

Health Consequences of Alcohol Use in New York City

In New York City, alcohol is readily available at service outlets, such as restaurants and bars, and at retail outlets, such as liquor stores and delis. More than half of NYC adults report drinking some alcohol in the past year. Light alcohol consumption (up to one drink daily for women and one or two drinks daily for men) has been associated with cardiovascular health benefits. However, heavier regular drinking and binge drinking (five or more drinks on one occasion) contribute to a wide range of serious health problems, including heart disease, diabetes, cancer, stroke and dementia. Alcohol use is also

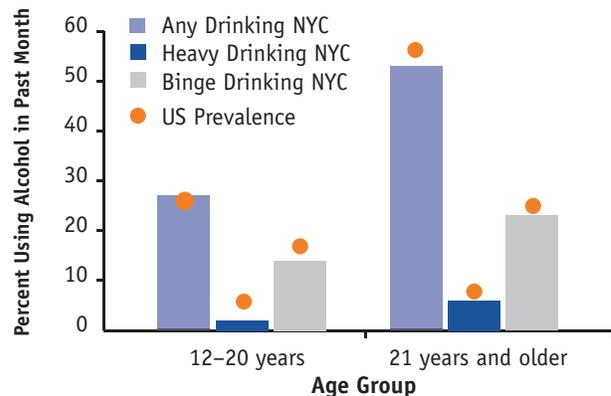
associated with depression, suicide, homicide, domestic violence, sexually transmitted diseases and injuries.

Each year in the United States, there are approximately 79,000 deaths attributable to excessive alcohol use, making alcohol the third leading behavior-related cause of death nationwide. This report examines alcohol consumption and resulting illness, injury and death among both adult and underage drinkers in New York City. The policy recommendations highlight opportunities for health care providers, policymakers, and the alcohol industry to address alcohol-related morbidity and mortality.

More than one in four New Yorkers younger than 21 report recent alcohol use and half of underage drinkers report binge drinking

- About half of New Yorkers aged 21 years and older (53%) report drinking alcohol, similar to adults nationwide (56%).
- Among adult New Yorkers who report any drinking, 11% are heavy drinkers and 42% binge drink.
- More than half of adults in NYC who drink alcohol consume beer (56%), compared with one quarter who consume wine and one fifth who consume spirits.
- More than one in four underage New Yorkers (12-20 years) report drinking in the past month (27%). Among underage drinkers, 52% report binge drinking and 10% report heavy drinking.
- Reported drinking in the past month has increased in NYC among underage college students (aged 18 to 20) from 45% in 2002-2005 to 57% in 2005-2008.

Self-reported alcohol consumption in the past month by age, NYC and US



Source: NSDUH - NYC 2007-2008 averaged; US 2008 only

Any drinking: consuming at least one alcoholic drink in the past 30 days.

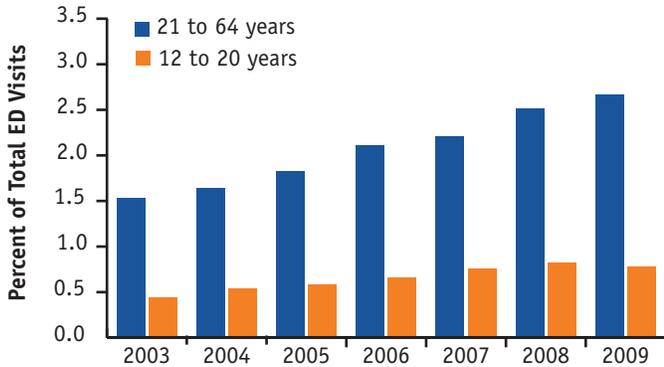
Heavy drinking: consuming an average of more than two drinks per day for men or more than one drink per day for women.

Binge drinking: consuming five or more drinks on one occasion in the past 30 days.

Data for this report are derived from several sources. The National Survey on Drug Use and Health (NSDUH), conducted annually by the Substance Abuse and Mental Health Services Administration (SAMHSA), includes a representative sample of NYC residents aged 12 years and over. Two-year averages are presented. Data on types of alcohol consumed are from the 2004 NYC Health and Nutrition Survey (NYC HANES). For full survey details, visit nyc.gov/health/nychanes. The NYC Syndromic Surveillance system tracks ED visits citywide reported by NYC emergency departments. Alcohol-related visits are determined by an alcohol "syndrome" and are defined as alcohol-related chief complaint and ICD-9 codes. The New York State Department of Health's Statewide Planning and Research Cooperative System (SPARCS) captures all inpatient hospitalizations. All alcohol-related principal and secondary diagnoses are included in these analyses for any NYC resident aged 13 years and older hospitalized in the city (1999 through 2006). Mortality data are from DOHMH's Bureau of Vital Statistics, 2008, and use the Centers for Disease Control and Prevention's Alcohol-Related Disease Impact (ARDI) methods (apps.nceed.edc.gov/ardi).

Alcohol-related emergency department (ED) visits are increasing

Percent of ED Visits that are alcohol-related in NYC by age group

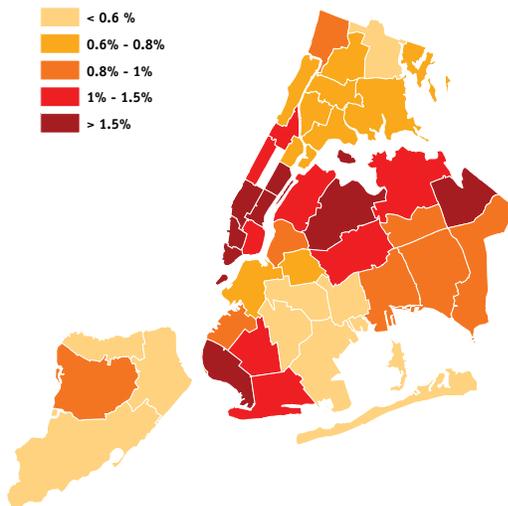


Source: NYC DOHMH Syndromic Surveillance ED Visits 2003-2009. Percentages reported reflect ED chief complaints mentioning alcohol. Numbers reported reflect ED chief complaints or ICD-9 codes mentioning alcohol.

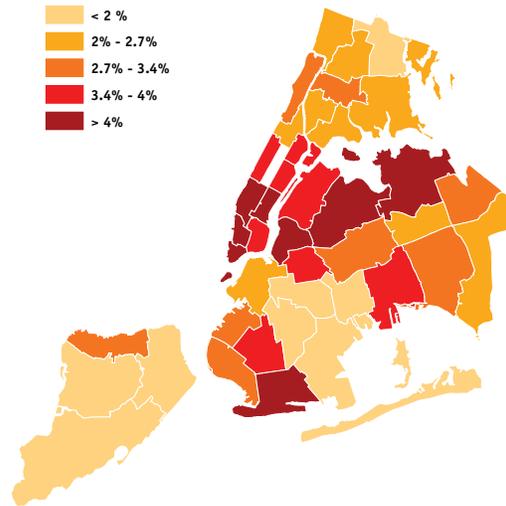
- From 2003 to 2009, the number of alcohol-related ED visits increased for all New Yorkers – both adults aged 21 to 64 years and underage New Yorkers (12 to 20 years).
- In 2009, there were at least 70,000 alcohol-related ED visits among New Yorkers aged 21 to 64. The proportion of alcohol-related ED visits in this group increased from 1.5% in 2003 to 2.7% in 2009, an almost two-fold increase.
- Similarly, the proportion of alcohol-related ED visits by underage New Yorkers nearly doubled, increasing from 0.5% in 2003 to 0.8% in 2009. In 2009, there were almost 4,000 alcohol-related ED visits in this group.

Alcohol-related ED visits vary by neighborhood; patterns are similar for adult and underage New Yorkers

Percent of ED visits that are alcohol-related, aged 12–20



Percent of ED visits that are alcohol-related, aged 21-64



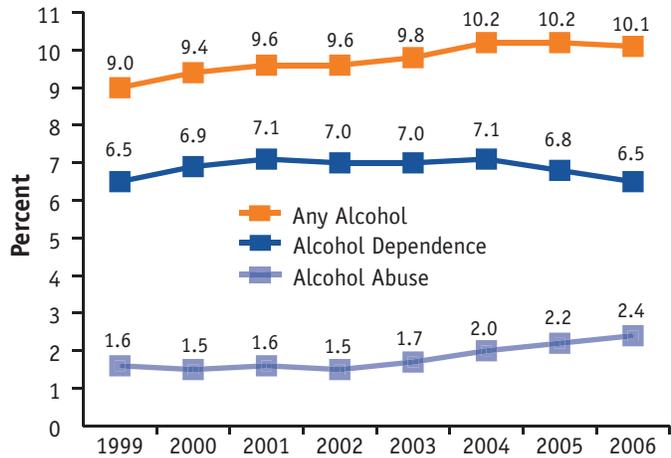
Sources: NYC DOHMH Syndromic Surveillance ED Visits 2007-2008

- Neighborhoods with the highest proportion of ED visits that are related to alcohol for both adults and underage drinkers are:
 - Lower Manhattan; Greenwich Village-SoHo, Gramercy Park-Murray Hill and Chelsea-Clinton in Manhattan; North and West Queens; Southern Brooklyn; and Greenpoint in Brooklyn.
- Neighborhoods with the lowest proportion of ED visits related to alcohol for both adults and underage drinkers are:
 - Most of Staten Island; the Northeast Bronx; Central Brooklyn; Canarsie-Flatlands and Flatbush in Brooklyn; and the Rockaways in Queens.

One in ten hospitalizations in New York City is alcohol-related

- In 2006, there were approximately 96,000 alcohol-related hospitalizations, which include those with either a principal or secondary diagnosis related to alcohol use.
- An estimated 55,000 New Yorkers had at least one alcohol-related hospitalization in 2006.
- The proportion of hospitalizations that were alcohol-related increased by 12% between 1999 and 2006.
- In NYC and nationwide, hospitalization rates for alcohol abuse are increasing.

Percent of all hospitalizations that are alcohol-related, aged 13 and older, NYC



Source: NYSDOH SPARCS, 1999-2006

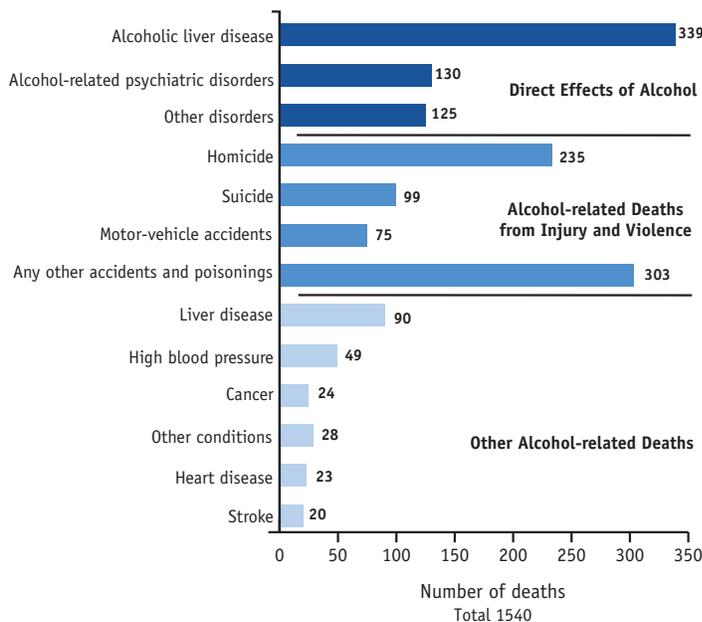
Dependence: a psychiatric diagnosis describing a physical dependence on alcohol; a chronic disease characterized by withdrawal in the absence of alcohol consumption, such as alcoholism.

Abuse: a pattern of drinking that results in harm to one's health, relationships or ability to work but without a physical dependence, such as binge drinking.

Source: Diagnostic and Statistical Manual of Mental Disorders (DSM IV)

Injuries and violence are leading causes of alcohol-related death

Alcohol-attributable deaths among New Yorkers



Source: NYC DOHMH Vital Statistics, 2008

* Includes alcohol-attributable deaths of NYC residents that occurred in NYC

- Alcohol-attributable deaths are among the leading causes of death in NYC; in 2008, an estimated 1,540 New Yorkers died of alcohol-attributable causes.
- These included deaths from chronic alcohol use, such as alcoholism, and deaths from acute alcohol use, such as binge drinking.
- Alcoholic liver disease accounts for one fifth (22%) of all alcohol-attributable deaths and is the most common chronic cause.
- Injuries, poisoning, and violence make up nearly half (46%) of all alcohol-attributable deaths and are the most common acute causes.
- Alcohol is associated with:
 - 46% of homicides
 - 26% of deaths due to unintentional injury and poisoning
 - 28% of motor vehicle-related deaths.

Recommendations

Health care providers should conduct universal screenings for alcohol problems.

- Provide brief interventions aimed at reducing harmful alcohol use as a routine practice component, in primary and specialty care settings alike. Visit “City Health Information: Brief Interventions for Alcohol Problems” at <http://www.nyc.gov/html/doh/downloads/pdf/chi/chi25-10.pdf>.
- Ensure emergency medical care settings maximize opportunities for screening and brief counseling interventions.
- Integrate an evidence-based screening tool and guidance for delivering brief interventions into electronic health record systems.

Policymakers and regulators should support evidence-based interventions that have been shown to reduce the health risks associated with harmful drinking and consider the following examples.

- Discourage child-friendly labeling and packaging of alcoholic beverages.
- Enforce laws prohibiting sales of alcohol to youth and to those already intoxicated.

The alcohol industry should reduce youth exposure to advertising.

- Reduce the amount of advertising that appears in settings, publications, or electronic media (TV, internet) with large youth audiences.
- Monitor and comply with the voluntary commitment not to place billboard alcohol advertising within 500 feet of a school or religious institution.

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