Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

500 Cities: Local Data for Better Health

Unhealthy Behaviors

Binge drinking among adults aged ≥ 18 years

Demographic group	Adults aged ≥18 years.
Numerator	Adults aged ≥18 years who report having five or more drinks (men) or four or more drinks (women) on an occasion in the past 30 days.
Denominator	Adults aged ≥18 years who report having a specific number, including zero, of drinks on an occasion in the past 30 days (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Annual prevalence: crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 9 [*1*]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Past 30 days.
Background	In 2010, a total of 17.1% of adults reported binge drinking on an occasion in the past 30 days (*2*). Binge drinking prevalence is higher among men, persons aged 18–34 years, whites, and those with household incomes ≥ $75,000 (*2*).
Significance	Excessive alcohol use accounted for an estimated average of 88,000 deaths and 2.5 million years of potential life lost (YPLL) in the United States each year during 2006–2010 (*3*), and an estimated $223.5 billion in economic costs in 2006 (*4*). Binge drinking accounted for more than half of those deaths, two thirds of the YPLL (*5*), and three fourths of the economic costs (*4*). Binge drinking also is a risk factor for many health and social problems, including motor-vehicle crashes, violence, suicide, hypertension, acute myocardial infarction, sexually transmitted diseases, unintended pregnancy, fetal alcohol spectrum disorders, and sudden infant death syndrome (*6*,*7*). In the United States, binge drinking accounts for more than half of the alcohol consumed by adults (*8*). However, most binge drinkers are not alcohol dependent (*9*,*10*).

Limitations of indicator	The indicator does not convey the frequency of binge drinking or the specific amount of alcohol consumed.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate. A recent study using BRFSS data found that self-reports identify only 22%–32% of presumed alcohol consumption in states, based on alcohol sales (*11*).
Related recommendations	• *Healthy People 2020* objective SA-14.3: Reduce the proportion of persons engaging in binge drinking in the past 30 days—adults aged ≥18 years. • CDC Prevention Status Report: Excessive alcohol use (*12*).

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4. Bouchery EE, Harwood HJ, Sacks JJ, Simon CJ, Brewer RD. Economic costs of excessive alcohol consumption in the U.S., 2006. Am J Prev Med 2011;41:516–24.
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Current smoking among adults aged ≥18 years

Demographic group	Resident adults aged ≥18 years.
Numerator	Respondents aged ≥18 years who report having smoked ≥100 cigarettes in their lifetime and currently smoke every day or some days.
Denominator	Respondents aged ≥18 years who reported information about cigarette smoking (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Annual prevalence: crude and age-adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 9 [*1*]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Current.
Background	Although the overall prevalence of cigarette smoking has steadily decreased since the National Health Interview Survey first began assessing use in 1965, 19.0% of adults aged ≥18 years still smoked in 2011 (*2*). Of these, 77.8% (34.1 million) smoked every day, and 22.2% (9.7 million) smoked on some days (*2*). During 2005–2011, a slight overall decline in current smoking prevalence was noted; the largest decline in current smoking prevalence occurred in adults aged 18–24 years (from 24.4% to 18.9%) (*2*).
Significance	Approximately 480,000 deaths each year are attributed to cigarette smoking and exposure to tobacco smoke, making it the leading preventable cause of death in the United States (*3*). Smoking increases the risk for heart disease, stroke, multiple types of cancer, and chronic lung disease (*4*). Quitting smoking is beneficial to health at any age, and cigarette smokers who quit before age 35 years have mortality rates similar to those who never smoked (*4,5*).
Limitations of indicator	Indicator does not measure the lifetime or current number of cigarettes smoked, and each of these factors can affect the risk for acquiring chronic disease from smoking cigarettes. Additionally, the indicator does not measure intent or attempts to quit smoking among smokers or exposure to secondhand smoke among nonsmokers.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS)
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address

	noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	*Healthy People 2020* objective TU-1.1: Reduce cigarette smoking by adults.

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No leisure-time physical activity among adults aged ≥18 years

Demographic group	Resident adults aged ≥18 years
Numerator	Respondents who answered "no" to the following question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"
Denominator	Number of adults aged ≥18 years who reported any or no physical activity in the past month (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Annual prevalence (crude and age adjusted) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Past month.

Background	The 2008 physical activity guidelines for Americans states that all adults should avoid inactivity (*1*). In 2011, nationwide (50 states and the District of Columbia), 25.4% of adults participated in no leisure-time physical activity in the past month (*2*).
Significance	Regular physical activity can improve the health and quality of life of persons in the United States of all ages, regardless of the presence of a chronic disease or disability (*1*). Among adults and older adults, physical activity can lower the risk for early death, coronary heart disease, stroke, high blood pressure, type 2 diabetes, breast and colon cancer, falls, and depression (*3*). The 2008 guidelines state that some physical activity is better than none, and adults who participate in any amount of physical activity gain some health benefits (*1*).
Limitations of indicator	Indicator captures information only about nonoccupational physical activity. The National Health Interview Survey is the national data source for *Healthy People 2020*, and BRFSS is the state data source. Because the questions from each data source and the survey administration are different, data cannot be compared.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	*Healthy People 2020* objective PA-1: Reduce the proportion of adults who engage in no leisure-time physical activity.

1. US Department of Health and Human Services. 2008 physical activity guidelines for Americans. Washington, DC: US Department of Health and Human Services; 2008
2. CDC. Behavioral Risk Factor Surveillance System survey data. Atlanta, Georgia: US Department of Health and Human Services, CDC; 2011.
3. US Department of Health and Human Services. Physical activity guidelines advisory committee report, 2008. Washington, DC: US Department of Health and Human Services; 2008.

Obesity among adults aged ≥18 years

Demographic group	Resident adults aged ≥18 years.

Numerator	Respondents aged ≥18 years who have a body mass index (BMI) ≥30.0 kg/m² calculated from self-reported weight and height. Exclude the following: • Height: data from respondents measuring <3 ft or ≥8 ft • Weight: data from respondents weighing <50 lbs or ≥650 lbs • BMI: data from respondents with BMI <12 kg/m2 ≥100 kg/m2 • Pregnant women
Denominator	Respondents aged ≥18 years for whom BMI can be calculated from their self-reported weight and height (excluding unknowns, refusals to provide weight or height and exclusions listed below): • Height: data from respondents measuring <3 ft or ≥8 ft • Weight: data from respondents weighing <50 lbs or ≥650 lbs • BMI: data from respondents with BMI <12 kg/m2 ≥100 kg/m2 • Pregnant women
Measures of frequency	Annual prevalence: crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 9 [*1*]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Current.
Background	In 2012, state prevalences for obesity ranged from 20.5% to 34.7% based on self-reported BRFSS data (*2*).
Significance	Being overweight or obese increases the risk for multiple chronic diseases, including heart disease, stroke, hypertension, type 2 diabetes, osteoarthritis, and certain cancers (*3*).
Limitations of indicator	Self-reports of height and weight lead to lower BMI estimates compared with estimates obtained when height and weight are measured (*4*,*5*).
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	*Healthy People 2020* objective NWS-9: Reduce the proportion of adults who are obese.

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Sleeping less than 7 hours among adults aged ≥18 years

Demographic group	Resident adults aged ≥18 years
Numerator	Respondents aged ≥18 years who report usually getting insufficient sleep (<7 hours for those aged ≥18 years, on average, during a 24-hour period)
Denominator	Respondents aged ≥18 years who report 0–24 hours of sleep (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Annual prevalence (percentage), crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 9 [*1*]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Current.
Background	In 2012, 29.2% of adults reported usually getting insufficient sleep (<7 hours for those aged ≥18 years, on average, during a 24-hour period) (*2*).
Significance	Insufficient sleep is associated with numerous chronic diseases and conditions, such as diabetes, cardiovascular disease, hypertension, obesity, and depression (*3*). Insufficient sleep is associated with the onset of these conditions and also poses important implications for their management and outcome. Moreover, insufficient sleep is responsible for motor vehicle crashes and industrial errors, causing substantial injury and disability each year. Sleepiness can also reduce productivity and quality of life (*3*).
Limitations of	Indicator does not measure variations in sleep duration (e.g., weekday vs. weekend sleep) or

indicator	quality of sleep. Both of these might affect the risk for chronic disease. Indicator does not identify specific sleep problems, such as sleep disordered breathing, that are associated with different chronic conditions.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	*Healthy People 2020* objective SH-4: Increase the proportion of adults who get sufficient sleep.

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