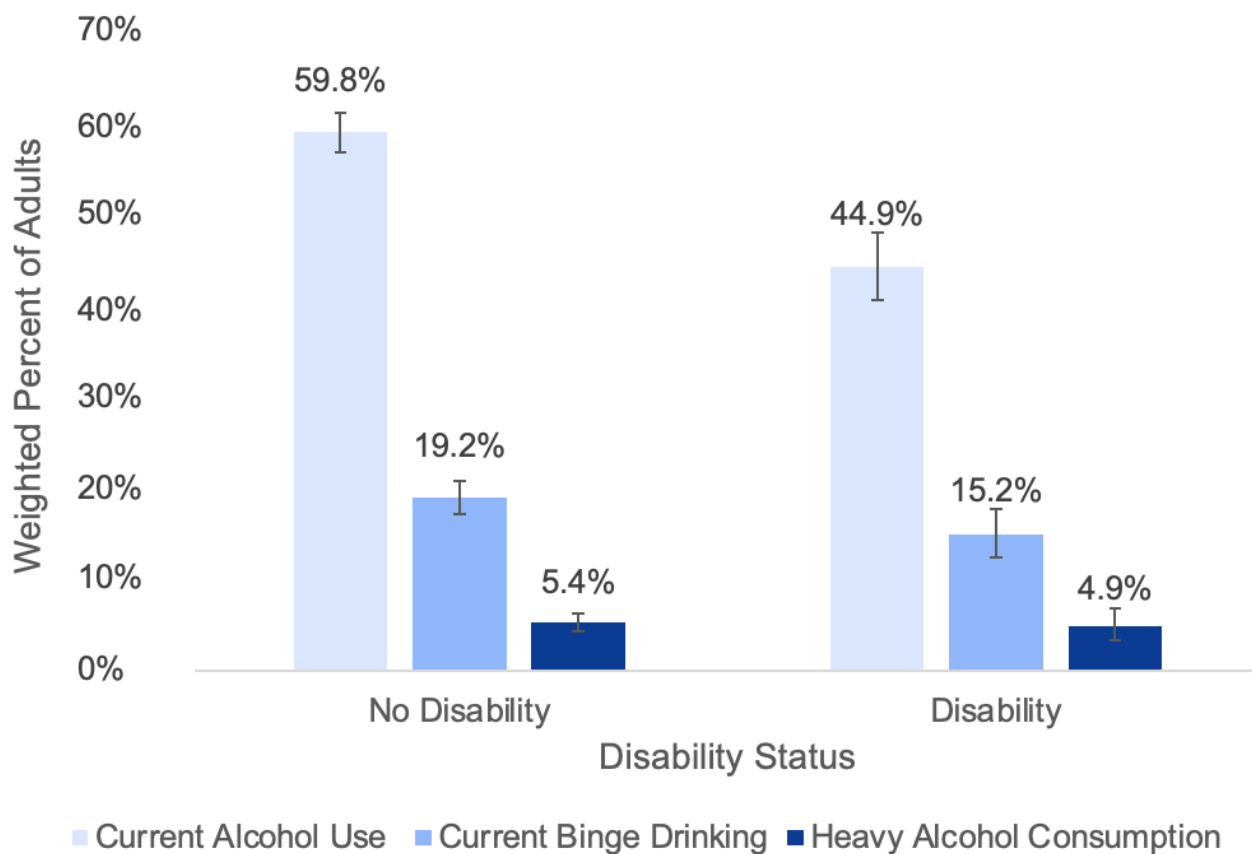
### *Current Binge Drinking*

Roughly 1,289,303 adults, or 19.2% (95% CI: 17.5%-21.1%) of those adults with no functional disability reported binge drinking in 2023. Whereas 372,042 adults, or 15.2% (95% CI: 12.7%-18.0%) of those adults living with a disability reported binge drinking. Note that, while not statistically significant, there was roughly a 4% disparity in binge drinking prevalence between those living with a functional disability and those without. Statewide prevalence estimates for current drinking by disability status are depicted in Figure B26.

### *Heavy Alcohol Consumption*

Among adults with no functional disability, 5.4% (95% CI: 4.5%-6.4%), or 360,700 adults reported heavy drinking. A slightly lower percentage, 4.9% (95% CI: 3.5%-7.0%), or 121,804 adults living with a disability reported heavy drinking. There was no significant difference in adult heavy drinking by disability status in 2023. Statewide prevalence estimates for heavy drinking by disability status are depicted in Figure B26.

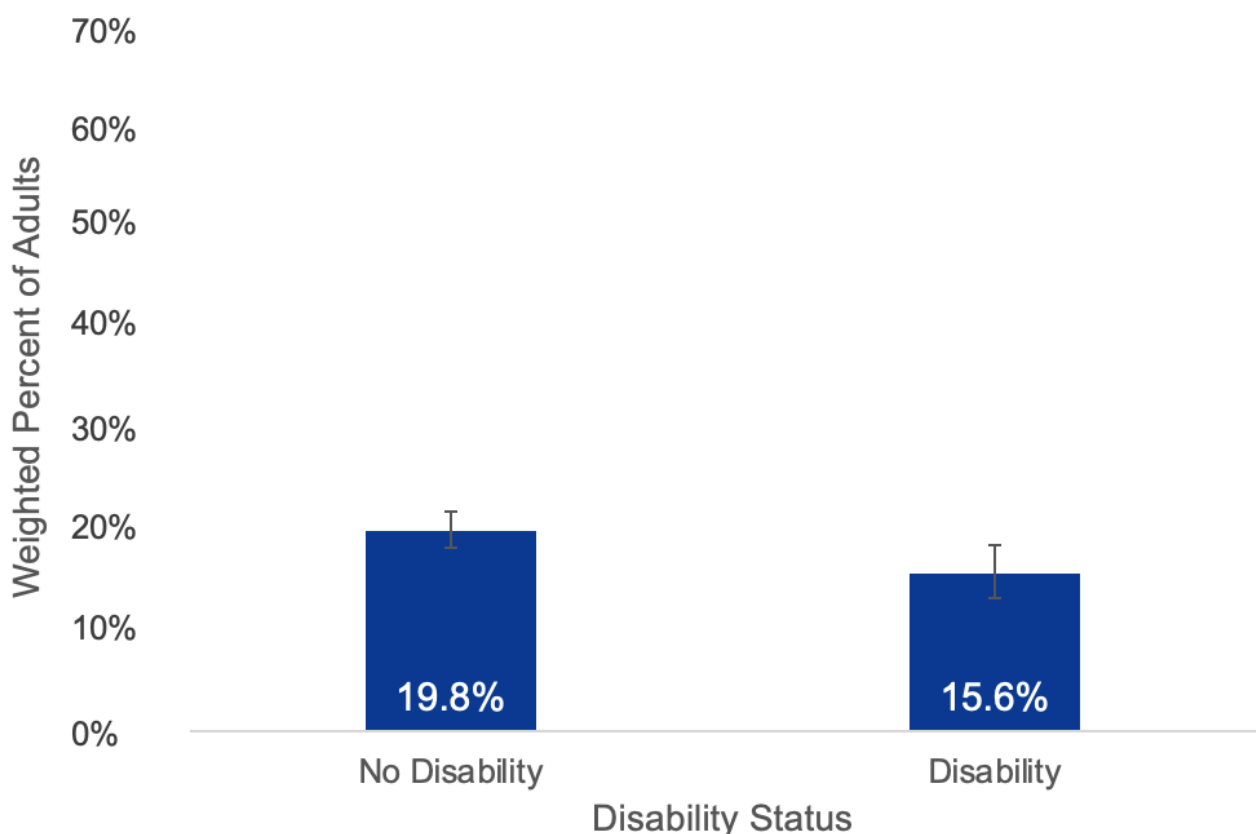
Figure B26: Percent of Adult Alcohol Consumption by Disability Status, BRFSS 2023, Illinois



### *Binge or Chronic Drinking Risk*

Among those adults with no functional disability, 19.8% (95% CI: 18.1%-21.7%), or 1,328,286 adults were at risk for binge or chronic drinking. A lower, non-statistically significant percentage (15.6%; 95% CI: 13.2%-18.4%), or 382,724 adults living with a disability were at risk for chronic or binge drinking. The statewide prevalence estimates for binge or chronic drinking risk by disability status are depicted in Figure B27.

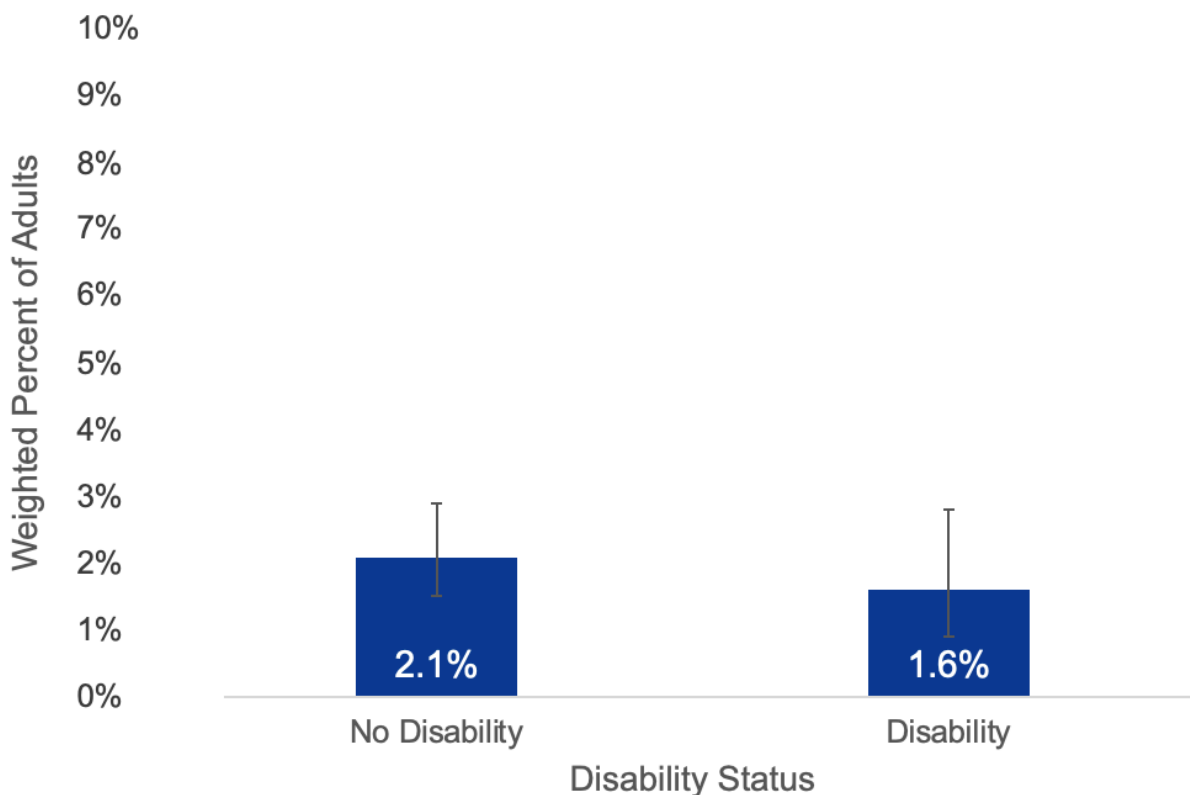
Figure B27: Percent of Binge or Chronic Drinking Risk by Disability Status, BRFSS 2023, Illinois



## Drinking and Driving

Among those adults with no functional disability, 2.1% (95% CI: 1.5%-2.9%), or 139,370 reported drinking and driving. Among adults living with a functional disability, 1.6% (95% CI: 0.9%-2.8%), or 39,660 adults reported drinking and driving. There was no statistically significant difference in the prevalence of drinking and driving by adult disability status in 2023. The statewide prevalence estimates for drinking and driving by disability status are depicted in Figure B28.

Figure B28: Percent of Driving After Drinking by Disability Status, BRFSS 2023, Illinois



# Maternal Alcohol Consumption

## Introduction

Alcohol use—particularly heavy or binge drinking—among individuals of reproductive age is an important public health concern as these drinking habits increase risks for miscarriage, preterm birth, stillbirth, fetal alcohol syndrome, and sudden infant death syndrome (Bailey & Sokol, 2011; Odendaal et al., 2021). Over the past six decades, public awareness campaigns and improvements in prenatal care and healthcare access have contributed to reductions in the prevalence and severity of alcohol-related birth outcomes (CDC, 2002; Hankin, 2002; Reid et al., 2015). However, recent trends—including increased alcohol use during the COVID-19 pandemic—suggest that shifts in drinking behaviors, especially among those with a history of substance use, warrant close observation (Boschuetz et al., 2020; Joyce et al., 2022). Moreover, early pregnancy is a critical window for fetal development, making it essential to monitor pre-pregnancy alcohol use. In doing so, we may identify at-risk groups and support the development of tailored interventions and messaging among clinicians and prenatal care providers. Surveillance efforts are not intended to prescribe personal behavior but to inform public health initiatives that promote healthy pregnancies and reduce adverse outcomes for both mother and child.

## Methodology

In Illinois, the Pregnancy Risk Assessment Monitoring System (PRAMS) serves as the primary tool for monitoring alcohol use patterns among individuals before and during pregnancy. The PRAMS samples females who had a live birth, with females from some groups sampled at a higher rate to ensure adequate data are available. Each participating site samples between 1,000 and 3,000 women annually.

While PRAMS Phase 9 (2023-present) includes specific questions about heavy drinking *during* pregnancy, this data was not yet available for inclusion in the present analysis. As a result, this report relies on PRAMS Phase 8 data (2016–2022), which captures information on alcohol consumption prior to pregnancy—offering valuable insight into drinking behaviors among individuals who became pregnant during the COVID-19 pandemic (2020–2022). In lieu of PRAMS data pertaining to alcohol use *during* pregnancy, live birth certificates for years 2020–2024 were used for analyses in this report.

Note that 2024 live birth certificates were provisional and that cell sizes <10 were suppressed to adhere to reliability and confidentiality guidelines.

More detailed information about the PRAMS sampling methodology, data weighting, and questionnaire design is available through the [CDC PRAMS website](#) and the [Illinois PRAMS website](#).

### *A Note on Social Desirability Bias*

Self-reported data on alcohol use are susceptible to social desirability bias, wherein respondents may underreport behaviors that are socially stigmatized, such as drinking during pregnancy. This tendency can lead to underestimation of the true prevalence of alcohol consumption, particularly when surveys are linked to health records or conducted postpartum. When interpreting PRAMS data or similar surveillance tools, it is critical to consider this limitation and recognize that reported rates of alcohol use likely reflect a conservative estimate.

### **Ethical Implications & Considerations**

National PRAMS data indicate that most individuals become aware of their pregnancy between 6–8 weeks gestation (Watson & Angelotta, 2022). It is important to acknowledge that heavy or chronic alcohol use throughout pregnancy is uncommon and often associated with early pregnancy loss rather than live birth outcomes (Strandberg-Larsen et al., 2008; Sundermann et al., 2019; Saxoy et al., 2023).

We acknowledge that by addressing the issue of substance use during pregnancy there is a potential blame directed at mothers, and that it is important to approach the topic with empathy and understanding, recognizing the complexities of individual circumstances. That is, substance use during pregnancy (e.g., heavy alcohol use) is influenced by a multitude of factors, including but not limited to past use, unintended pregnancy, level of education, employment, age, comorbid physical and mental health conditions, adverse childhood experiences, environmental stressors, intimate partner violence, access to substances, and level of knowledge surrounding the impact of substance use on fetal development.

# **Pre-Pregnancy Alcohol Use: Findings from the Pregnancy Risk Assessment Monitoring System, Illinois, 2020-2022**

## **Introduction**

The Illinois Pregnancy Risk Assessment Monitoring System (IL-PRAMS) is an ongoing population-based survey of people who have recently delivered a live born infant in Illinois. PRAMS, located in the Illinois Center for Health Statistics, is an important part of the Illinois Department of Public Health's surveillance activities and is part of a national initiative by the CDC to reduce infant morbidity and mortality. PRAMS collects information from mothers about their behaviors and experiences before, during and immediately after pregnancy. The unique information collected by the PRAMS program is used by health professionals, administrators, policy makers, and researchers to develop and to modify programs and policies to improve the health of women and children in Illinois.

## **Methodology**

IL-PRAMS data was obtained for years 2020-2022 directly from the IDPH from the IL-PRAMS working group, embedded in the Office of Planning, Policy, & Statistics. Current drinking was defined as at least 1 or more alcohol drinks within the 3 months before pregnancy. Heavy drinking was defined as having consumed 8 or more drinks in a week at least once within the 3 months before pregnancy. All data was cleaned and analyses performed using SAS (SAS Institute Version 9.4).

Statewide pre-pregnancy alcohol use was first obtained and then stratified by age and education attainment. T-tests were conducted to determine statistically significant relationships. Note that sample size restrictions did not allow for the stratification of pre-pregnancy heavy alcohol use by racial and ethnic groups.

## Findings

### *Pre-Pregnancy Drinking & Heavy Drinking*

From 2020-2022, approximately 51.4% (95% CI: 48.1%-54.9%) of Illinois PRAMS respondents reported having been currently drinking alcohol within the 3 months prior to pregnancy. Approximately 4.4% (95% CI: 3.5%-5.4%) of respondents reported at least one instance of heavy drinking (8 or more drinks a week) within the 3 months prior to the start of their pregnancy. Figure C1 and Table C1 depict pre-pregnancy alcohol consumption in Illinois from 2020-2022.

Figure C1: Pre-Pregnancy Alcohol Consumption Habits, Illinois PRAMS, 2020-2022

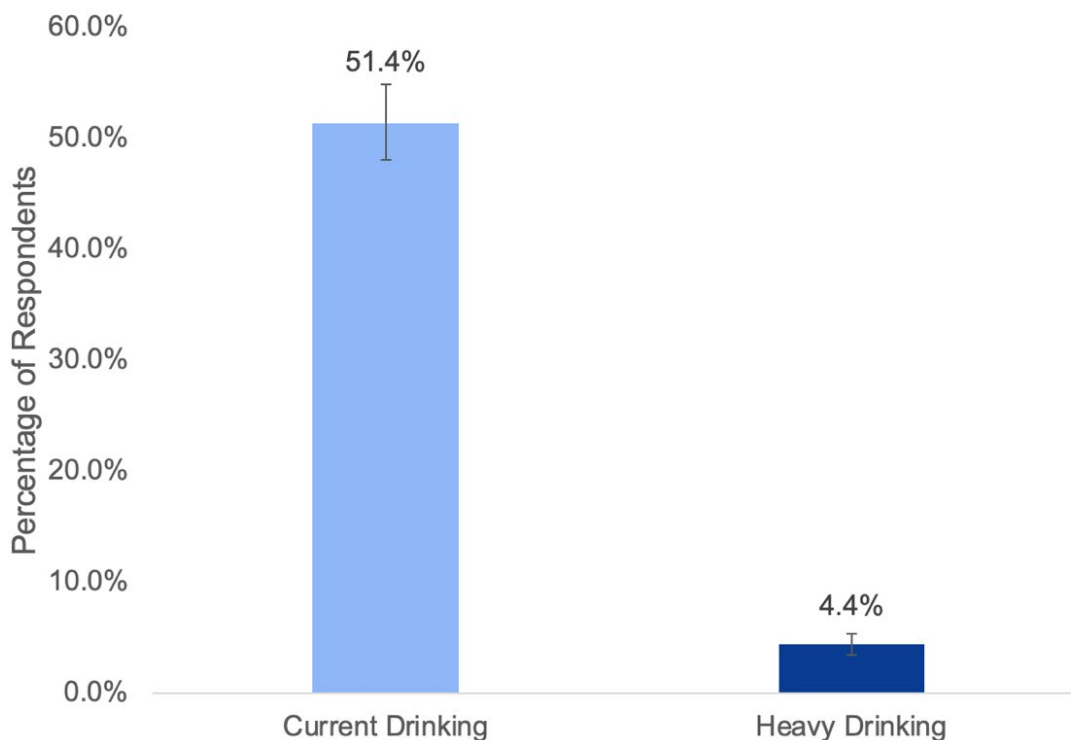


Table C1: Weighted Frequency of Pre-Pregnancy Alcohol Consumption Habits, Illinois PRAMS, 2020-2022

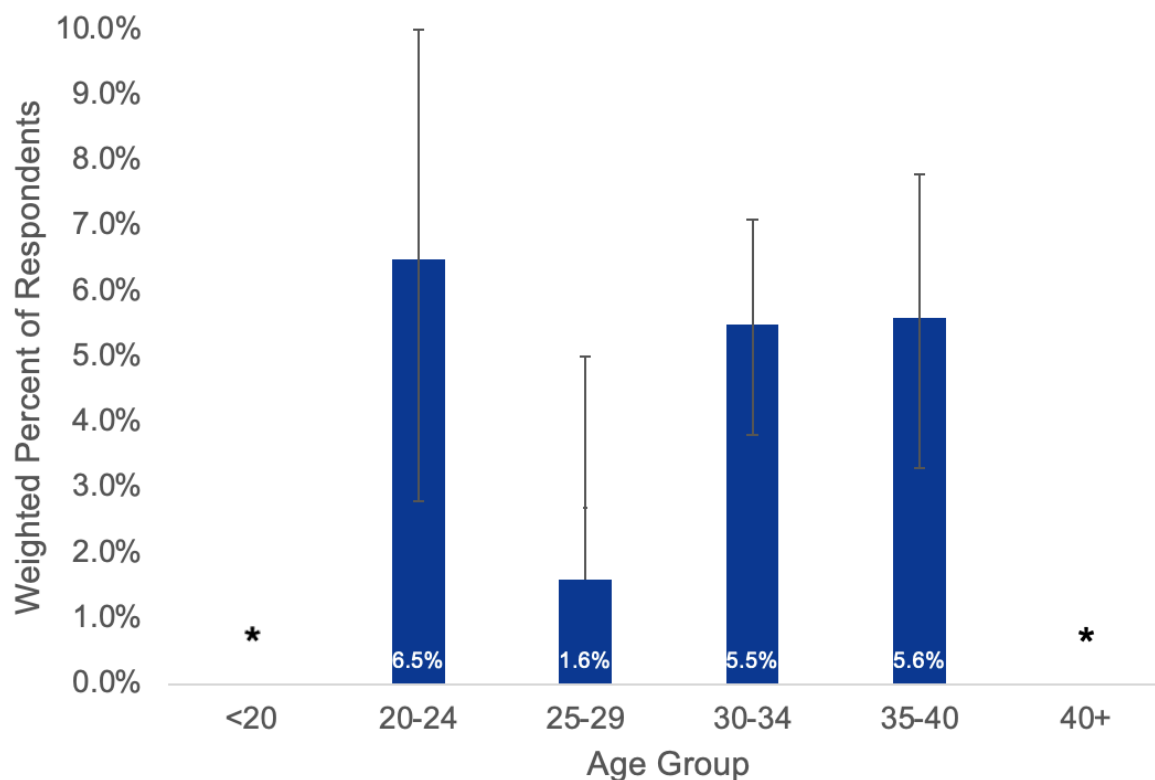
Alcohol Consumption	Weighted % (95% CI)	Unweighted N	Weighted N
Current Heavy Drinking	4.4% (3.5%-5.4%)	100	3,766
Current Drinking	51.4% (48.1%-54.9%)	537	19,282

## Pre-Pregnancy Heavy Drinking by Age

Among Illinois respondents, the prevalence of pre-pregnancy heavy drinking varied by age group. The highest reported rate was among adults aged 20–24 years (6.5%; 95% CI: 2.8-10.0), followed by those aged 35–40 years (5.6%; 95% CI: 3.3-7.8) and 30–34 years (5.5%; 95% CI: 3.8-7.1). In contrast, adults aged 25–29 reported a substantially lower prevalence at 1.6% (95% CI: 0.5-2.7). Data for individuals under 20 and over 40 did not meet standards for reliable reporting and were suppressed. As compared to those aged 25-29, those 20-24, 30-34, and 35-40 had significantly higher prevalence of pre-pregnancy heavy drinking ( $p < 0.02$ ). Figure C2 depicts the statewide estimates of pre-pregnancy heavy drinking by age group.

These findings underscore the need for universal, age-inclusive alcohol screening and brief intervention strategies. For clinicians, this underscores the importance of integrating preconception counseling and routine alcohol use assessments into primary and obstetric care, regardless of age, to support early intervention and reduce the risk of alcohol-exposed pregnancies.

Figure C2: Heavy Alcohol Consumption within 3 Months Prior to Pregnancy by Maternal Age, PRAMS 2020-2022, Illinois



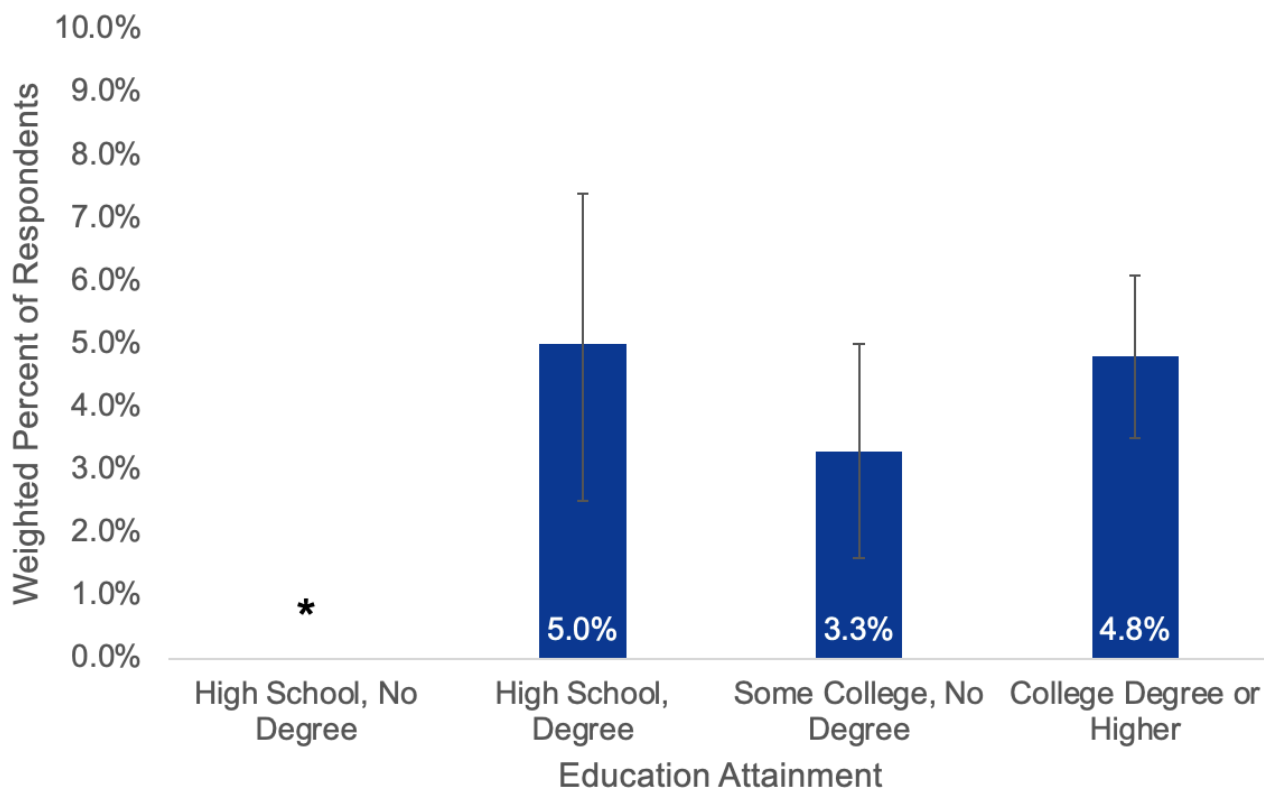
Note: \*data did not meet standards for reliable reporting and was suppressed

### Pre-Pregnancy Heavy Drinking by Education Attainment

From 2020-2022, the prevalence of heavy drinking before pregnancy varied by educational attainment. The highest rates were observed among respondents with a high school diploma (5.0%; 95% CI: 2.5-7.4) and those with a college degree or higher (4.8%; 95% CI: 3.5-6.1). Individuals with some college but no degree reported a lower prevalence at 3.3% (95% CI: 1.6-5.0). Data for respondents without a high school diploma were suppressed due to reliability concerns. Figure C3 depicts the statewide prevalence estimates of pre-pregnancy heavy drinking by education attainment.

These findings suggest that pre-pregnancy heavy drinking is not linearly associated with education attainment. Both lower and higher educational attainment groups reported elevated prevalence, underscoring the need for universal screening and alcohol-use counseling regardless of education level during preconception and prenatal care.

Figure C3: Heavy Alcohol Consumption 3 Months Pre-Pregnancy by Maternal Education Attainment, PRAMS 2020-2022, Illinois



Note: \*data did not meet standards for reliable reporting and was suppressed

# Alcohol Use During Pregnancy: Findings from the Illinois Vital Records System Birth Records, 2020-2024

## Introduction

In order to obtain a current estimate of heavy alcohol use during pregnancy, Illinois birth certificates for years 2020-2024 were used. Note that Illinois PRAMS Phase 9 (2023-Present) survey data will be used in future editions of this report as the primary surveillance method for heavy alcohol use *during* pregnancy.

## Methodology

Birth certificates were obtained directly from the IDPH Vital Records System for years 2020-2024. Records were selected if the mother was a resident of Illinois and if the maternal details file indicated the mother drank during pregnancy (Yes/No). The number of drinks per week were dichotomized as either heavy drinking ( $8 \leq$  drinks/week) or non-heavy drinking ( $\leq 7$  drinks/week). Heavy drinking was further stratified by maternal age, education attainment, race and ethnicity to examine potential disparities in alcohol consumption patterns during pregnancy.

All data cleaning and statistical analyses were performed in SAS (SAS Institute Version 9.4). Note that future editions of this surveillance report will include PRAMS Phase 9 as the primary method of monitoring alcohol consumption during pregnancy.

## Findings

From 2020-2024 Illinois had approximately 634,946 births. Of which, 3,466 records ( $<.01\%$ ) indicated that the mother reported drinking during pregnancy. Of the 3,466 files that reported they drank, only 141 reported heavy drinking.

**52.2** in 10,000

Any Alcohol Use  
During Pregnancy



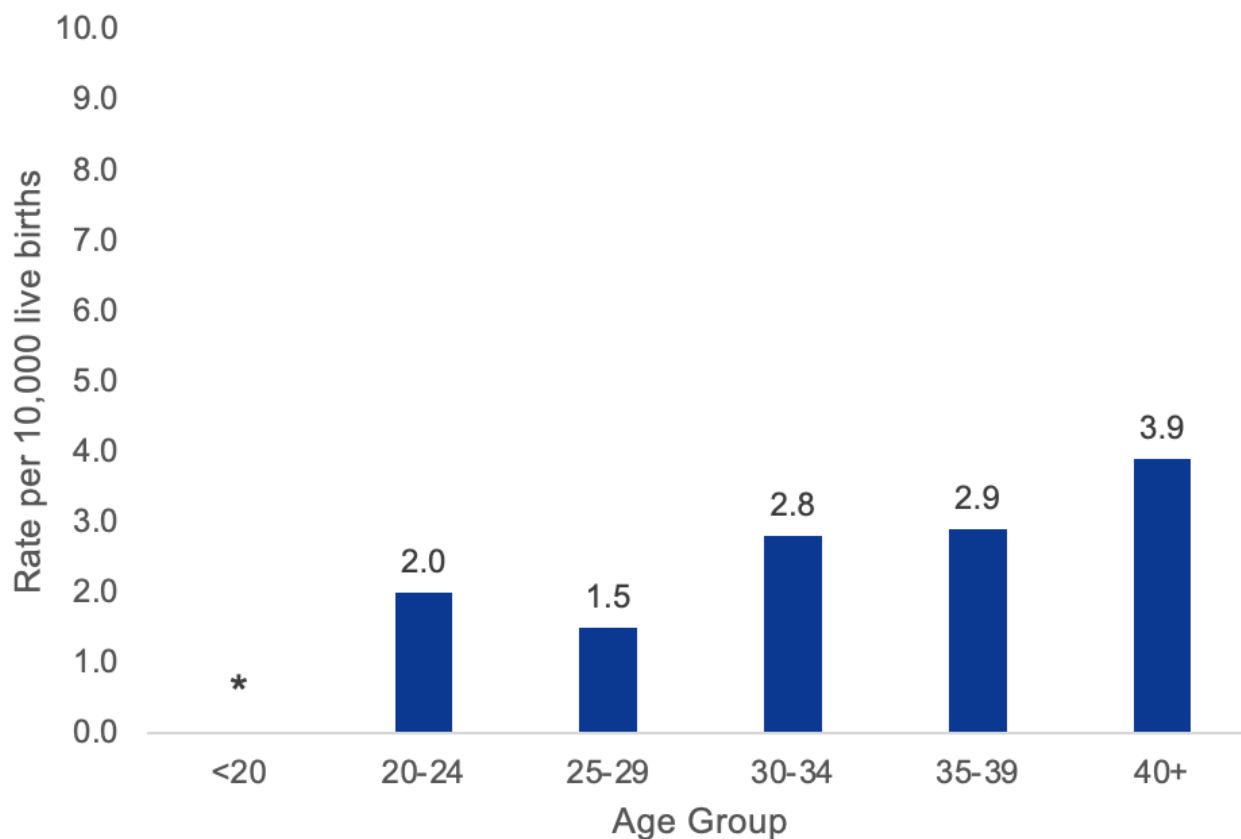
**2.5** in 10,000

Heavy Alcohol Use  
During Pregnancy

### Heavy Drinking by Maternal Age

From 2020-2024, the prevalence of reported heavy drinking during pregnancy increased with maternal age. Those aged 40 and older had the highest reported rate of reported heavy drinking during pregnancy at 3.9 per 10,000 live births. This was followed by those aged 35-39 (2.9) and those 30-34 (2.8). Those age 20-24 had an occurrence of 2.0 per 10,000 live births while the 25-29 age group had the lowest rate of reported heavy drinking during pregnancy at 1.5 per 10,000 live births. The prevalence of maternal heavy drinking by age group is depicted in Figure C5. While the overall rates are low, the observed upward trend with age underscores the importance of continued surveillance and targeted prevention efforts, particularly among older pregnant individuals.

Figure C5: Rate of People with a Live Delivery Who Reported Heavy Drinking on Birth Record by Maternal Age, Illinois Birth Certificates, 2020-2024

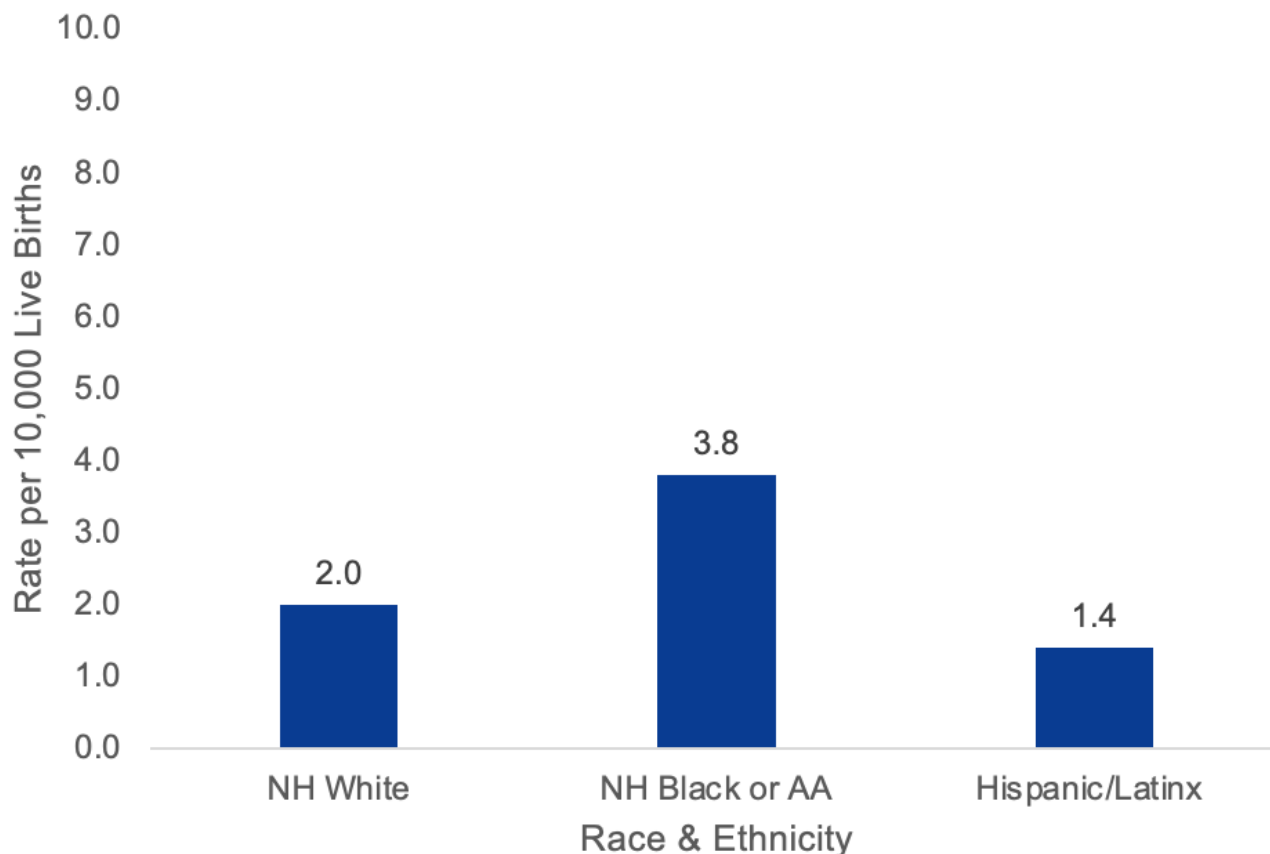


\*Note: Data were suppressed due to confidentiality and reliability standards

### *Heavy Drinking by Race & Ethnicity*

From 2020-2024, birth certificate data revealed disparities in the rate of heavy drinking reported among females by race and ethnicity. As compared to White non-Hispanic (NH) females and Hispanic/Latinx females, Black or African American NH mothers had a statistically significantly higher rate of heavy drinking (3.8 per 10,000 live births,  $p < 0.01$ ). This was followed by White NH females (2.0) and Hispanic/Latinx females at 1.4 per 10,000 live births. Figure C6 depicts the variation in the rate of reported heavy drinking during pregnancy across racial and ethnic groups. While the prevalence of heavy drinking during pregnancy remains low, these findings underscore the need for targeted, equity-focused interventions in obstetric and prenatal care to address alcohol use among populations at increased risk.

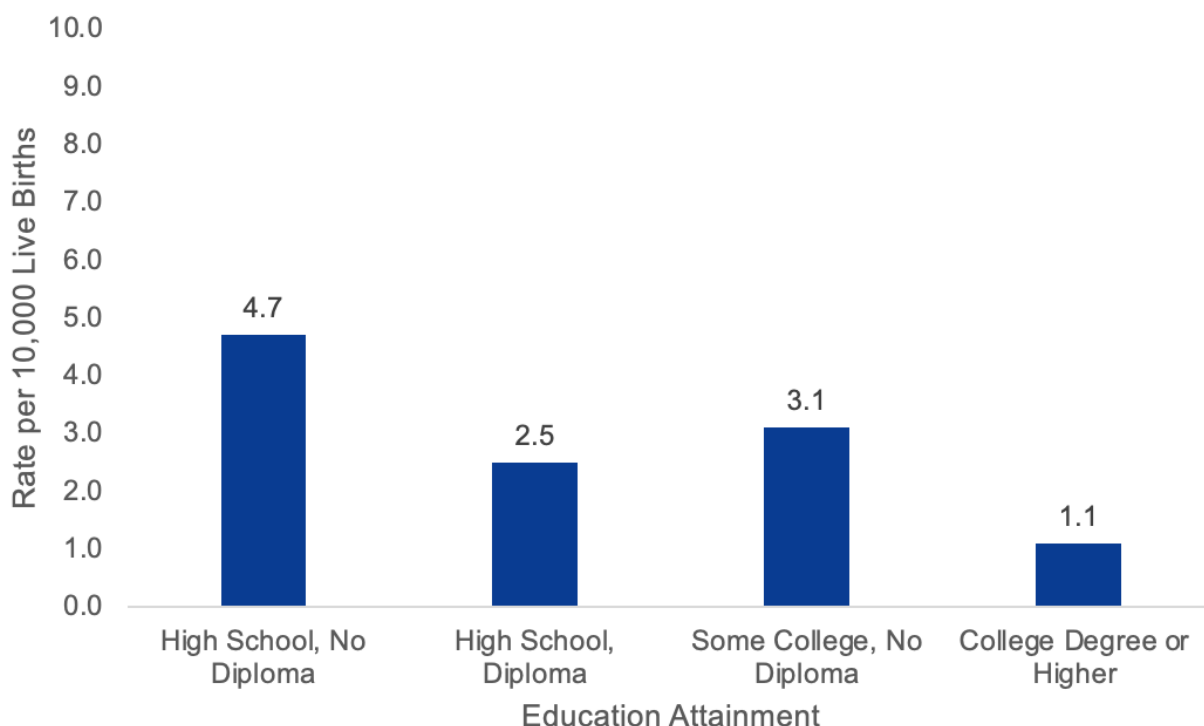
Figure C6: Rate of People with a Live Delivery Who Reported Heavy Drinking on Birth Record by Maternal Race & Ethnicity, Illinois Birth Certificates, 2020-2024



### *Heavy Drinking by Maternal Education Attainment*

From 2020 to 2024, heavy drinking during pregnancy suggested an inverse relationship with maternal education attainment. Females without a high school diploma had the highest rate, at 4.8 per 10,000 live births—nearly five times the rate observed among those with a college degree or higher (1.1 per 10,000). Rates were also elevated among females with a high school diploma (2.5 per 10,000) and those with some college but no degree (3.1 per 10,000). As compared to those females with a college degree or higher, each education attainment level had a statistically significantly higher rate of heavy alcohol use during pregnancy ( $p < 0.01$ ). The prevalence of heavy drinking during pregnancy by maternal education attainment can be found in Figure C7. These findings highlight the critical role of education as a social determinant of health and emphasize the need for targeted interventions. Public health efforts should prioritize outreach and support for pregnant individuals with lower educational attainment, who may face greater barriers to accessing preventive care, health information, and substance use services.

Figure C7: Rate of People with a Live Delivery Who Reported Heavy Drinking on Birth Record by Maternal Race & Ethnicity, Illinois Birth Certificates, 2020-2024



## Implications for Public Health & Continued Surveillance

This report integrates data from two key surveillance systems to assess alcohol use among women of reproductive age in Illinois: The PRAMS and the Illinois Vital Records System (IVRS). PRAMS Phase 8 data (2020–2023) was used to evaluate self-reported alcohol use in the three months prior to pregnancy, while birth certificate data from IVRS was analyzed to assess reports of heavy drinking during pregnancy.

At a glance, there is a notable disparity between the self-reported pre-pregnancy and in-pregnancy alcohol use estimates. That is, PRAMS data indicated that 4.4% of individuals who gave birth reported heavy drinking prior to pregnancy, whereas 0.01% of live birth certificates documented heavy alcohol use during pregnancy. This contrast reveals two important considerations. First, the low proportion of reported heavy drinking during pregnancy may reflect successful public health campaigns, increased public awareness, and early prenatal care interventions aimed at reducing fetal alcohol exposure. These gains highlight the importance of maintaining and expanding educational campaigns, screening protocols, and support services throughout early pregnancy and reproductive health settings. Second, that the difference may also point to significant underreporting in birth records, likely attributable to social desirability bias. Recall that birth records are often completed in clinical settings. In contrast, PRAMS surveys are conducted in private and anonymous formats, likely fostering more honest disclosures of sensitive behaviors such as substance use. Understanding these contextual and methodological differences is crucial for accurately interpreting prevalence estimates and developing responsive, targeted interventions.

Analyses from both PRAMS and live birth certificates reveal important sociodemographic patterns in heavy alcohol use that can inform targeted public health strategies. A clear inverse relationship was observed between educational attainment and heavy drinking, with the highest prevalence and rates found among females without a high school diploma, and the lowest among those with a college degree or higher. Interestingly, females with some college credit but no degree had higher levels of heavy drinking than those with only a high school diploma—suggesting that individuals in this educational transition group may experience unique vulnerabilities, such as economic instability or psychosocial stressors, that elevate their risk for alcohol use.

Similar patterns emerged when examining maternal age. While the birth certificate data showed a steady increase in heavy drinking during pregnancy with advancing age, PRAMS data pointed to the lowest prevalence of pre-pregnancy heavy drinking among women aged 25–29. Although less linear in PRAMS, both systems identified this age group as the lowest-risk segment, with higher levels of alcohol use appearing among both younger (20–24) and older (35–40) reproductive-aged individuals. These findings suggest a need for nuanced public health messaging and intervention efforts that are responsive to age-specific risks, while also reinforcing the protective behaviors already observed in mid-reproductive age groups.

Alongside public health efforts, clinicians and healthcare providers are central to preventing alcohol exposure during pregnancy. Routine alcohol screening and brief intervention remain evidence-based strategies for reducing risk. Given that many pregnancies are unplanned or unrecognized in the early weeks, the preconception period is a critical window for identifying and addressing heavy drinking behaviors. Providers should also be equipped to engage in nonjudgmental, proactive conversations about alcohol use, with attention to the sociodemographic factors that shape individual risk.

# Motor Vehicle Crashes & Fatalities

## Introduction & Methodology

In accordance with the CDC/CSTE guidelines, the Fatality Analysis Reporting System (FARS) serves as the primary surveillance method for data pertaining to alcohol-attributable crashes and fatalities.

FARS is a nationwide database maintained by the National Highway Traffic Safety Administration (NHTSA) that provides yearly data regarding fatal injuries suffered in motor vehicle traffic crashes. In collaboration with FARS, the Illinois Department of Transportation (IDOT) uses this data, along with other crash data, for highway safety research, program design, and roadway engineering.

All FARS data presented in this report is publicly available data directly from the FARS website. For more information about methodology, datasets and reports, or any questions regarding FARS, please visit the NHTSA [FARS website](#).

## *The Illinois Motor Vehicle Data Linkage Project*

Funded by a grant from the Illinois Department of Public Health (IDPH) in collaboration with the Illinois Department of Transportation (IDOT), the overall goal of this project is to link state health and transportation data to support local, regional, and statewide highway safety decision-making to affect decreases in deaths, non-fatal injuries, and health care costs resulting from motor vehicle crashes, which will help make Illinois roads safer.

One recent study titled, “*Polysubstance Use and Motor Vehicle Crashes in Illinois: An Exploration of Linked Crash and Hospital Data*,” provides a high-level view of the state of substance use among those involved in a motor vehicle crash on Illinois roadways. This study found that, by several measures, the presence of any substance is related to increased risky behavior (decreased seat belt and helmet use, aggressive driving), more severe injuries, and

higher hospital charges. Additional substances (polysubstance use) intensify the relationship as the substance count increases.

As polysubstance use with alcohol is a growing concern, this report features key takeaways and findings from this project. For questions regarding this project or to access the full report and accompanying infographics, please visit the [Motor Vehicle Data Linkage Project](#) website or contact Dr. Mickey Edwards at [hedwa4@uis.edu](mailto:hedwa4@uis.edu).

## Alcohol-Attributable Crashes & Fatalities: Findings from the Fatality Analysis Reporting System, Illinois, 2022

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### Introduction

In Illinois, the legal limit for intoxication by blood alcohol concentration (BAC) when driving is 0.08% or higher. A BAC of .01%, while considered a very low level of alcohol in the bloodstream, indicates some alcohol present in the system, and for the purposes of this report was used as a stratifying variable. Note that 2022 is the most recent year of published data from FARS.

This section of this report includes state- and county-level prevalence estimates from the following FARS data:

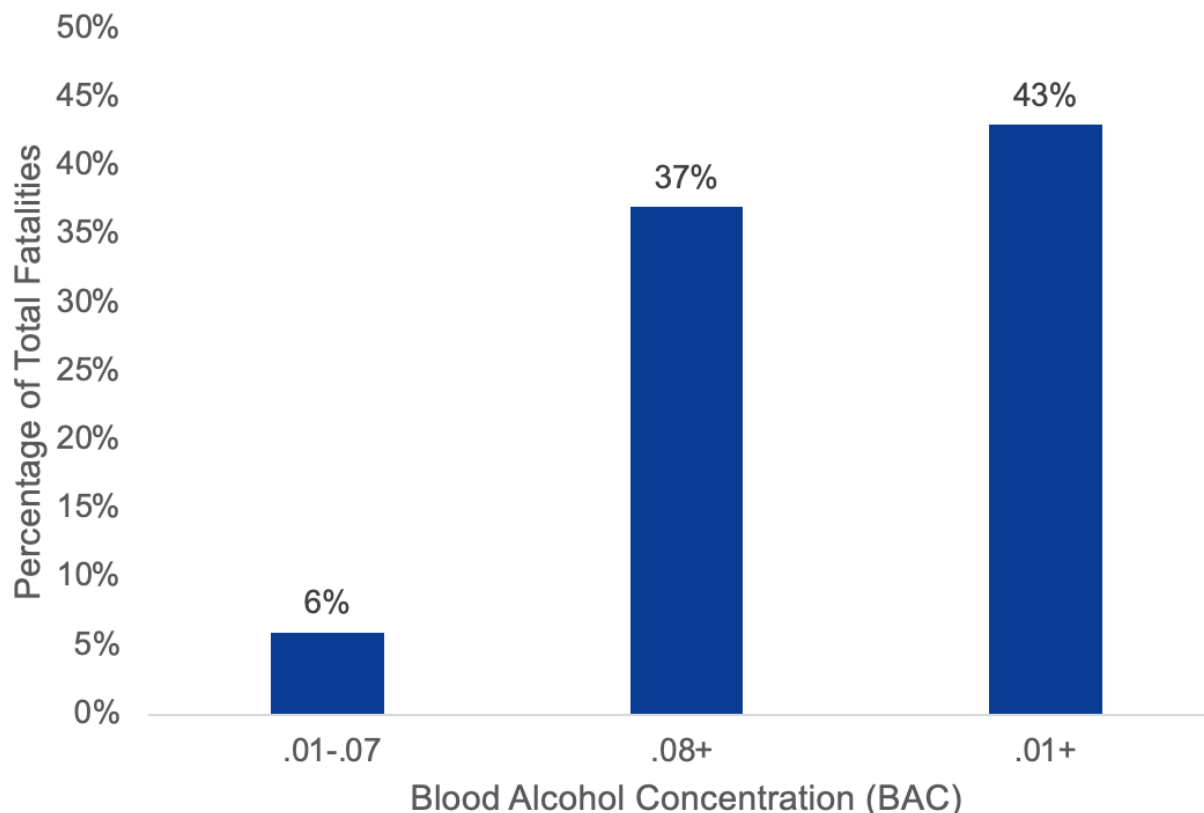
1. Percentage of **persons killed**, by highest driver blood alcohol concentration involved in the crash (.01+ BAC; .08+ BAC)
2. Percentage of **drivers involved** in fatal crashes, by blood alcohol concentration of the driver (.01+ BAC; .08+ BAC)
3. Percentage of **drivers killed** in crashes, by blood alcohol concentration of the driver (.01+ BAC; .08+ BAC)
4. Percentage of **surviving drivers** involved in fatal crashes, by blood alcohol concentration of the driver (.00 BAC; .01+ BAC)

## Total Fatalities by BAC

Figures E1-E4 depict the percentage of persons killed and highest driver blood alcohol concentration involved in the crash. For more detailed information pertaining to county-specific prevalence estimates, please view tables E1-E2 in the appendix.

In 2022, Illinois saw 1,268 crash fatalities. Roughly 43% (N = 551) of victims were killed by drivers with alcohol in their system (i.e., BAC of .01+). Specifically, 37% (N = 471) of fatalities involved a driver above the legal limit (i.e., a BAC of 0.08 or higher) whereas 6% (N = 80) had some alcohol in their system, but within the legal threshold (i.e., a BAC between .01-.07). Figure E1 depicts the breakdown of persons killed by highest BAC involved in the crash.

Figure E1: Percentage of Persons Killed by Highest Driver Blood Alcohol Concentration in Crash by BAC, Illinois, 2022

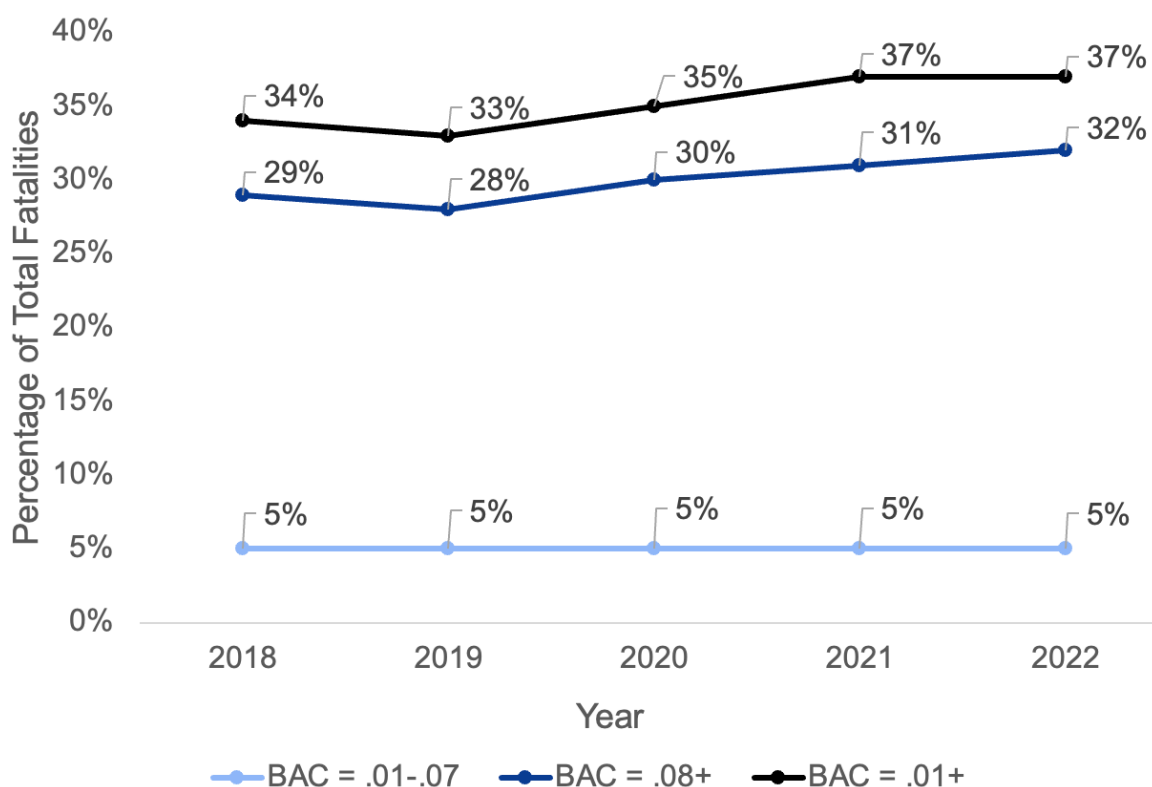






In 2022, 37% of all persons killed in roadway crashes involved a driver with a blood alcohol concentration (BAC) of .01+ or higher. Trend analysis reveals that, since 2019, there has been a slight, steady increase the percentage of fatalities involving a driver with alcohol present in their bloodstream. Interestingly, there has been no change in BAC between .01-.07, but rather an increase in those drivers with BAC above the legal limit (.08+). Annual percentages of persons killed in a motor vehicle crash involving a driver with blood alcohol concentrations are depicted in Figure E4.

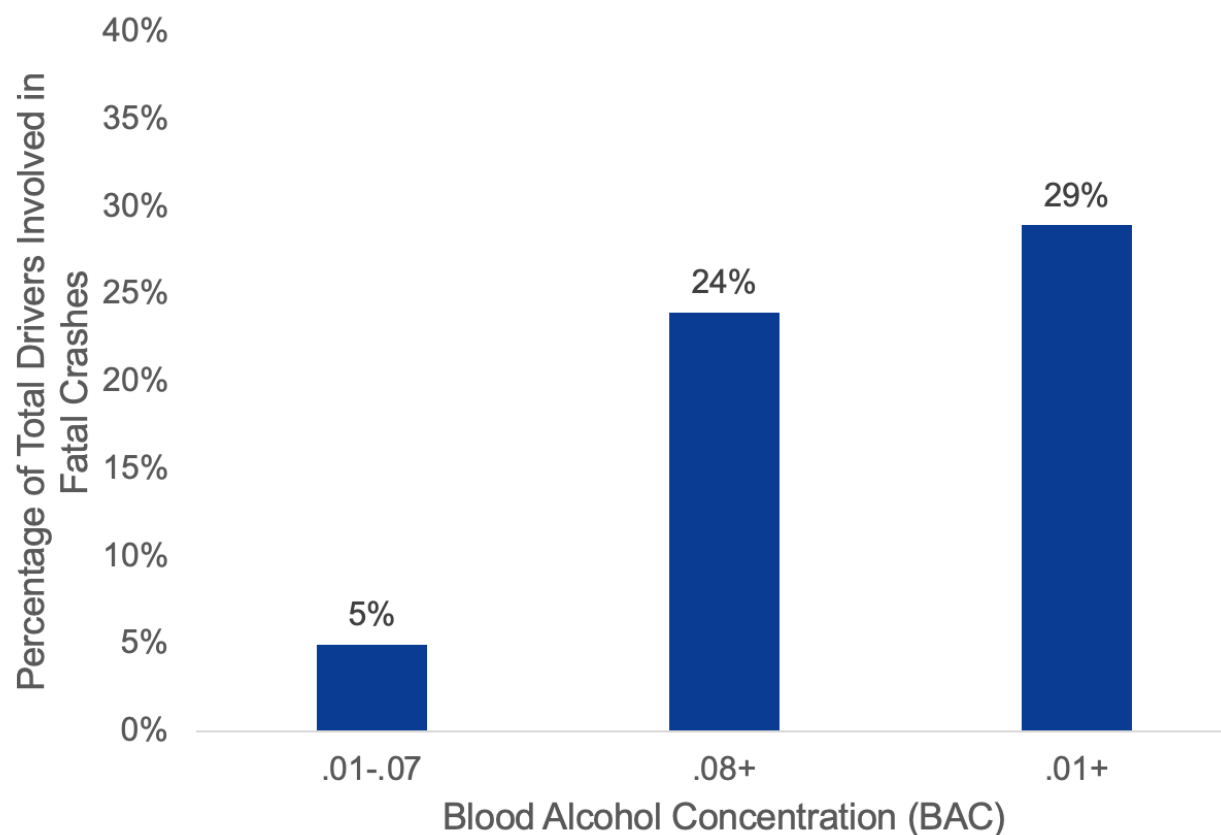
Figure E4: Percentage of Total Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, Illinois, 2018-2022



## ***Drivers Involved in Fatal Crashes by BAC***

Figures E5-E7 depict the percentage of drivers involved in fatal crashes by blood alcohol concentration of the driver. For more detailed information pertaining to county-specific prevalence estimates, please view tables E3-E4 in the appendix.

Figure E5: Drivers Involved in Fatal Crashes and Blood Alcohol Concentration of the Driver, Illinois, 2022



In 2022, roughly 1,847 drivers were involved in fatal crashes. By blood alcohol concentration, 29% (N = 530) had a BAC of .01 or higher. Specifically, 5% (N = 86) had a BAC of .01-.07 whereas 24% (N = 444) had a BAC of .08+ or higher.

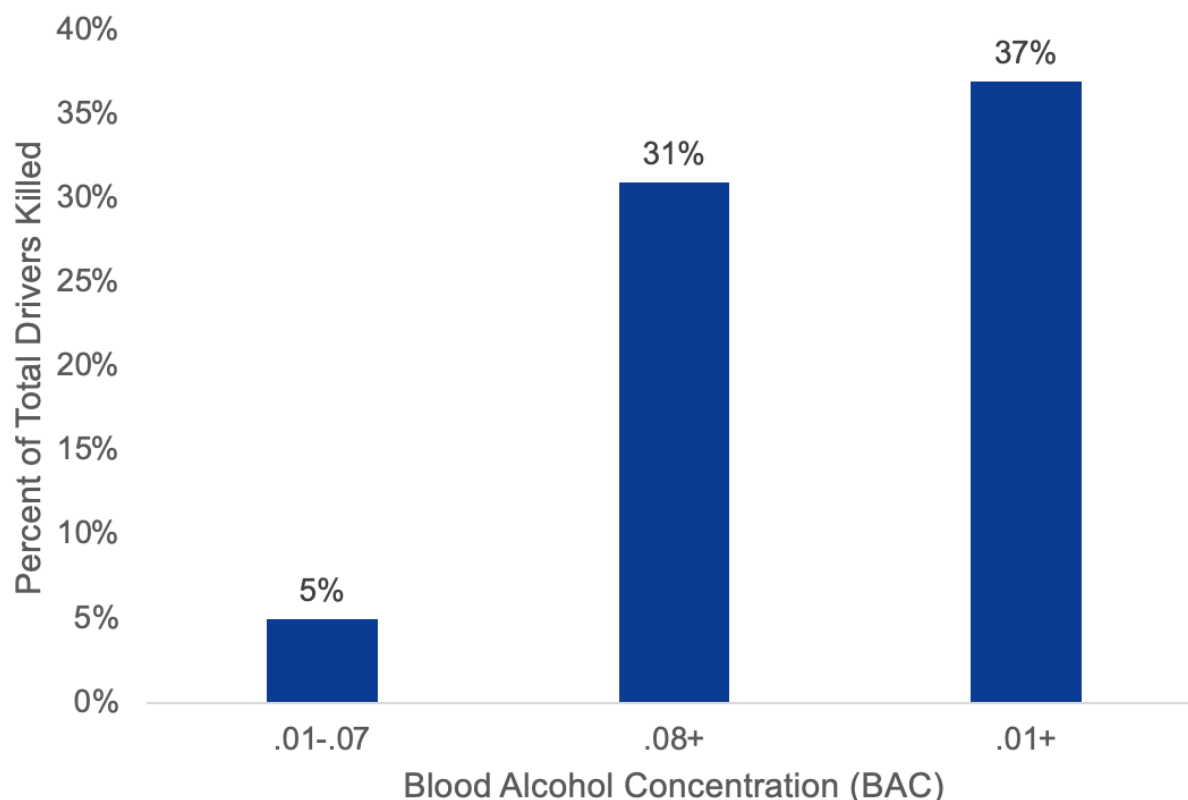




## Drivers Killed in Crashes by BAC

Figures E8-E10 depict the percentage of drivers killed in crashes by blood alcohol concentration of the driver. For more detailed information pertaining to county-specific prevalence estimates, please view tables E5-E6 in the appendix.

Figure E8: Percentage of Drivers *Killed* in Crashes and Blood Alcohol Concentration of the Driver, Illinois, 2022



In 2022, Illinois saw roughly 793 drivers killed in roadway crashes. Among those drivers, 37% (N = 292) had a BAC of .01 or higher. Specifically, 31% (N = 249) had a BAC of .08 or higher whereas 5% (N = 44) had a BAC of .01-.07.

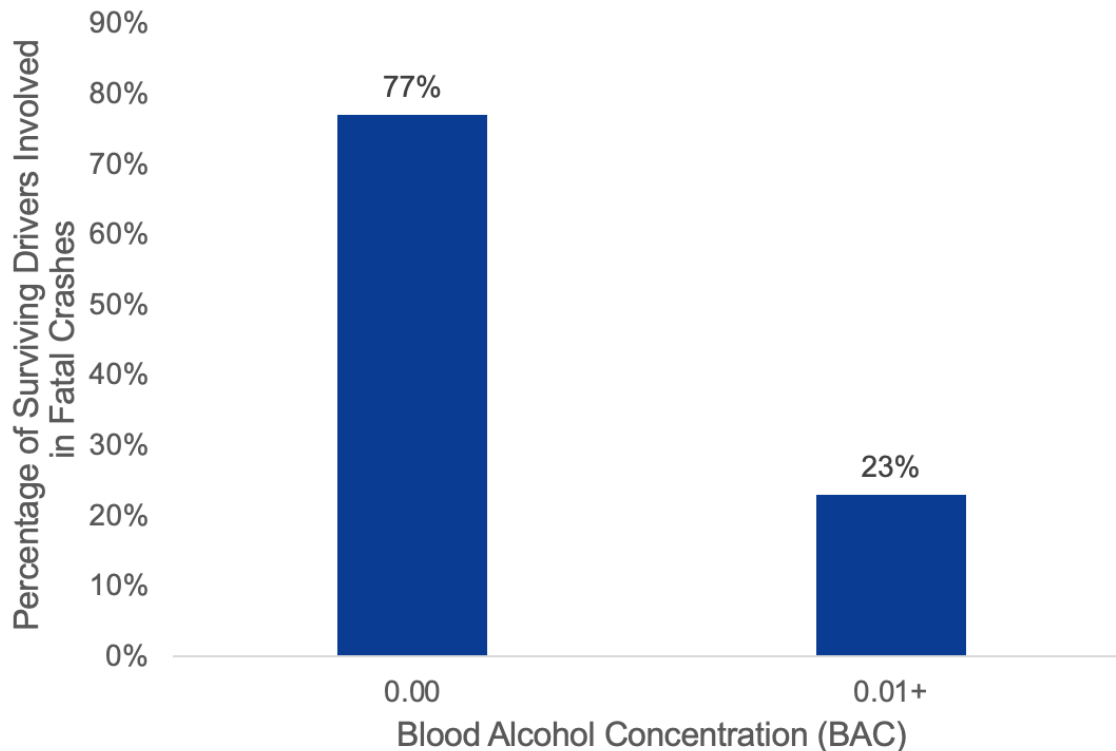




## Surviving Drivers in Fatal Crashes by BAC

Figure E11 depicts the percentage of drivers surviving in crashes by blood alcohol concentration of the driver. In 2022, 1,054 drivers involved in a fatal crash survived. Among those survivors, the overwhelming majority (77%; N = 816) of those had a BAC of 0.00, or no alcohol in their system. Comparatively, 23% (N = 238) of those surviving drivers had a BAC of 0.01+ or higher.

Figure E11: Percentage of Surviving Drivers in Fatal Crashes by Blood Alcohol Concentration of the Driver, Illinois, 2022



## ***Polysubstance Use and Motor Vehicle Crashes in Illinois: An Exploration of Linked Crash and Hospital Data, 2016-2020***

Dr. Mickey Edwards | University of Illinois-Springfield

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Polysubstance use is a growing concern among health and transportation safety professionals. Polysubstance use is considered two or more intoxicating substances simultaneously present in a single person. Combining various substances at varying levels can be unpredictable and tragic for all road users.

The purpose of this project was:

- 1) To gain a better understanding of substance use on Illinois roadways and
- 2) To better understand polysubstance use (i.e., what are the commonly combined substances and what outcomes may occur as a result of those combinations)

Statewide data sets of crash reports were obtained from the Illinois Department of Transportation alongside hospital discharge records from the Illinois Department of Public Health. Using customized software and probabilistic matching strategy, hospital discharge files were linked to crash files, providing a more complete picture of circumstances surrounding a crash and medical outcomes endured. Research information for 6 specific substance types with an additional field for “other,” including alcohol, cannabis, opioid, cocaine, hallucinogen, and stimulant. Precise concentrations of substances discussed were not known. Note that data likely undercount the true scale of substance-involved crashes in Illinois.

Figure F1: Count and Share of Substance Prevalence, Illinois, 2016-2020

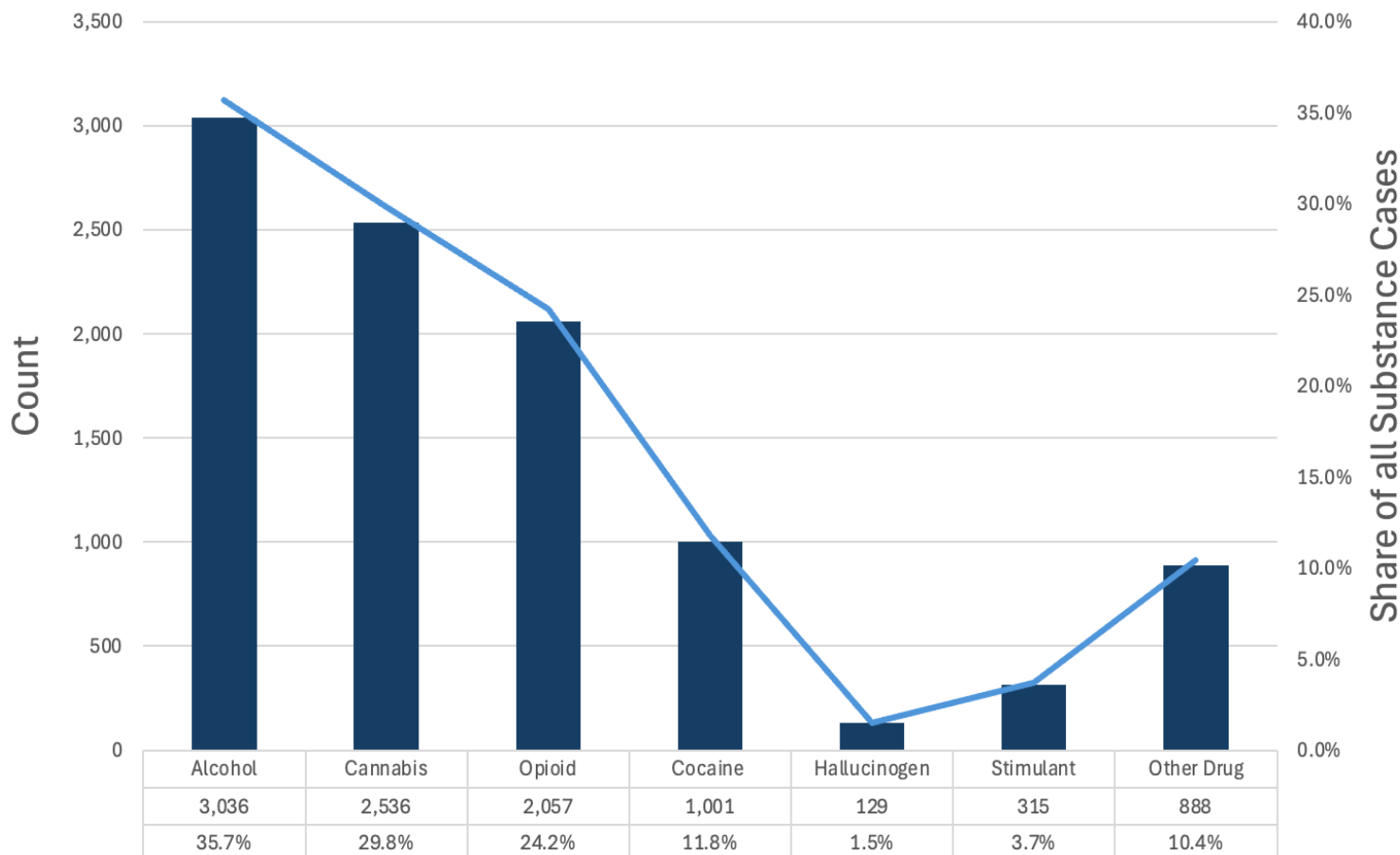


Figure 1 establishes the prevalence of individual substances for which a crashed road user was diagnosed. Note the sum of substance shares totals more than 100%, this is because the denominator used in the calculation is the number of crashes involving a substance. Since substances are used in combination with others, there are more substances used than crashes involving substances.

2016 - 2020 analysis used 337,418 linked crash and patient hospital discharges and includes all road user types: drivers, passengers, pedestrians, and cyclists. Alcohol was the most prevalent at nearly 2/3 of substance-related crashes, cannabis was next at about 30%, followed by opioids at just under a quarter.

Table F1: Distribution of Substance Use by Road User Type, Illinois, 2016-2020\*

Substance	Driver	Share of Drivers	Passenger	Share of Passengers	Pedestrian	Share of Pedestrian	Cyclist	Share of Cyclists
Alcohol	2,470	38%	385	28%	144	33%	37	26%
Cannabis	1,814	28%	556	41%	110	25%	56	39%
Opioid	1,613	25%	286	21%	121	28%	37	26%
Cocaine	743	11%	133	10%	95	22%	39	27%
Hallucinogen	103	2%	18	1%	-	-	-	-
Stimulant	240	4%	58	4%	12	3%	-	-
Other Drug	727	11%	120	9%	29	7%	12	8%

\*Because of polysubstance use columns do not add to 100%

*Note:* 'Share of' indicates the proportion of those in a roadway crash and tested positive for at least one intoxicating substance

*Note:* "-" denotes cell count less than 10

Table F1 analyzes the types of substances commonly associated with road user types. Among drivers involved in crashes alcohol was the most common substance found at 38% of drivers with at least one intoxicating substance. Among drivers, cannabis was second common at 28% followed closely by opioids at 25%. Among passengers, cannabis was the most frequently occurring substance at 41%, followed by alcohol at 28%. About a third of struck pedestrians who were identified as having an intoxicating substance in their system had used alcohol. Also, among those pedestrians, some 28% had opioids, and a quarter had cannabis, followed closely by cocaine at 22%. Struck cyclists later diagnosed at the hospital as positive for an intoxicating substance most commonly had used cannabis, at 39% of such cases. Cocaine (27%), opioid (26%), and alcohol (26%) use split most of the remaining cases involving struck cyclists. Finally, among struck pedestrians, the share positive for cocaine was double that of drivers, and among struck cyclists, the share was nearly two and a half times the rate.

Figure F2: Count and Share of Substances Present in Polysubstance Motor Vehicle Crashes, Illinois, 2016-2022

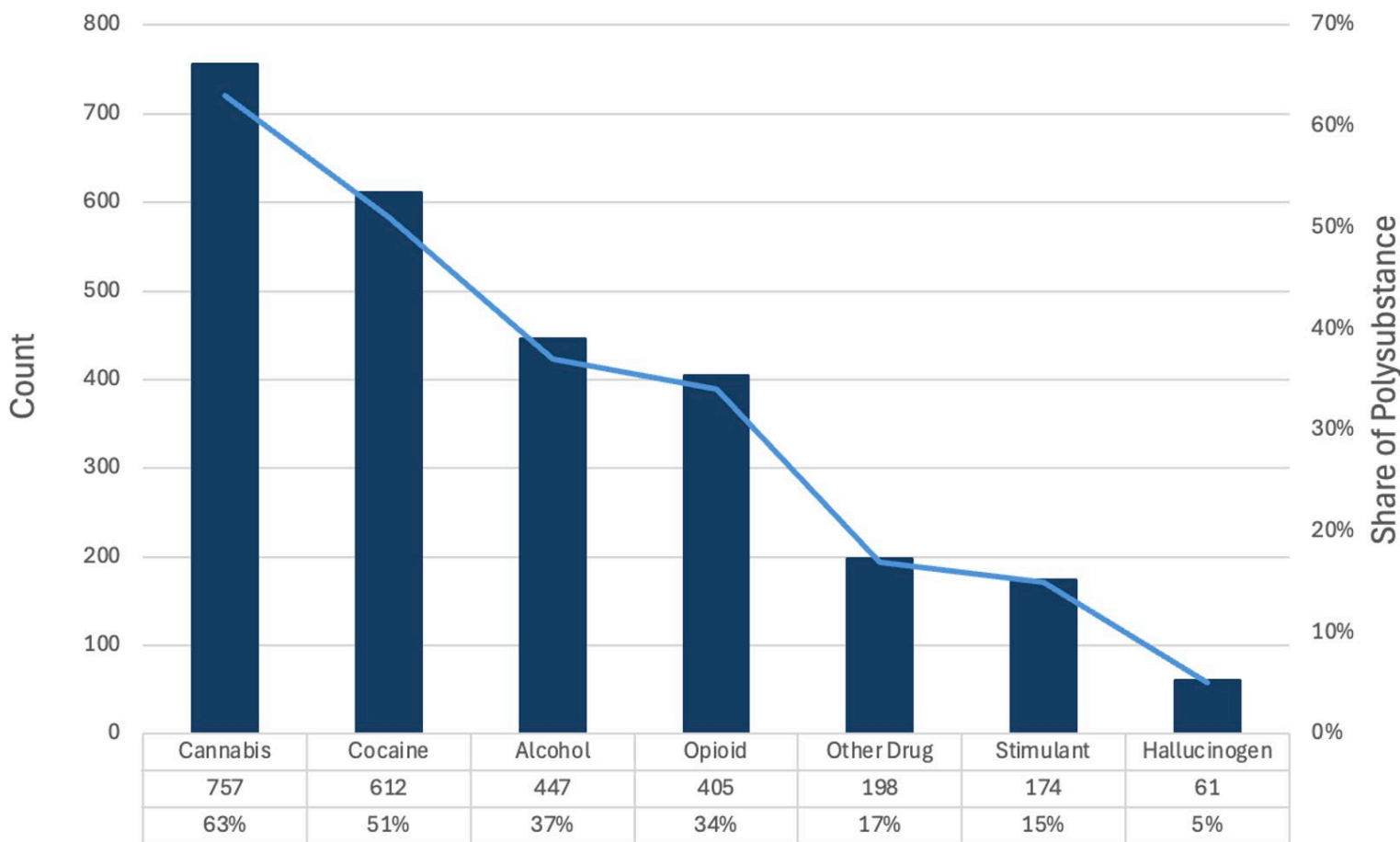


Figure F2 shows the frequency and share of all polysubstance crashes for the six substances for which patients are tested and data available in the hospital discharge file. The most frequently combined substance was cannabis, with nearly two-thirds, or 757 incidents, of polysubstance crashes involving the drug. Cocaine was the second-most frequently occurring at 51%, 612 incidents of crashes. Alcohol and opioids had a similar frequency and share among polysubstance crashes at 447 cases or 37%, and 405 cases or 34%, respectively.

Figure F3: Count and Share of Dual Substances Among Motor Vehicle Crash Patients, Illinois, 2016-2022

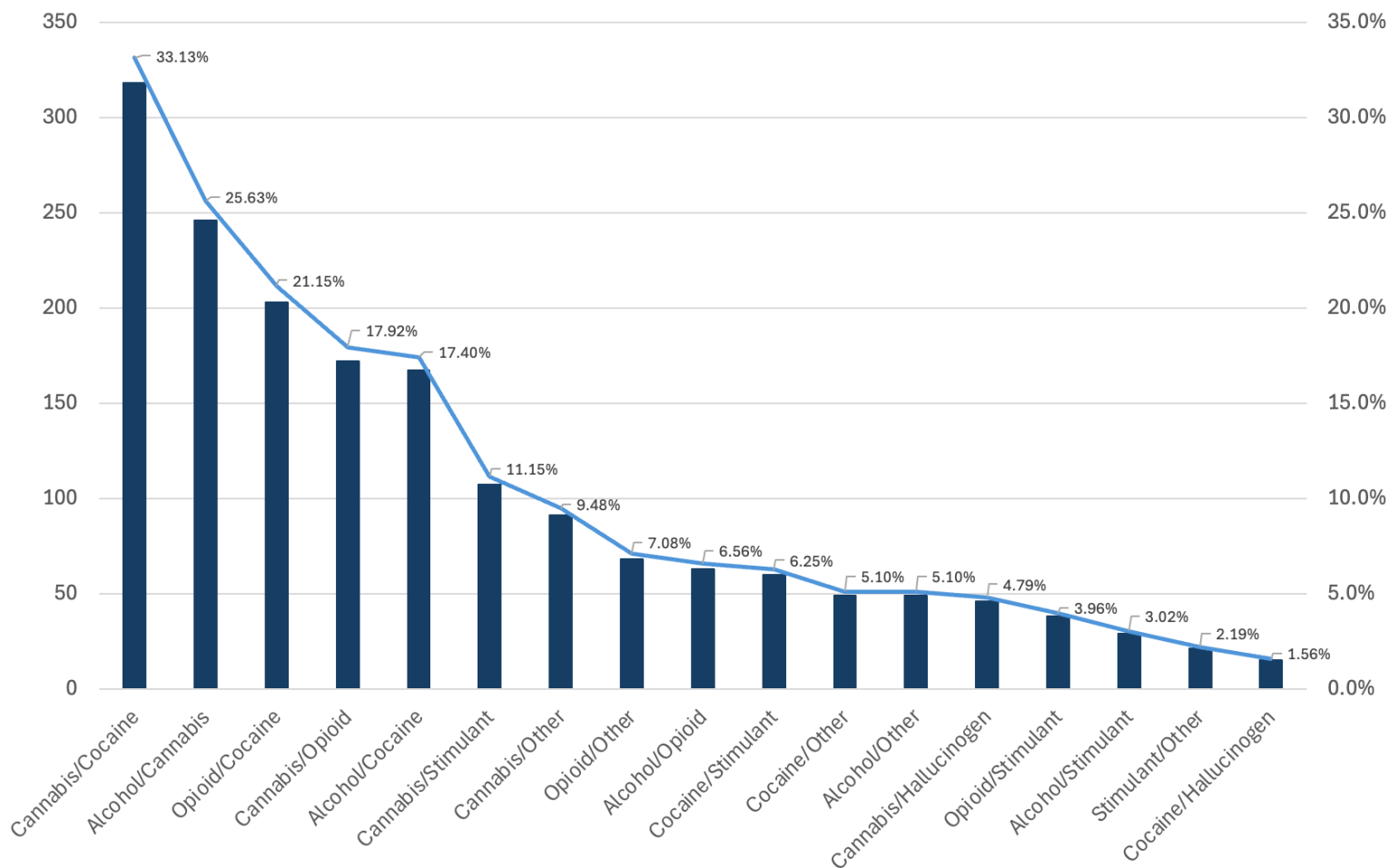


Figure F3 shows the distribution and frequency for which substances were used in combination among all road users involved in a motor vehicle crash. Some 960 crashes involved a combination of two substances, 199 involved three, and 33 involved four substances present in a single road user.

By dual substances among motor vehicle crash patients, cannabis with cocaine is the most frequently occurring combination at 33.1% of such cases. This is followed by cannabis and alcohol, of which are above a quarter of such cases, opioids and cocaine at about 21.2% of such cases, and cannabis and opioids at about 18.0% of such cases.

Figure F4: Hospital Charges by Substance Count

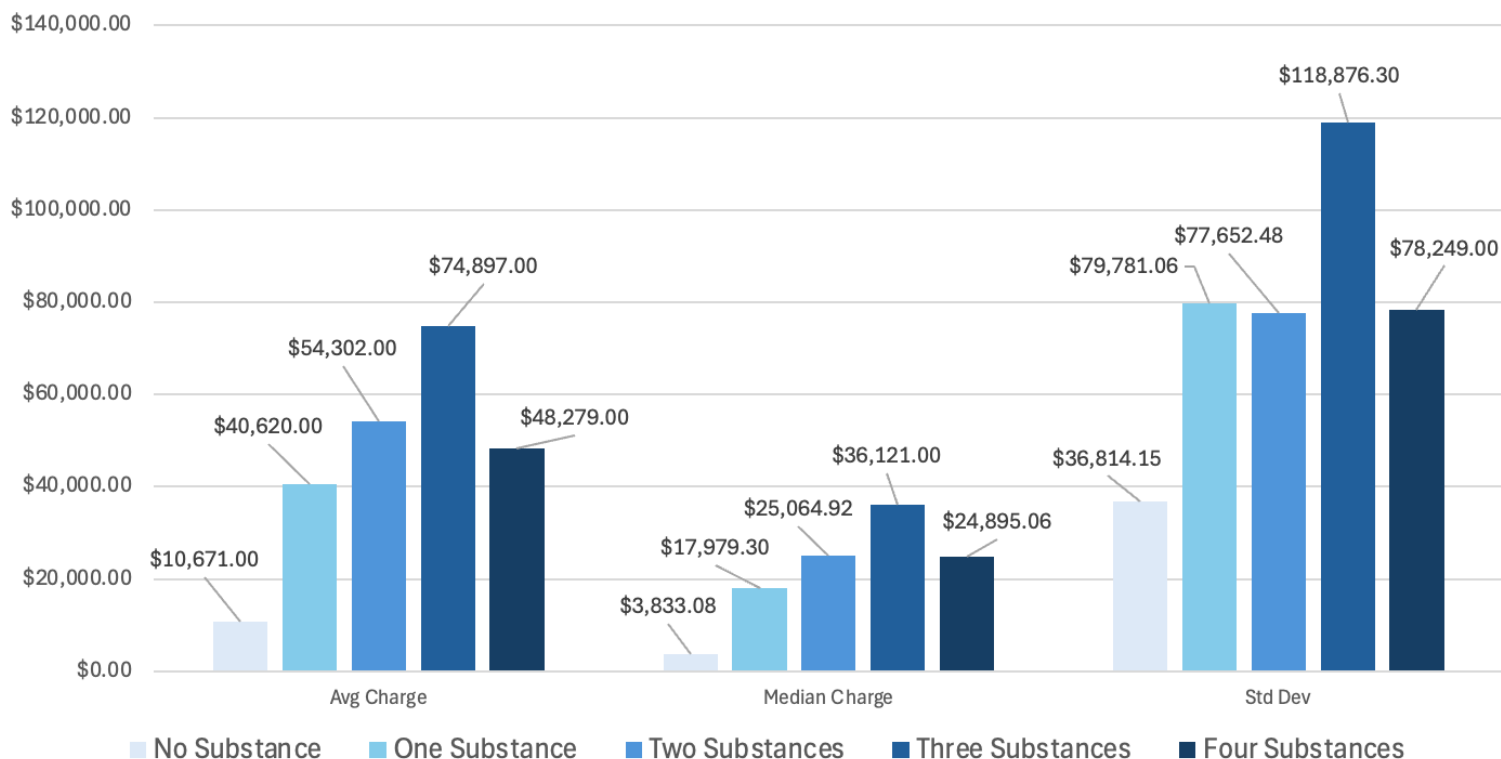


Figure F4 shows the distribution of hospital charges for motor vehicle crash treatment (2016-2020) stratified by intoxicating substance presence. The average charge for three substances was nearly \$75,000, over seven times the cost for no substances. The median charge was over \$36,000, 9.5 times the median for no substances. Large standard deviations and long right tails reflect the unpredictability of crashes, with some severe injuries and others minor.

Figure F5: Hospital Charges by Substance, Illinois, 2016-2020

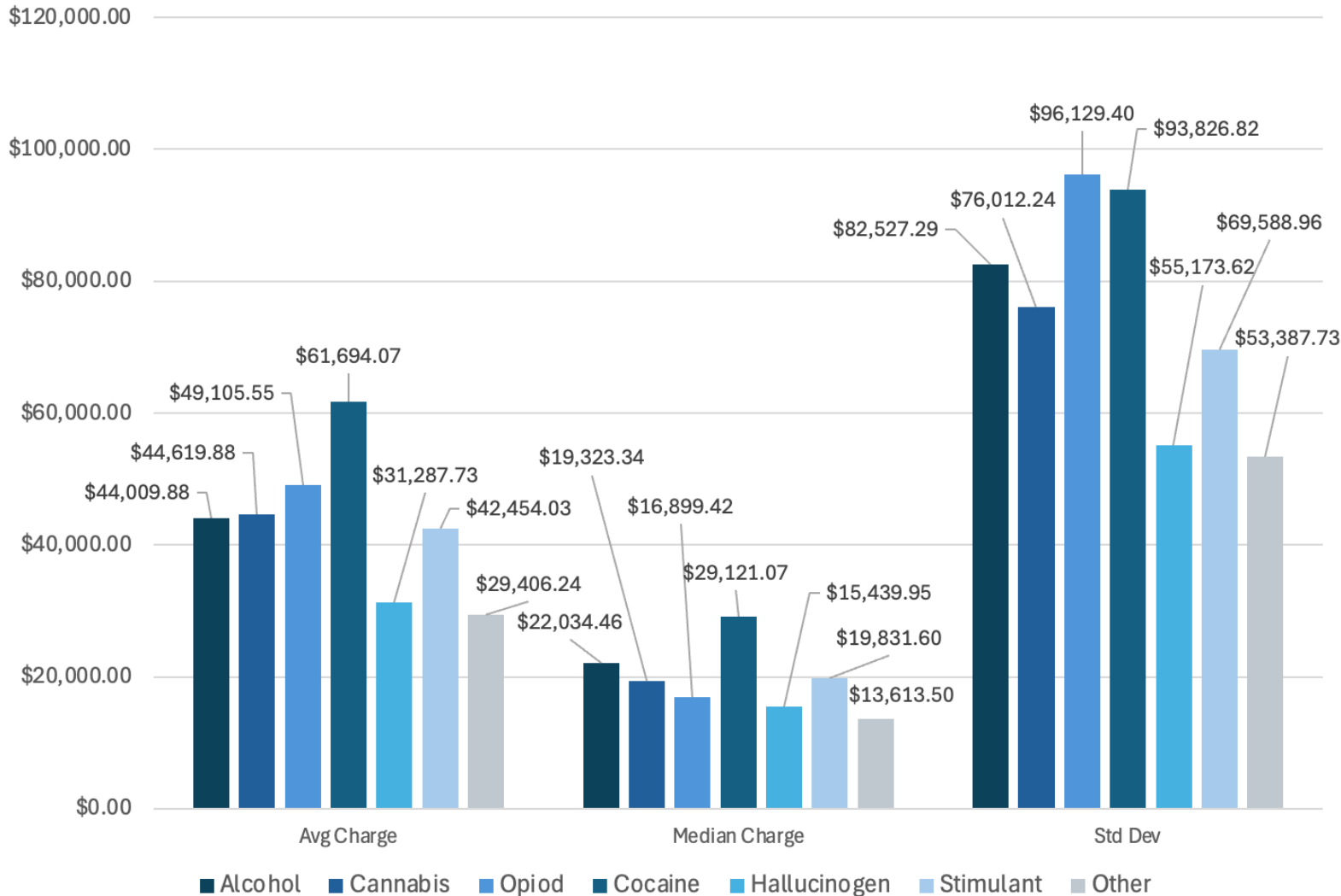


Figure F5 depicts the distribution of hospital charges by substance type present in the motor vehicle crash patient receiving treatment. From 2016-2020, those involved in crashes who had cocaine in their systems averaged nearly \$62,000 in hospital charges, the highest average cost attributable to any substance. This was followed by those with opioids in their systems at roughly \$49,000. The next highest averages were those with cannabis in their system (nearly \$45,000) and alcohol (roughly \$44,000).

Figure F6: Injury Severity by Substance, Illinois, 2016-2022

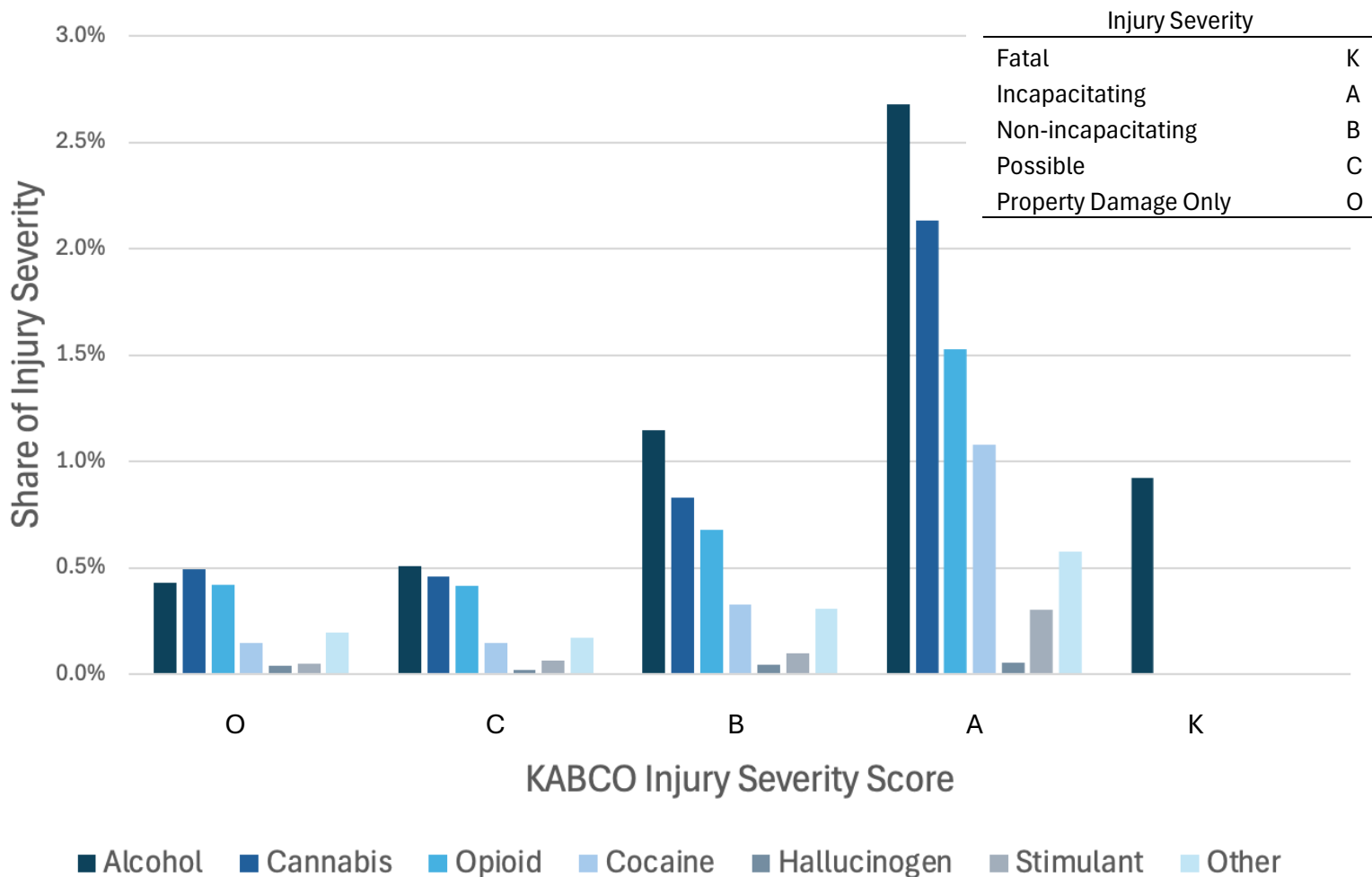


Figure F6 shows the injury severity of all road users involved in a motor vehicle crash by the substance found in their system. The share of crashes involving serious injury increases along with substance use. Looking at injury severity by substance, alcohol use among road users consistently garners the greatest share of injury crashes, followed by cannabis. Note that because of variations in circumstances surrounding fatal crashes, the substance use details among the decedent are incomplete, and data were suppressed for fatal crashes (K).

Figure F7: Injury Severity by Substance Count, Illinois, 2016-2022

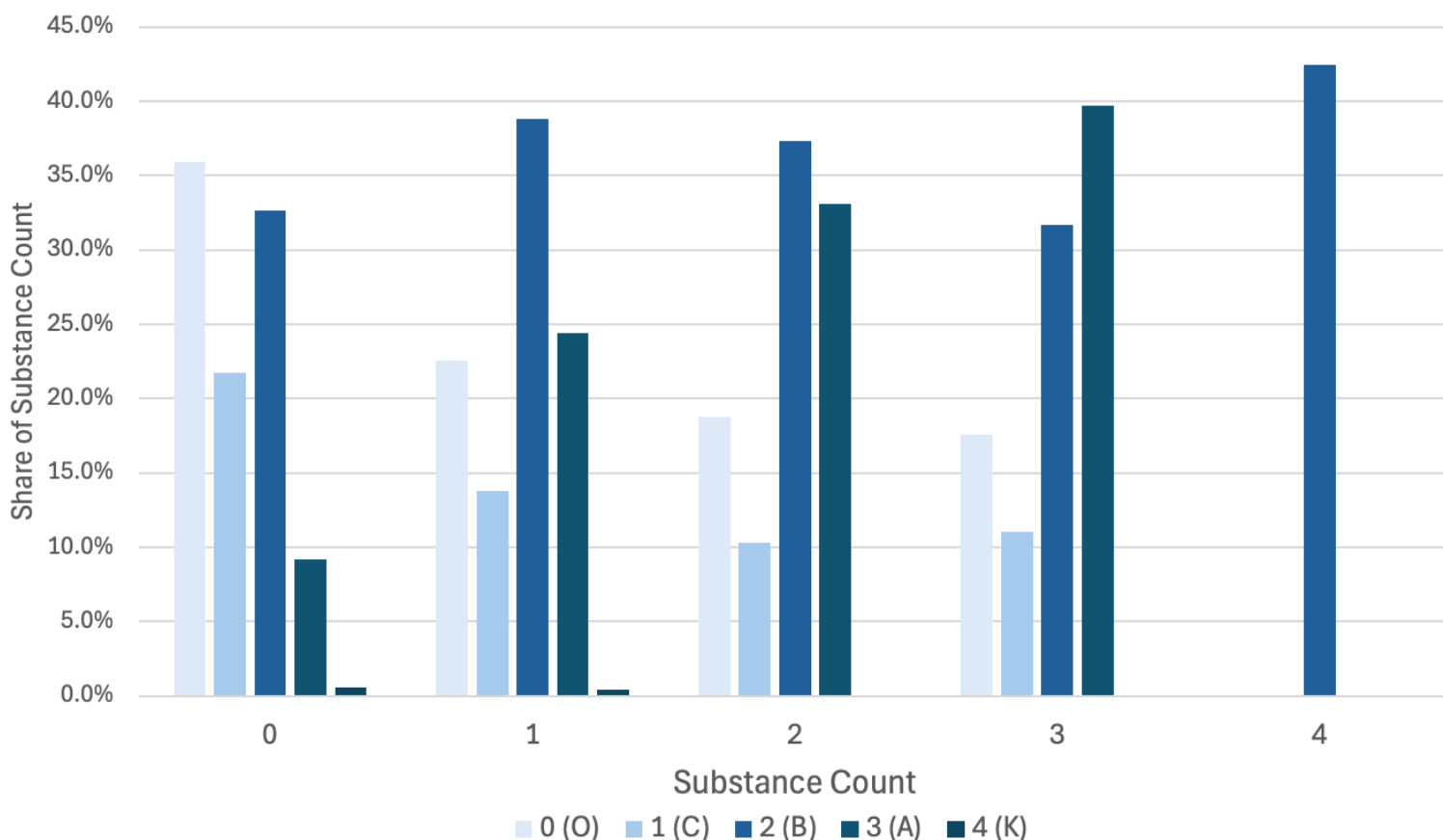


Figure F7 shows the relationship between the number of distinct substances present in a single patient and that patient's injury severity level suffered during a motor vehicle crash.

Focusing on the trends, a clear association emerges between injury severity and substance count. That is, road users who escape uninjured from a motor vehicle crash diminished quickly as substances enter the circumstances. When looking at severe injury, the bars grow ever larger as substance count increases. Substance use is not only associated with injuries but severe injuries – especially as the number of substances present in the individual increases. Note that those injuries involving 4 or more substance were suppressed due to confidentiality standards.

# Illinois Alcohol State Excise Taxes

Monitoring state alcohol excise taxes is vital as these taxes directly affect the retail price of alcoholic beverages, which in turn influences consumption patterns. Higher alcohol prices are associated with reduced alcohol intake and lower rates of alcohol-related harms, including injuries, drunk driving, violence, and chronic (e.g., like liver disease) (Xuan et al., 2013). By systematically tracking and adjusting excise taxes, policymakers and public health officials can assess the effectiveness of alcohol control policies and implement evidence-based strategies to reduce the burden of alcohol-related harm.

As of 2024, the Illinois state excise tax on beer and cider (ABV 0.5%-7.0%) was \$0.23 per gallon. Illinois currently ranks 28th in the nation for beer excise tax. The state excise tax for any alcohol other than beer with an ABV of less than 20.0% (i.e., wine) was \$1.39 per gallon. The excise tax of distilled spirits with an ABV of 20.0% or more was \$8.55 per gallon. The state excise taxes for alcohol and the accompanying national rankings (highest to lowest) are found in Table G1.

Table G1: Illinois State Excise Taxes on Alcohol, 2024, *Adapted from the Alcohol Policy Information System\**

<b>Alcohol</b>	<b>State Excise Tax Per Gallon</b>	<b>National Ranking</b>
Beer	\$0.23	28th
Wine	\$1.39	13th
Distilled Spirits	\$8.55	16th

*\*Note:* The Alcohol Policy Information System (APIS) is a comprehensive online database managed by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) that provides detailed information on various alcohol-related policies across the United States at both state and federal levels, serving as a key research tool for studying the effects of different alcohol policies

# Alcohol-Related Disease Impacts

## Introduction

In 2024, alcohol-related issues were the leading reason for calls to the Illinois HelpLine, funded by the Illinois Department of Human Services. This highlights a critical need for increased resources, data collection, and targeted community interventions to address the growing health threat alcohol use poses to Illinois communities.

A recent report by the U.S. Surgeon General revealed concerning statistics about alcohol use and its impact on public health. Less than half of Americans (45%) are aware that alcohol consumption increases cancer risk, in contrast to 89% who recognize the cancer risk associated with tobacco use and 53% who are aware of the link between obesity and cancer (USDHHS, 2025). The report also highlights alcohol use as the third leading preventable cause of cancer in the U.S., following tobacco and obesity. Alcohol use contributes to nearly 100,000 cancer cases and approximately 20,000 deaths each year. This underscores the urgent need for a comprehensive understanding of alcohol use in Illinois to inform public health efforts, raise awareness, and implement effective prevention strategies.

## Methodology

In accordance with the CDC/CSTE Alcohol Surveillance System, Illinois vital records were used to determine the prevalence of alcohol-attributable liver disease and cirrhosis mortality. Death records for years 2020-2023 were obtained directly from the IDPH Electronic Data Warehouse (EDW). To identify alcohol-attributable liver cirrhosis and liver disease fatalities, we obtained a comprehensive list of International Classification of Diseases, 10th Revision (hereafter ICD-10) codes aligned with the CDC's Alcohol-Related Disease Impact (ARDI) Application. These codes are

categorized by level of alcohol-attributability and further distinguished by chronic versus acute alcohol consumption patterns. In an effort to expand beyond traditional measures (i.e., liver cirrhosis and liver disease mortality), this report includes additional mortality data obtained directly from the CDC ARDI data (2020-2021). Due to reliability and confidentiality guidelines, certain causes of death (e.g., child maltreatment) could not be reported if the cell size was  $<10$ . Note that for the purpose of these analyses, only the primary underlying cause of death was used to identify alcohol attributable liver disease and liver cirrhosis mortality.

### *100% Alcohol-Attributable Conditions*

These deaths are classified as being 100% alcohol-attributable and are reported in the CDC ARDI. A total of 4 of the 13 chronic causes of death listed as 100% alcohol-attributable in ARDI were used in this report: Alcohol Dependence Syndrome, Excessive Alcohol Use, Alcoholic Liver Disease, and Alcohol-induced Psychosis.

### *Directly Measured Alcohol-Attributable Conditions*

Injuries were generally defined as having been alcohol-attributable if the decedent had a BAC  $\geq 0.10$  g/dL at the time of death. One chronic condition (liver cirrhosis) and 6 causes of injury (drownings, fire injuries, homicide, child maltreatment, suicide, and fall injuries) were used in this report.

### *Indirectly Measured Alcohol-Attributable Conditions*

Note that these causes of death are still directly related to alcohol use, but the CDC calculations involve several types of information. That is, the CDC uses pooled risk estimates obtained from large, systematic reviews of the scientific literature, known as meta-analyses, on the relationship between alcohol and various causes as well as data on the prevalence of alcohol consumption at specific levels (e.g., more than one drink per day on average).

All data management and statistical analyses were conducted using SAS (SAS Institute 9.4). ICD-10 codes were grouped into composite variables to represent key alcohol-related health outcomes. For example, codes K74.0–K74.2, K74.6, K76.0, K76.7, and K76.9 were combined to define a single variable representing alcohol-attributable liver cirrhosis as the underlying cause of death.

Geographic analyses were conducted to assess regional-level prevalence of liver disease and cirrhosis mortality. Additionally, stratified analyses were performed by age group and sex to explore demographic variations in liver-related mortality.

A list of alcohol-attributable ICD-10 codes used in this report are presented in Tables H1 and H2. For a more detailed description of the methodology used in defining attributability and ICD-10 codes, including the full list of codes and additional information on alcohol-attributable conditions, please refer to the CDC's [Alcohol-Related Disease Impact System](#) webpage.

### *A Note on Confounding Factors*

Several lifestyle and sociodemographic factors, such as age, gender, socioeconomic status, and cultural influences can impact alcohol use and contribute to the development of related health conditions. Additionally, confounding factors like genetics, smoking, mental health disorders, and co-occurring substance use can significantly influence both the pattern of alcohol consumption and the progression of adverse health outcomes, including liver disease and cirrhosis. It is important to acknowledge that these confounding factors were not accounted for in the current surveillance system, which represents a limitation in fully understanding the complex relationship between alcohol use and its health impacts across Illinois communities.

Table H1: Alcohol Attributable ICD-10 Codes for *Chronic* Alcohol Use\*

<b>Attribution</b>	<b>Cause</b>	<b>ICD-10 Code(s)</b>
100% Attributable	Alcoholic psychosis	F10.3-F10.9
	Excessive Alcohol Use	F10.0,F10.1
	Alcohol dependence syndrome	F10.2
	Alcoholic liver disease	K70.0-K70.4, K70.9
Directly Attributable	Liver cirrhosis, unspecified	K74.0-K74.2, K74.6 K76.0, K76.7, K76.9
Indirectly Attributable	Cancer, breast	C50
	Cancer, colorectal	C18, C20
	Cancer, esophageal	C15
	Cancer, laryngeal	C32
	Cancer, liver	C22
	Cancer, oral cavity and pharynx	C01-C06, C09-C10, C12-C14
	Cancer, pancreatic	C25
	Cancer, prostate	C61
	Cancer, stomach	C16
	Atrial Fibrillation	I48
	Coronary heart disease	I20-I25
	Hypertension	I10-I13, I15

\*Note: Adapted from the Center of Disease Control & Prevention Alcohol Related Disease Impact (2021)

Table H2: Alcohol Attributable ICD-10 Codes for *Acute* Alcohol Use\*

<b>Attribution</b>	<b>Cause</b>	<b>ICD-10 Code(s)</b>
Directly Attributable	Child maltreatment	X85-X99, Y00-Y09, Y87.1
	Drowning injuries	W65-W70, W73, W74, Y21
	Fall injuries	W00-W19, Y30
	Fire injuries	X00-X06, X08, X09, Y26
	Firearm injuries	W32-W34, Y22-Y24
	Homicide	X85-X99, Y00-Y09, Y87.1
	Suicide	X60-X64, X66-X84, Y87.0

\*Note: Adapted from the Center of Disease Control & Prevention Alcohol Related Disease Impact (2021)

## The Burden of *Chronic* Alcohol Use on Health: Insights from Mortality Data, Illinois, 2020-2023 and CDC ARDI, 2020-2021.

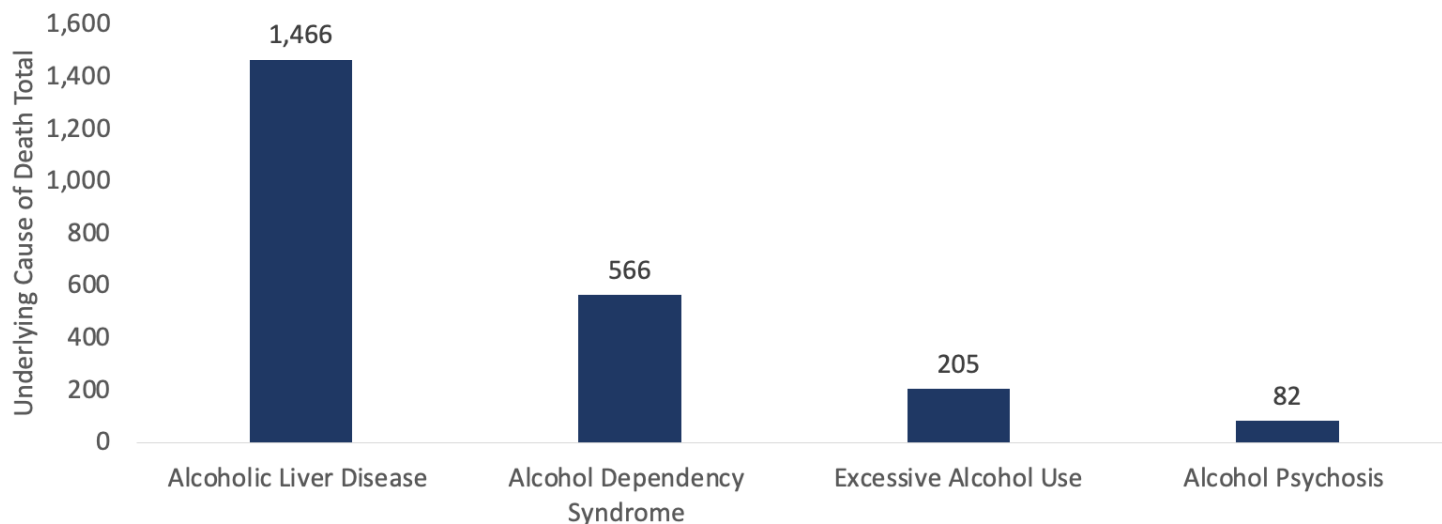
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### *100% Attributable Health Outcomes*

Figure H1 depicts the 100% alcohol-attributable underlying causes of death associated with chronic alcohol use. Between 2020 and 2023, alcohol-related mortality in Illinois was predominantly driven by 100% alcohol-attributable Liver Disease (sometimes referred to as alcoholic liver disease), which accounted for 1,466 deaths. This was followed by Alcohol Dependency Syndrome (566), Excessive Alcohol Use (205 deaths), and Alcohol Psychosis with 82 deaths.

This data highlights alcoholic liver disease as the leading alcohol-attributable cause of death in Illinois, underscoring the need for targeted prevention and intervention strategies focused on chronic alcohol-related health outcomes.

Figure H1: The Distribution of 100% Attributable Adverse Health Outcomes from Chronic Alcohol Use, Illinois Vital Records, 2020-2023



### *Estimated Indirectly Attributable Health Outcomes*

Between 2020 and 2023, chronic alcohol use in Illinois was associated with a substantial burden of cancer-related mortality. Figure H2 depicts the alcohol-attributable cancers associated with chronic alcohol use in Illinois from 2020 to 2023. Liver cancer had the highest number of alcohol-related deaths at 125, followed by colorectal cancer (47 deaths), oral and pharynx (44 deaths), and prostate cancer (23 deaths). Other notable attributable cancers were breast (21 deaths), esophageal (16 deaths), laryngeal (11 deaths) and pancreatic (7 deaths). This data underscores the wide-ranging and often overlooked carcinogenic impact of chronic alcohol use beyond traditionally recognized liver-related outcomes.

Figure H2: Estimated Indirectly Attributable Cancer Underlying Causes of Death from Chronic Alcohol Use, CDC ARDI, 2020-2023

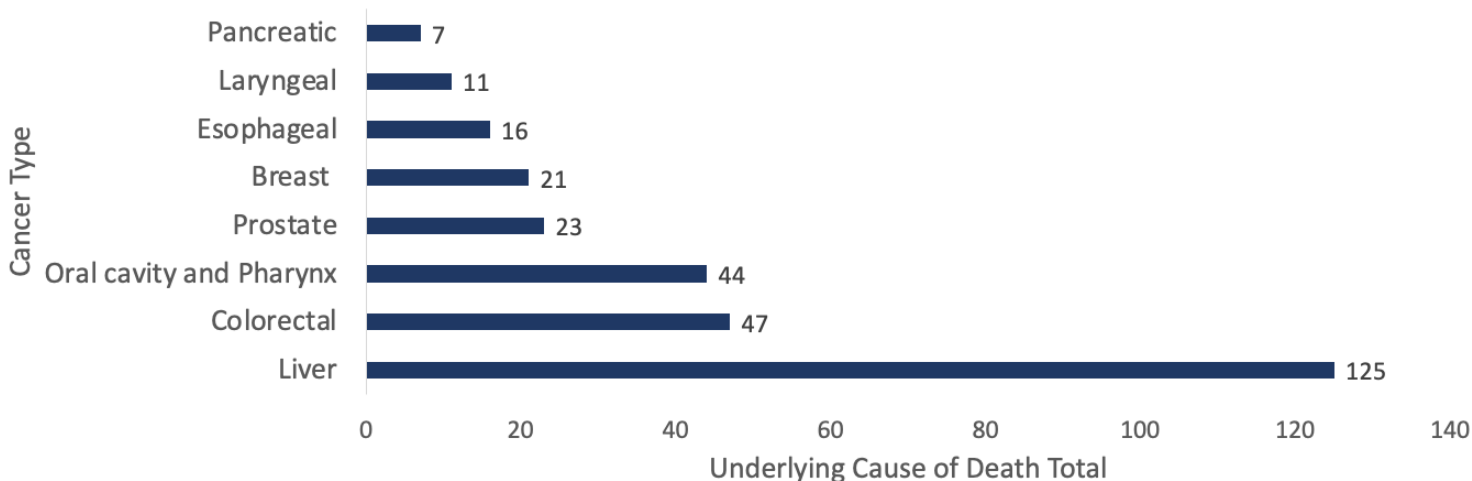
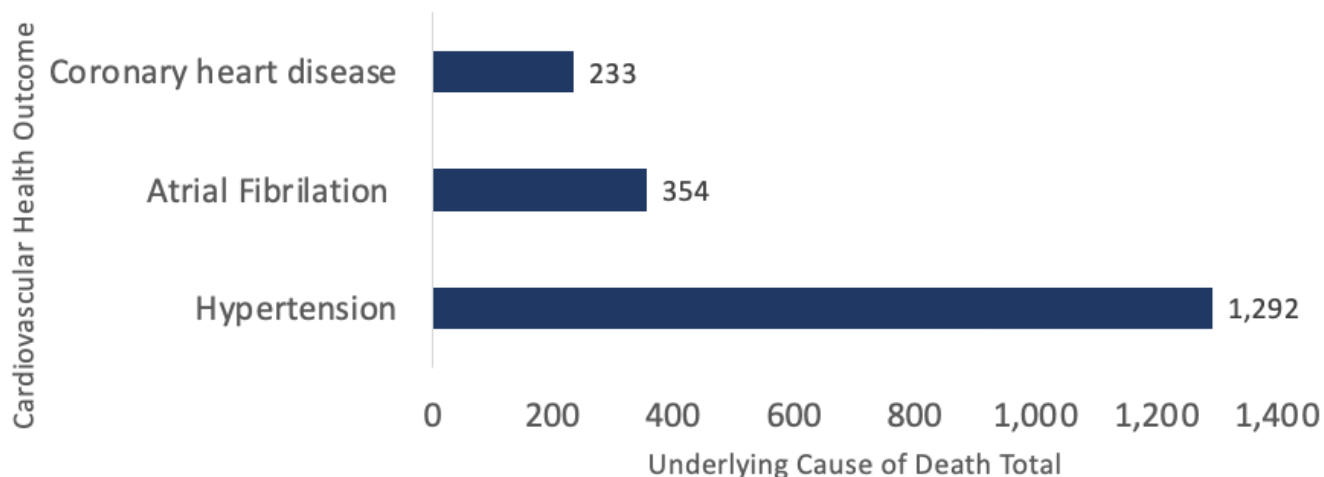


Figure H3: The Distribution of Estimated Indirectly Attributable Cardiovascular Underlying Causes of Death from Chronic Alcohol Use, CDC ARDI, 2020-2023



From 2020 to 2023, there was a notable burden of cardiovascular mortality attributable to chronic alcohol use. The leading alcohol-attributable cardiovascular condition contributing to death was hypertension, with a total of 1,292 deaths, followed by atrial fibrillation at 354 deaths. Coronary heart disease, while contributing less overall, still accounted for 233 deaths. The distribution of these underlying causes of death are depicted in Figure H3.

These findings highlight the role of alcohol in the development of adverse cardiovascular health outcomes. Chronic alcohol consumption increases blood pressure, arrhythmias, and heart disease (Marcus & Smith, 2008; Roerecke & Rehm, 2012), and this data underscores the importance of integrating alcohol-use screening and intervention into cardiovascular disease prevention and control efforts across Illinois.

## ***Alcohol-Attributable Liver Disease & Liver Cirrhosis Mortality, Illinois Vital Records, 2020-2023***

Age-Adjusted Alcohol-Attributable Liver Disease

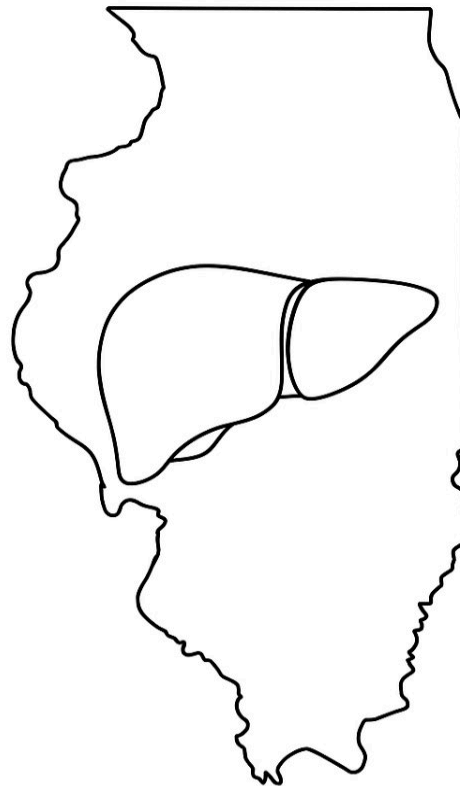
Mortality Rate

————— **3.0** deaths per 100,000 —————

Age-Adjusted Alcohol-Attributable Liver Cirrhosis

Mortality Rate

————— **1.4** deaths per 100,000 —————



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***Liver Disease*** is a broad term used to describe a variety of conditions affecting the liver. These conditions can range from mild inflammation to severe scarring and organ failure. Liver disease can be caused by various factors, including viral infections (e.g., hepatitis), alcohol use, non-alcoholic fatty liver disease (NAFLD), genetic conditions, toxins, or autoimmune disorders.

***Liver Cirrhosis*** is a specific, advanced stage of liver disease where the liver becomes severely scarred due to chronic injury. Over time, this scarring disrupts the normal structure and function of the liver, leading to complications such as liver failure, variceal bleeding, and increased risk of liver cancer. Cirrhosis is often the result of long-term liver damage from chronic diseases like alcohol-related liver disease, chronic viral hepatitis (especially Hepatitis B or C) and NAFLD (Dufour & Bellentani, 2006; Friedman, 2008; Khan & Fanning, 2021).

## Liver Disease & Cirrhosis Mortality Rates by Age

Figure H4: Distribution of Alcohol-Attributable Liver Disease and Estimated Alcohol-Attributable Liver Cirrhosis as Underlying Cause of Death by Age Group, Illinois Vital Records, 2020-2023

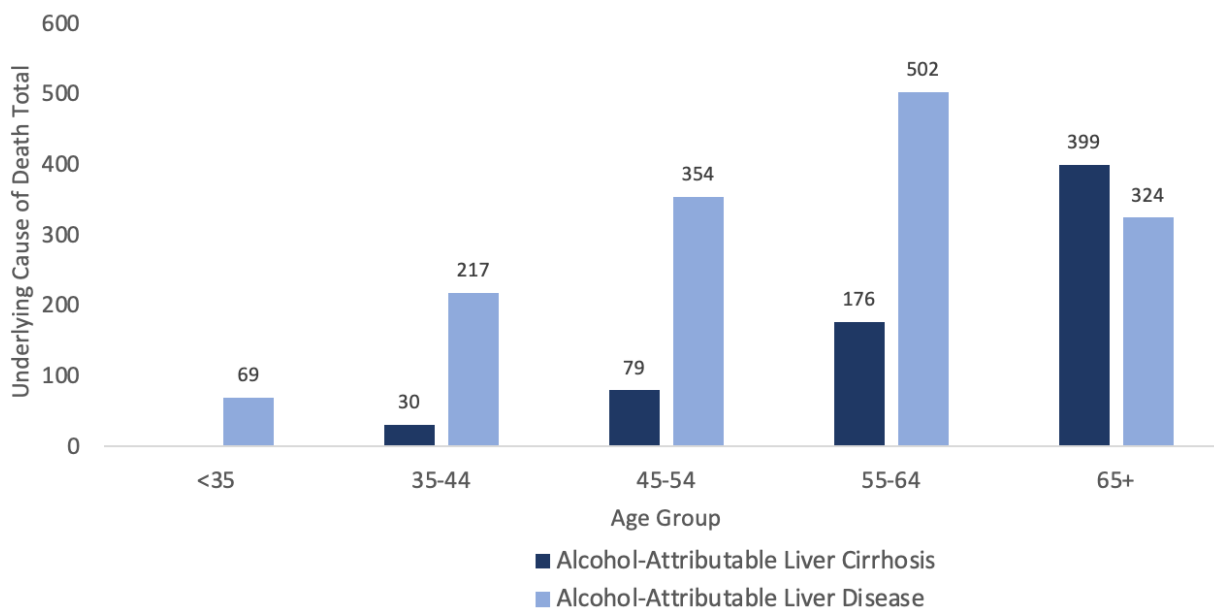
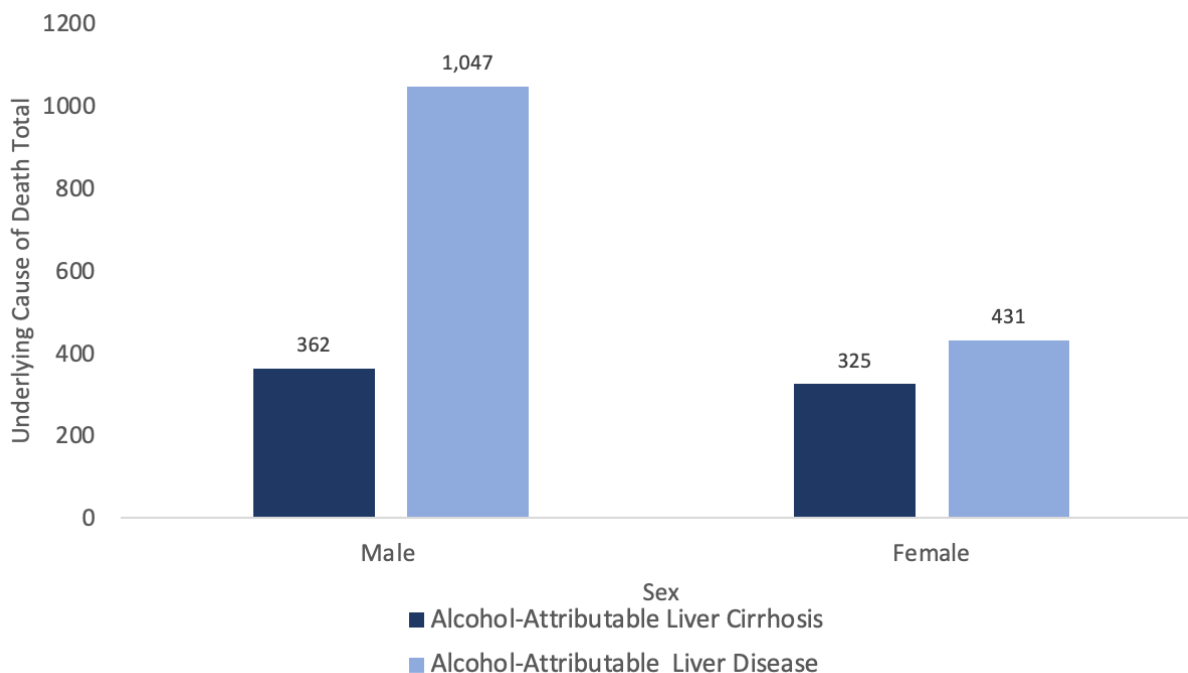


Figure H4 depicts the total number of deaths from alcohol-attributable liver cirrhosis (N = 687) and liver disease (N = 1,466) across adult age groups in Illinois from 2020 to 2023. Following well-documented patterns, a clear age-related trend emerged, with both liver cirrhosis and liver disease mortality increasing substantially with age. Note that mortality data for individuals under 35 were sparse and subject to suppression due to confidentiality standards. These data underscore the need for early prevention strategies, especially targeting adults in their 30s and 40s, along with expanded screening and access to care for at-risk populations. Public health efforts should also ensure appropriate management and support for older adults already affected by advanced stages of liver disease. Tailored, age-specific interventions are essential to reduce the growing burden of liver-related deaths across the state.

## Liver Disease & Cirrhosis Mortality Rates by Sex

Figure H5: Distribution of Alcohol-Attributable Liver Disease and Estimated Liver Cirrhosis as Underlying Cause of Death by Sex, Illinois Vital Records, 2020-2023



Between 2020 and 2023, the age-adjusted rate for alcohol-attributable liver disease among males was 2.0 per 100,000, more than double the rate observed in females (0.9 per 100,000). However, the estimated age-adjusted rate for alcohol-attributable liver cirrhosis was relatively similar between males and females (0.8 and 0.6 per 100,000, respectively). Total underlying cause of death counts for alcohol-attributable liver disease and cirrhosis mortality by sex are depicted in Figure H5.

These findings have several public health implications. First, the consistent elevation of mortality in males suggests underlying behavioral, biological, or access-to-care differences that warrant targeted intervention. Moreover, the relatively high cirrhosis mortality among females, compared to overall liver disease, highlights a potentially underrecognized burden in women that may be masked when examining broader liver disease.

### *Liver Disease Mortality Rate by Region*

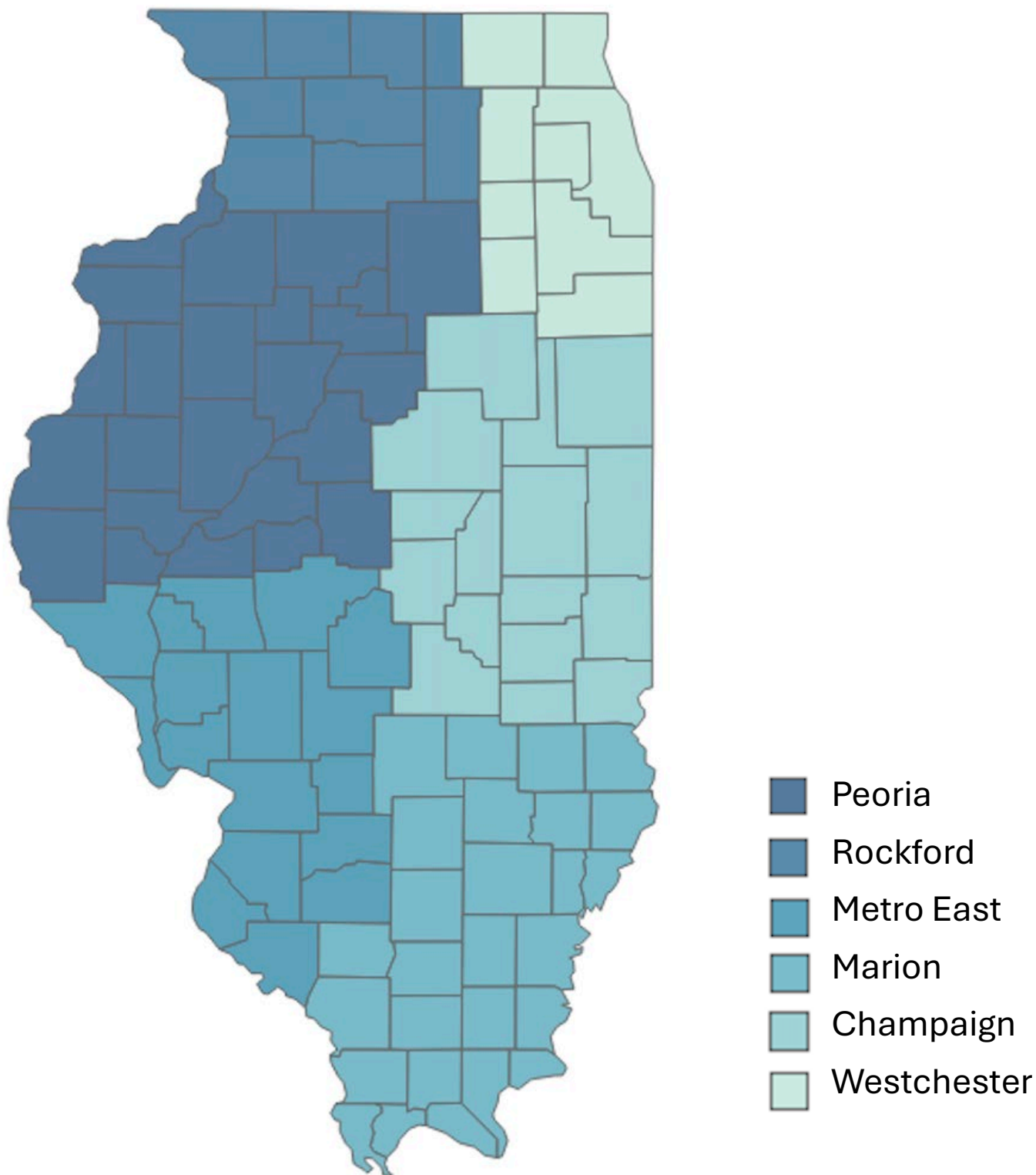
From 2020-2023, alcohol-related liver disease mortality varied notably across Illinois regions, with Peoria having the highest rate at 5.2 deaths per 100,000 people, followed by Rockford (4.8), Metro East (4.4), Marion (3.9), Champaign (2.7), and Westchester (2.3). This pattern shows a clear gradient, with Peoria's rate more than double that of Westchester, indicating significant regional disparities. Table H3 and Figure H6 depict the regional rates of alcohol-attributable liver disease in Illinois.

These regional differences may provide insight into socioeconomic disparities, variations in healthcare access, and differences in alcohol use behaviors for these specific regions. Areas with higher mortality rates may experience greater levels of poverty as well as differences in education and health literacy surrounding long-term alcohol related harms, limited access to preventive care and treatment services, and higher rates of harmful alcohol consumption (Karriker-Jaffe et al., 2014; SAMHSA, 2025). Additionally, regional differences in public health infrastructure, mental health support, and urban-rural composition can influence early liver disease detection, management, and outcomes.

Table H3: Age-Adjusted Rates of Alcohol-Attributable Liver Disease by Region, Illinois Vital Records, 2020-2023

Region	Rate of Alcohol-Attributable Liver Disease (per 100,000)
Peoria	5.2
Rockford	4.8
Metro East	4.4
Marion	3.9
Champaign	2.7
Westchester	2.3

Figure H6: Age-Adjusted Rate of Alcohol-Attributable Liver Disease by Region, Illinois Vital Records, 2020-2023



### *Estimated Alcohol-Attributable Liver Cirrhosis Mortality Rate by Region*

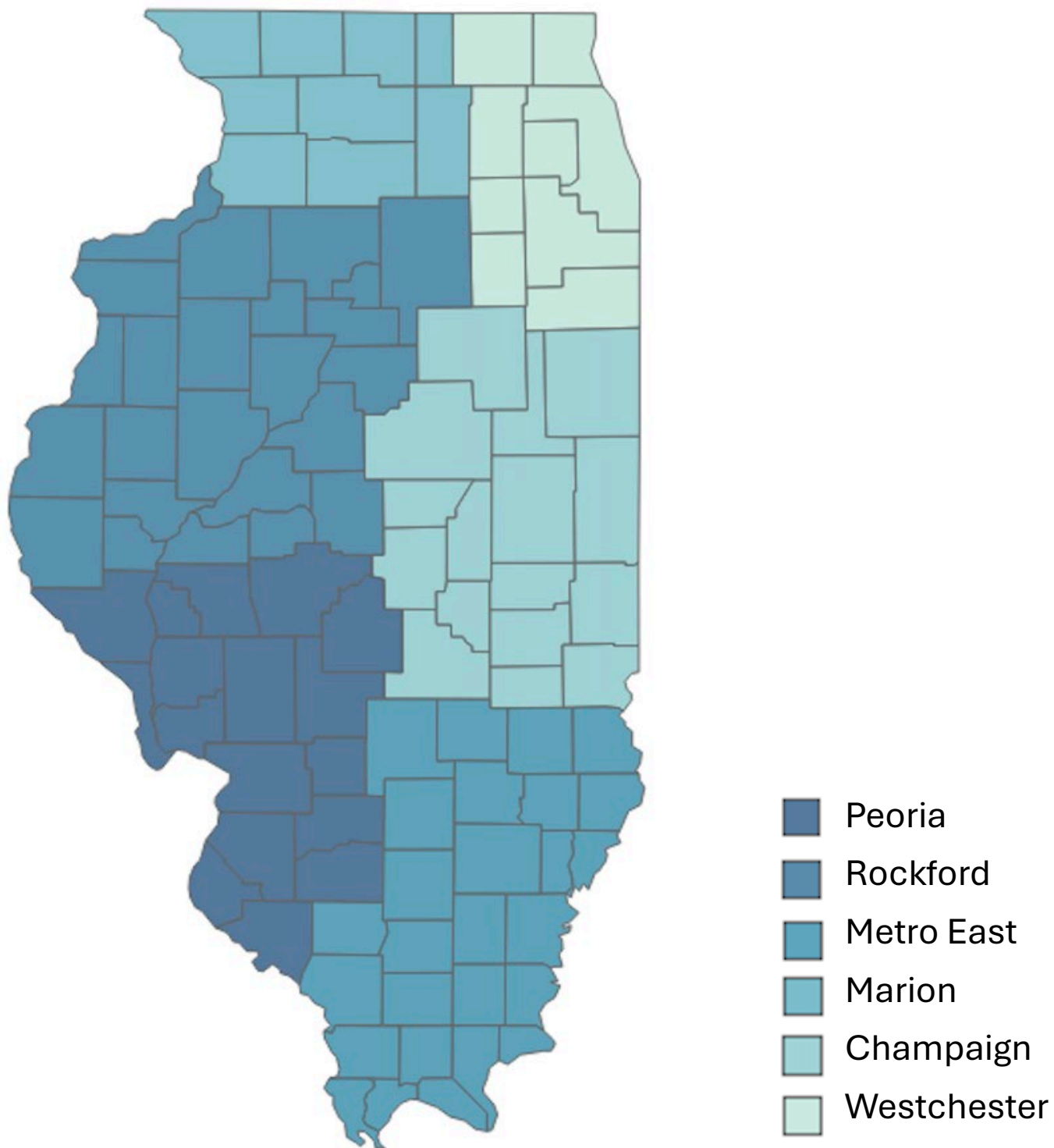
From 2020-2023, alcohol-related liver cirrhosis mortality varied notably across Illinois regions, with Metro East having the highest rate at 2.1 deaths per 100,000 people, followed by Peoria and Marion (1.9), Rockford (1.3), Champaign and Westchester (1.2). Table H3 and Figure H6 depict the regional rates of alcohol-attributable liver disease in Illinois.

The variation in alcohol-related liver cirrhosis mortality across Illinois regions from 2020–2023 highlights geographic disparities in alcohol-attributable disease burden. The highest rate in Metro East suggests localized risk factors such as a higher prevalence of heavy alcohol use, reduced access to liver disease screening and treatment, or social determinants like poverty and limited healthcare access that may be driving elevated mortality. Tailored, community-based interventions may help reduce mortality and address underlying factors contributing to these disparities.

Table H4: Age-Adjusted Rates of Alcohol-Attributable Liver Cirrhosis by Region, Illinois Vital Records, 2020-2023

Region	Estimated Rate of Alcohol-Attributable Liver Cirrhosis (per 100,000)
Metro East	2.1
Peoria	1.9
Marion	1.9
Rockford	1.3
Champaign	1.2
Westchester	1.2

Figure H7: Age-Adjusted Rate of Alcohol-Attributable Liver Cirrhosis by Region, Illinois Vital Records, 2020-2023



## The Burden of *Acute* Alcohol Use on Health: Insights from Mortality Data, Illinois, 2020-2023

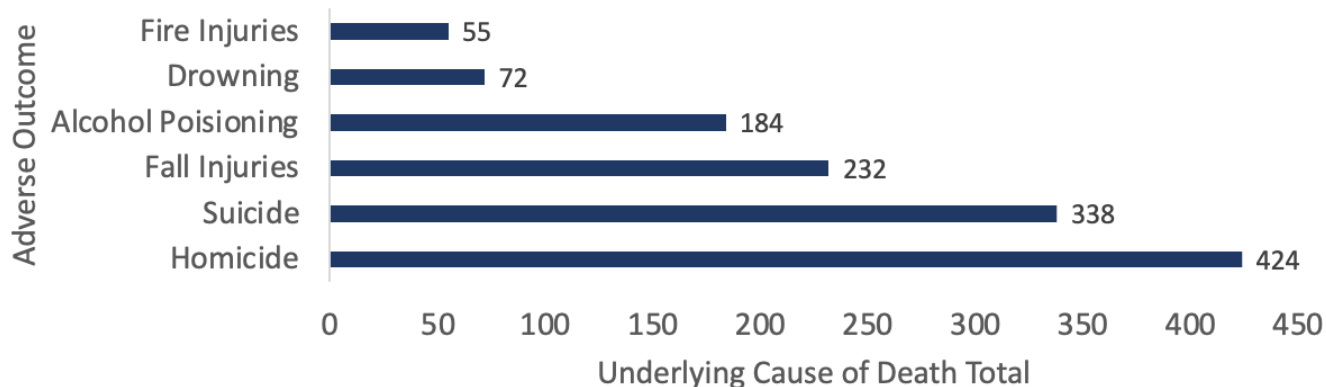
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### *Estimated Directly Attributable Health Outcomes*

Between 2020 and 2023, Illinois saw an estimated 424 homicides directly attributable to acute alcohol use. Suicide was the second most prevalent, with 338 deaths, followed by fall injuries (232), alcohol poisonings (184), drownings (72), and fire injuries with 55 fatalities from 2020 to 2023.

This data underscores the substantial impact of alcohol on both unintentional injuries, such as falls, and intentional acts, including homicide. These patterns point to the urgent need for alcohol-focused violence prevention strategies, including community-based interventions to reduce alcohol-related aggression, suicide prevention programs integrated with substance use treatment, and policies that limit high-risk alcohol access.

Figure H8: Estimated Directly Attributable Adverse Health Outcomes from Acute Alcohol Use, CDC ARDI, 2020-2023



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# Acknowledgments

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<sup>5</sup>The University of Illinois-Springfield

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# Appendix

Table 0A: Alcohol Consumption Prevalence, Youth Risk Behavior Surveillance Survey, Illinois, 2021

Alcohol Consumption	N	Unweighted Frequency		Weighted Frequency		
		N	%	N	%	95% CI
Current Alcohol Use*	2,882					
No		2261	78.5	398,950	77.2	75.2-79.1
Yes		621	21.5	118,148	22.8	21.0-24.8
Current Binge Drinking†	2,890					
No		2,587	89.5	457,431	88.4	87.0-89.8
Yes		303	10.5	59,870	11.6	10.2-13.0

\*Note: Current Alcohol Use defined as having 1 or more alcoholic beverages in the past 30 days

†Note: Current Binge Drinking defined as at least 1 or more days in the past 30 days that they consumed 4 or more drinks of alcohol in a row, that is, within a couple of hours (if they are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if they are male)

Table 0B: Alcohol Consumption by Sexual Orientation, Youth Risk Behavior Surveillance Survey, Illinois, 2021

Alcohol Consumption	LGBTQ+ Youth		Heterosexual Youth	
	Weighted % (95% CI)	Unweighted N	Weighted % (95% CI)	Unweighted N
Current Alcohol Use*	28.4% (23.9-32.0)	179	21.6% (19.0-24.3)	420
Current Binge Drinking†	15.1% (12.6-17.6)	90	10.7% (9.3-12.2)	201

\*Note: Current Alcohol Use defined as having 1 or more alcoholic beverages in the past 30 days

†Note: Current Binge Drinking defined as at least 1 or more days in the past 30 days that they consumed 4 or more drinks of alcohol in a row, that is, within a couple of hours (if they are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if they are male) for at least 1 or more days

Table 0C: Alcohol Consumption by Sex, Youth Risk Behavior Surveillance Survey, Illinois, 2021

Alcohol Consumption	Males		Females	
	Weighted % (95% CI)	Unweighted <i>N</i>	Weighted % (95% CI)	Unweighted <i>N</i>
Current Alcohol Use*	17.7% (15.5-19.8)	229	28.4% (25.3-31.4)	389
Current Binge Drinking†	8.1% (6.2-9.9)	102	15.2% (13.0-17.4)	198

\*Note: Current Alcohol Use defined as having 1 or more alcoholic beverages in the past 30 days

†Note: Current Binge Drinking defined as, at least 1 or more days in the past 30 days that they consumed 4 or more drinks of alcohol in a row, that is, within a couple of hours (if they are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if they are male)

Table 0D: Alcohol Consumption by Race &amp; Ethnicity, Youth Risk Behavior Surveillance Survey, Illinois, 2021

Alcohol Consumption	NH White		NH Black or African American		Hispanic/Latinx		All Other Races & Ethnicities	
	Weighted % (95% CI)	Unweighted <i>N</i>	Weighted % (95% CI)	Unweighted <i>N</i>	Weighted % (95% CI)	Unweighted <i>N</i>	Weighted % (95% CI)	Unweighted <i>N</i>
Current Alcohol Use*	27.0% (23.8-30.2)	318	15.9% (11.6-20.2)	44	22.5% (18.5-26.6)	204	13.9% (9.0-18.9)	44
Current Binge Drinking†	14.8% (12.4-17.2)	173	-	-	10.5% (8.0-13.0)	91	-	-

NH = non-Hispanic

\*Note: Current Alcohol Use defined as having 1 or more alcoholic beverages in the past 30 days

†Note: Current Binge Drinking defined as at least 1 or more days in the past 30 days that they consumed 4 or more drinks of alcohol in a row, that is, within a couple of hours (if they are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if they are male) for at least 1 or more days

Table E1: Percentage of Persons Killed by Highest Driver Blood Alcohol Concentration in Crash, By County, Illinois, 2022 (BAC .01+)

County	Number	Percent	County	Number	Percent	County	Number	Percent
CALHOUN	1	100%	WILL	30	46%	KNOX	-	20%
DOUGLAS	1	100%	DU PAGE	17	45%	MASSAC	-	20%
PULASKI	1	100%	MADISON	17	45%	MACOUPIN	1	17%
RICHLAND	1	100%	WINNEBAGO	13	45%	LIVINGSTON	1	15%
STARK	1	100%	COOK	175	44%	CRAWFORD	-	13%
UNION	5	82%	CLINTON	4	43%	RANDOLPH	1	13%
SALINE	2	80%	FAYETTE	2	43%	WAYNE	1	12%
MERCER	1	70%	MONTGOMERY	3	43%	BOONE	1	11%
MCHENRY	18	69%	DE KALB	7	41%	CLAY	-	10%
MORGAN	4	68%	COLES	3	40%	EFFINGHAM	1	10%
SCOTT	2	67%	JEFFERSON	2	40%	OGLE	1	8%
KENDALL	4	62%	MCDONOUGH	1	40%	SHELBY	-	8%
WARREN	3	62%	MOULTRIE	-	40%	HENRY	-	7%
ADAMS	9	59%	JERSEY	2	38%	JO DAVIESS	-	7%
ROCK ISLAND	8	59%	LOGAN	2	38%	BROWN	-	-
ALEXANDER	2	58%	STEPHENSON	2	38%	CASS	-	-
MONROE	3	57%	LEE	3	36%	CUMBERLAND	-	-
CHAMPAIGN	12	56%	CARROLL	1	35%	DE WITT	-	-
PEORIA	11	56%	CLARK	2	33%	EDWARDS	-	-
GREENE	1	55%	VERMILION	6	33%	FORD	-	-
JACKSON	3	55%	MARSHALL	1	30%	HAMILTON	-	-
SANGAMON	17	52%	MASON	-	30%	HANCOCK	-	-
TAZEWELL	9	51%	EDGAR	1	28%	HARDIN	-	-
WASHINGTON	5	50%	CHRISTIAN	2	27%	HENDERSON	1	-
KANE	22	49%	MCLEAN	6	26%	JOHNSON	-	-
LA SALLE	7	49%	WILLIAMSON	3	26%	MENARD	-	-
MACON	4	49%	GALLATIN	1	25%	PERRY	-	-
KANKAKEE	7	48%	JASPER	1	25%	PIATT	-	-
FRANKLIN	1	47%	LAWRENCE	1	25%	PIKE	-	-
LAKE	28	47%	GRUNDY	1	23%	POPE	-	-
ST CLAIR	22	47%	MARION	3	23%	PUTNAM	-	-
WHITESIDE	8	47%	BOND	1	20%	SCHUYLER	-	-
WOODFORD	3	47%	BUREAU	1	20%	WABASH	-	-
IROQUOIS	3	46%	FULTON	1	20%	WHITE	-	-

Note: "-" indicates missing or suppressed data

Table E2: Percentage of Persons Killed by Highest Driver Blood Alcohol Concentration in Crash, By County, Illinois, 2022 (BAC .08+)

County	Number	Percent	County	Number	Percent	County	Number	Percent
CALHOUN	1	100.0%	LAKE	24	40.0%	MACOUPIN	1	15.0%
PULASKI	1	100.0%	WILL	26	40.0%	WILLIAMSON	2	14.0%
RICHLAND	1	100.0%	COOK	152	38.0%	CRAWFORD	-	13.0%
STARK	1	100.0%	LOGAN	2	38.0%	RANDOLPH	1	13.0%
SALINE	2	80.0%	WASHINGTON	3	38.0%	LIVINGSTON	1	12.0%
UNION	5	80.0%	DE KALB	6	37.0%	BOONE	1	11.0%
EFFINGHAM	1	70.0%	JEFFERSON	2	37.0%	CLAY	-	10.0%
MERCER	1	70.0%	CARROLL	1	35.0%	KNOX	-	10.0%
WARREN	3	62.0%	WINNEBAGO	10	35.0%	MASSAC	-	10.0%
KENDALL	4	58.0%	MACON	3	34.0%	OGLE	1	8.0%
MCHENRY	15	56.0%	SCOTT	1	33.0%	SHELBY	-	8.0%
GREENE	1	55.0%	STEPHENSON	1	33.0%	HENRY	-	7.0%
JACKSON	3	52.0%	IROQUOIS	2	31.0%	WAYNE	-	7.0%
CHAMPAIGN	11	51.0%	DU PAGE	11	30.0%	BROWN	-	-
SANGAMON	16	50.0%	JERSEY	2	30.0%	CASS	-	-
MONROE	3	48.0%	LEE	3	30.0%	CUMBERLAND	-	-
ROCK ISLAND	6	48.0%	MCDONOUGH	1	30.0%	DE WITT	-	-
KANE	21	47.0%	MARSHALL	1	30.0%	DOUGLAS	-	-
PEORIA	9	47.0%	MASON	-	30.0%	EDWARDS	-	-
ADAMS	7	45.0%	CLINTON	3	29.0%	FORD	-	-
ALEXANDER	2	45.0%	CHRISTIAN	2	27.0%	HAMILTON	-	-
WOODFORD	3	45.0%	CLARK	2	25.0%	HANCOCK	-	-
FAYETTE	2	43.0%	EDGAR	1	25.0%	HARDIN	-	-
FRANKLIN	1	43.0%	JASPER	1	25.0%	JO DAVIESS	-	-
KANKAKEE	7	43.0%	VERMILION	4	23.0%	JOHNSON	-	-
MONTGOMERY	3	43.0%	MARION	3	21.0%	MENARD	-	-
MORGAN	3	42.0%	BOND	1	20.0%	PERRY	-	-
LA SALLE	6	41.0%	BUREAU	1	20.0%	PIATT	-	-
MADISON	15	41.0%	FULTON	1	20.0%	PIKE	-	-
ST CLAIR	20	41.0%	GALLATIN	-	20.0%	POPE	-	-
TAZEWELL	7	41.0%	LAWRENCE	-	20.0%	PUTNAM	-	-
WHITESIDE	7	41.0%	MCLEAN	4	20.0%	SCHUYLER	-	-
COLES	3	40.0%	MOULTRIE	-	20.0%	WABASH	-	-
HENDERSON	1	40.0%	GRUNDY	1	18.0%	WHITE	-	-

Note: "-" indicates missing or suppressed data

Table E3: Drivers Involved in Fatal Crashes and Blood Alcohol Concentration of the Driver (BAC .01+), By Illinois County, 2022

County	Number	Percent	County	Number	Percent	County	Number	Percent
CALHOUN	1	100	SALINE	3	31	CLAY	-	10
DOUGLAS	1	100	COOK	177	30	KNOX	-	10
PULASKI	1	100	DE KALB	7	30	MASON	-	10
RICHLAND	1	100	LAKE	29	30	BOONE	1	9
STARK	1	100	LOGAN	2	30	EFFINGHAM	1	9
MERCER	1	70	MONTGOMERY	3	30	FULTON	1	9
SCOTT	2	67	WHITESIDE	5	30	LIVINGSTON	1	9
HENDERSON	1	55	JEFFERSON	2	29	RANDOLPH	1	9
WARREN	3	54	KANE	21	29	GRUNDY	1	8
GREENE	2	50	DU PAGE	19	28	CRAWFORD	-	7
JACKSON	3	47	KANKAKEE	7	28	JO DAVIESS	-	7
KENDALL	4	46	WINNEBAGO	12	28	SHELBY	-	6
ROCK ISLAND	7	43	WOODFORD	3	28	HENRY	-	4
PEORIA	11	42	WILL	28	27	OGLE	1	4
MORGAN	4	41	IROQUOIS	3	25	WAYNE	-	4
UNION	3	41	CHRISTIAN	1	24	BROWN	-	-
MCDONOUGH	1	40	CLARK	2	23	CASS	-	-
MOULTRIE	-	40	FRANKLIN	1	23	CUMBERLAND	-	-
CHAMPAIGN	11	39	EDGAR	1	22	DE WITT	-	-
JERSEY	2	38	ALEXANDER	2	21	EDWARDS	-	-
MCHENRY	12	38	CARROLL	1	20	FORD	-	-
STEPHENSON	2	38	JASPER	1	20	HAMILTON	-	-
WASHINGTON	5	38	MASSAC	-	20	HANCOCK	-	-
CLINTON	4	37	VERMILION	5	19	HARDIN	-	-
LEE	3	36	BUREAU	1	17	JOHNSON	-	-
MONROE	4	36	COLES	2	17	MENARD	-	-
ADAMS	6	35	GALLATIN	1	17	PERRY	-	-
LA SALLE	6	35	LAWRENCE	1	17	PIATT	-	-
MADISON	17	35	WILLIAMSON	3	17	PIKE	-	-
SANGAMON	17	35	MCLEAN	5	15	POPE	-	-
FAYETTE	2	34	MARION	3	15	PUTNAM	-	-
ST CLAIR	23	34	MARSHALL	1	14	SCHUYLER	-	-
TAZEWELL	8	33	BOND	1	12	WABASH	-	-
MACON	5	31	MACOUPIN	1	11	WHITE	-	-

Note: "-" indicates missing or suppressed data

Table E4: Drivers Involved in Fatal Crashes and Blood Alcohol Concentration of the Driver (BAC .08+), By Illinois County, 2022

County	Number	Percent	County	Number	Percent	County	Number	Percent
CALHOUN	1	100	WOODFORD	3	27	BOONE	1	9
PULASKI	1	100	COOK	150	26	RANDOLPH	1	9
RICHLAND	1	100	KANKAKEE	7	26	WILLIAMSON	2	9
STARK	1	100	CLINTON	3	25	FULTON	1	8
MERCER	1	70	WHITESIDE	5	25	CRAWFORD	-	7
HENDERSON	1	55	CHRISTIAN	1	24	LIVINGSTON	1	7
WARREN	3	54	DE KALB	6	24	EFFINGHAM	1	6
GREENE	1	47	LAKE	23	24	GRUNDY	1	6
JACKSON	3	44	TAZEWELL	5	23	SHELBY	-	6
KENDALL	4	44	WILL	24	23	KNOX	-	5
UNION	3	40	FRANKLIN	1	22	HENRY	-	4
CHAMPAIGN	9	34	MACON	3	22	OGLE	1	4
FAYETTE	2	34	WINNEBAGO	9	21	WAYNE	-	2
PEORIA	9	34	CARROLL	1	20	BROWN	-	-
ROCK ISLAND	6	34	EDGAR	1	20	CASS	-	-
SANGAMON	16	33	JASPER	1	20	CUMBERLAND	-	-
SCOTT	1	33	MOULTRIE	-	20	DE WITT	-	-
STEPHENSON	1	33	DU PAGE	13	19	DOUGLAS	-	-
MADISON	15	31	BUREAU	1	17	EDWARDS	-	-
JERSEY	2	30	CLARK	2	17	FORD	-	-
LEE	3	30	ALEXANDER	1	16	HAMILTON	-	-
LOGAN	2	30	COLES	2	16	HANCOCK	-	-
MCDONOUGH	1	30	IROQUOIS	2	15	HARDIN	-	-
MONROE	3	30	VERMILION	4	15	JO DAVIESS	-	-
MONTGOMERY	3	30	MARION	2	14	JOHNSON	-	-
ST CLAIR	20	30	MARSHALL	1	14	MENARD	-	-
SALINE	3	30	GALLATIN	-	13	PERRY	-	-
ADAMS	5	28	LAWRENCE	-	13	PIATT	-	-
JEFFERSON	2	28	BOND	1	12	PIKE	-	-
LA SALLE	5	28	MCLEAN	4	11	POPE	-	-
MCHENRY	9	28	CLAY	-	10	PUTNAM	-	-
MORGAN	3	28	MACOUPIN	1	10	SCHUYLER	-	-
WASHINGTON	3	28	MASON	-	10	WABASH	-	-
KANE	19	27	MASSAC	-	10	WHITE	-	-

Note: "-" indicates missing or suppressed data

Figure E5: Percentage of Drivers Killed in Crashes and Blood Alcohol Concentration of the Driver (.01+), by Illinois County, 2022

County	Number	Percent	County	Number	Percent	County	Number	Percent
CALHOUN	1	100	COOK	80	38	CARROLL	-	5
DOUGLAS	1	100	TAZEWELL	3	38	COLES	-	5
HENDERSON	1	100	WILL	17	36	EFFINGHAM	-	5
KENDALL	3	100	ADAMS	5	35	BOND	-	-
PULASKI	1	100	CHRISTIAN	1	33	BROWN	-	-
RICHLAND	1	100	CLINTON	1	33	CASS	-	-
STARK	1	100	MONTGOMERY	2	33	CUMBERLAND	-	-
LA SALLE	5	71	STEPHENSON	1	33	DE WITT	-	-
MERCER	1	70	IROQUOIS	2	32	EDWARDS	-	-
SALINE	2	70	WHITESIDE	3	31	FORD	-	-
JEFFERSON	2	67	CLARK	1	30	FULTON	-	-
WARREN	2	67	LEE	1	28	GALLATIN	-	-
UNION	3	65	WOODFORD	1	28	HAMILTON	-	-
CHAMPAIGN	10	64	LOGAN	1	27	HANCOCK	-	-
JACKSON	3	60	WINNEBAGO	5	27	HARDIN	-	-
MORGAN	3	60	WILLIAMSON	2	26	HENRY	-	-
MONROE	2	53	BUREAU	1	25	JO DAVIESS	-	-
PEORIA	6	52	GREENE	1	25	JOHNSON	-	-
MCHENRY	7	51	JASPER	1	25	KNOX	-	-
EDGAR	1	50	ROCK ISLAND	2	23	LAWRENCE	-	-
MACON	3	50	MARION	2	21	MARSHALL	-	-
SCOTT	1	50	CRAWFORD	-	20	MASON	-	-
KANE	14	49	MCDONOUGH	-	20	MENARD	-	-
LAKE	16	49	MASSAC	-	20	MOULTRIE	-	-
WASHINGTON	4	49	MCLEAN	3	19	PERRY	-	-
JERSEY	2	45	BOONE	1	18	PIATT	-	-
DE KALB	4	44	MACOUPIN	1	18	PIKE	-	-
FAYETTE	2	43	RANDOLPH	1	16	POPE	-	-
FRANKLIN	1	43	CLAY	-	10	PUTNAM	-	-
MADISON	11	42	LIVINGSTON	1	10	SCHUYLER	-	-
ST CLAIR	11	41	OGLE	1	8	SHELBY	-	-
KANKAKEE	4	40	VERMILION	1	8	WABASH	-	-
SANGAMON	11	40	ALEXANDER	-	7	WAYNE	-	-
DU PAGE	10	39	GRUNDY	-	7	WHITE	-	-

Note: "-" indicates missing or suppressed data

Table E6: Percentage of Drivers Killed in Crashes and Blood Alcohol Concentration of the Driver (.08+), by Illinois County, 2022

County	Number	Percent	County	Number	Percent	County	Number	Percent
CALHOUN	1	100	WILL	15	32	GRUNDY	-	3
HENDERSON	1	100	DE KALB	3	31	EFFINGHAM	-	2
KENDALL	3	100	CLINTON	1	30	BOND	-	-
PULASKI	1	100	LEE	1	28	BROWN	-	-
RICHLAND	1	100	WOODFORD	1	28	CASS	-	-
STARK	1	100	ADAMS	4	27	CUMBERLAND	-	-
MERCER	1	70	LOGAN	1	27	DE WITT	-	-
SALINE	2	70	STEPHENSON	1	27	DOUGLAS	-	-
JEFFERSON	2	67	WHITESIDE	3	26	EDWARDS	-	-
WARREN	2	67	BUREAU	1	25	FORD	-	-
UNION	3	65	JASPER	1	25	FULTON	-	-
JACKSON	3	60	TAZEWELL	2	24	GALLATIN	-	-
CHAMPAIGN	9	57	DU PAGE	6	23	HAMILTON	-	-
LA SALLE	4	57	ROCK ISLAND	2	23	HANCOCK	-	-
EDGAR	1	50	MARION	2	21	HARDIN	-	-
SCOTT	1	50	CLARK	1	20	HENRY	-	-
KANE	14	48	CRAWFORD	-	20	JO DAVIESS	-	-
MONROE	2	45	GREENE	-	20	JOHNSON	-	-
FAYETTE	2	43	BOONE	1	18	KNOX	-	-
PEORIA	5	43	MACOUPIN	1	16	LAWRENCE	-	-
FRANKLIN	1	40	RANDOLPH	1	16	MARSHALL	-	-
MORGAN	2	40	WINNEBAGO	3	16	MASON	-	-
SANGAMON	11	40	WILLIAMSON	1	14	MENARD	-	-
KANKAKEE	4	39	MCLEAN	2	13	MOULTRIE	-	-
ST CLAIR	11	39	IROQUOIS	1	12	PERRY	-	-
JERSEY	2	38	CLAY	-	10	PIATT	-	-
MADISON	10	37	LIVINGSTON	1	10	PIKE	-	-
WASHINGTON	3	37	MCDONOUGH	-	10	POPE	-	-
LAKE	12	36	MASSAC	-	10	PUTNAM	-	-
MCHENRY	5	35	OGLE	1	8	SCHUYLER	-	-
CHRISTIAN	1	33	VERMILION	1	8	SHELBY	-	-
COOK	70	33	ALEXANDER	-	7	WABASH	-	-
MACON	2	33	CARROLL	-	5	WAYNE	-	-
MONTGOMERY	2	33	COLES	-	5	WHITE	-	-

Note: "-" indicates missing or suppressed data

