



# Alcohol Screening and Brief Intervention Connecticut, 2014

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## KEY POINTS:

- Alcohol screening and brief intervention (ASBI) is an effective evidence-based strategy to help prevent the harms of excessive drinking.
- In 2014, about 3 in 4 Connecticut adults were screened for alcohol use at their last routine medical checkup.
- In Connecticut, being screened for alcohol use by a healthcare provider was most prevalent among excessive drinkers, married residents, members of an unmarried couple, and adults with higher education.
- Increased implementation of ASBI among all Connecticut residents, as well as training for healthcare providers, could reduce excessive alcohol consumption throughout the state, and the harms related to it.

## Health Statistics and Surveillance Section

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## Introduction

Excessive alcohol use is a leading cause of preventable death in the United States, contributing to deaths from falls, drowning, burns, motor vehicle crashes, murder and suicide. Nationwide, alcohol abuse contributes to one in 10 deaths among working-age adults aged 20-64 years old.<sup>1</sup> In 2015, Connecticut ranked worse than most other states in excessive alcohol consumption.<sup>2</sup> Over time, excessive alcohol use contributes to the development of chronic diseases, including high blood pressure, liver and heart disease, cancer, stroke and depression.<sup>3</sup> Excessive drinking includes binge or heavy drinking, or any drinking by pregnant women or people younger than age 21.<sup>1</sup> Heavy drinking is defined as having at least two drinks daily for men or having at least one drink a day for women. Binge drinking is five or more drinks during a single occasion for men or four or more drinks during a single occasion for women.<sup>4</sup> In 2014, 60.8% of Connecticut residents were current drinkers, or those who had at least one drink in the past month. Among current drinkers, 15.9% were binge drinkers and 5.7% engaged in heavy drinking.<sup>4</sup>

Alcohol screening and brief intervention (ASBI) is recommended by the U.S. Preventive Services Task Force for all adults as an evidence-based practice in primary health care settings.<sup>5</sup> As a simple preventive service to identify and help individuals who engage in risky or hazardous drinking, ASBI can occur as part of a patient's wellness visit. ASBI uses a validated set of questions to screen all adult patients for excessive drinking, followed by a brief intervention to counsel patients who are at-risk drinkers. If the patient is found to be dependent on alcohol, appropriate referrals for treatment are made.

A study performed by the U.S. Preventive Services Task Force found that 6 to 12 months after brief counseling, participants drinking at safe or moderate levels was 10% to 19% greater than those who did not receive the brief intervention.<sup>6</sup> Additionally, ASBI was found effective with at-risk drinkers across a wide range of ages, from 17 to 70 years old.

Since at-risk drinkers make up a large percentage of all drinkers, ASBI can have a significant impact on the overall health of a population.<sup>7</sup> However, despite strong recommendations and evidence of effectiveness, ASBI has not been broadly adopted or fully implemented as standard clinical practice. In 2014, the Connecticut Behavioral Risk Factor Surveillance System (CT BRFSS) included a module to determine the use of ASBI in primary care settings. The objective of this analysis was to estimate the prevalence of ASBI among adults in Connecticut and assess ASBI implementation by selected demographic characteristics and alcohol consumption status.

### Methods

The CT BRFSS (<http://www.ct.gov/dph/BRFSS>) is an annual statewide landline and cell phone survey of Connecticut resident volunteers 18 years of age and over. It is funded by the Centers for Disease Control and Prevention (CDC) to assess health status and risk protective factors among Connecticut adults. In 2014, all survey respondents were asked questions regarding their alcohol use, including frequency and average number of drinks per drinking occasion, which were used to calculate binge and heavy drinking. The ASBI module was asked of respondents who reported having a routine medical checkup in the past two years and included five questions (**Table 1**) to determine whether respondents were asked about their alcohol use and drinking habits.

For this analysis, responses to the ASBI module were described and compared by selected sociodemographic variables and drinking behavior, including age, sex, race/ethnicity, education, employment, marital status, income, health insurance, excessive drinking and current alcohol consumption. Weighted prevalence values and 95% confidence intervals (95% CI) were calculated using SAS software (Copyright © 2002-2012 SAS Institute Inc., Cary, NC).

**Table 1: ASBI module, CT BRFSS, 2014**

Question
1. You told me earlier that your last routine checkup was [within the past year/two years]. At that checkup, were you asked in person or on a form if you drink alcohol?
2. Did the health care provider ask you in person or on a form how much you drink?
3. Did the healthcare provider specifically ask whether you drank [5 for men/4 for women] or more alcoholic drinks on an occasion?
4. Were you offered advice about what level of drinking is harmful or risky for your health?
5. At your last routine checkup, were you advised to reduce or quit your drinking?

### Results

In 2014, alcohol use and binge drinking were significantly higher among Connecticut adults who were under 34 years of age, men, and residents with household incomes of \$75,000 or greater.<sup>3</sup> Overall, 85.7% of Connecticut residents had a routine health checkup within the past two years, and were asked the ASBI module (**Table 2**). Adults who reported having a checkup within the past two years varied significantly by age, sex, race/ethnicity, education and health insurance coverage. Adults over 55 years of age (92.0%), women (82.3%), non-Hispanic black (90.8%), insured (88.5%), married (88.2%), or previously married (89.3%), had a significantly higher prevalence of having had a routine checkup in the past two years (**Table 2**) and were more likely, therefore, to be screened for alcohol consumption. Additionally, the prevalence of having had a routine checkup within the past two years among excessive (binge or heavy) drinkers (79.9%) was significantly less than for non-excessive drinkers (87.3%).

Among those who had a routine checkup within the past two years, an estimated 76.6% were asked by their healthcare provider, either in person or on a form, if they currently drank alcohol (**Table 2**). The prevalence of being screened for alcohol use was more common among those aged 35-54 years old (82.3%), women (78.3%), Hispanics (79.7%), and adults with an annual household income of at least \$75,000 (83.5%). Married respondents (79.4%), members of an unmarried couple (92.2%), and those with a high school diploma (71.5%) had a significantly higher prevalence than their unmarried counterparts and those without higher education (**Table 2**). The prevalence of alcohol screening was also significantly higher among excessive (84.3%) and current alcohol drinkers (81.8%) compared to all residents in Connecticut who were screened for alcohol use (76.6%).

Of those who had been asked by a health professional about their drinking, 68.0% were asked how much they drank, and 20.2% were offered advice about what level of drinking is harmful or risky for their health (**Table 3**). Adults aged 18-34 years old (29.5%) and men (25.1%) both had a significantly higher prevalence, compared with the overall population (20.2%), of being offered advice about their risky drinking, while women (15.9%) and adults older than 55 years old (16.0%) were significantly less likely to be counseled about their drinking behaviors (**Table 4**). Among those who had been offered advice, only 17.0% of binge drinkers, 21.2% of heavy drinkers, and 17.1% of all excessive drinkers had been advised to reduce or quit their drinking. However, the prevalence of being advised to reduce alcohol use among binge drinkers (21.2%) was nearly three times that of non-binge drinkers (6.2%, **Table 4**).

### Conclusion

The results of this analysis indicate that in 2014, the majority of adults in Connecticut were asked, either in person or on a form, about alcohol use at their last checkup. Residents who not only had a routine checkup in the past two years, but also were screened for alcohol use varied significantly by several sociodemographic variables and drinking behaviors. In 2014, three out of five Connecticut adults were current alcohol drinkers, while binge and heavy drinkers accounted for 15.9% and 5.7%, respectively. Adults younger than 55 years of age, men, and residents with annual incomes over \$75,000 represented a large portion of the adult population in Connecticut, and were at a much greater risk for excessive alcohol use. However, the prevalence of being screened for binge drinking or offered advice about alcohol use was significantly less compared to those with incomes under \$35,000.

ASBI can be an effective prevention tool and is easily implemented in the clinical setting with minimal time and resources. However, in 2014, four out of five Connecticut adults with excessive drinking behaviors did not have a routine checkup in the past two years and were therefore not screened for alcohol use or offered brief counseling. Similarly, the prevalence of having had a checkup within the past two years for adults aged 18-35 years old, men, Hispanics, and unmarried residents, was significantly less compared to the overall population.

While data from responses to the ASBI module help determine the prevalence of screenings and interventions in Connecticut, it is unclear if healthcare providers were using validated screening tools, such as those recommended by the Centers for Disease Control and Prevention and the World Health Organization.<sup>7,8</sup> Despite indications that in 2014 the majority of healthcare providers in Connecticut were communicating with their patients about alcohol use, only about two in seven resident adults were screened for binge drinking, and even fewer were offered advice on the harms of alcohol use or counseled to reduce or quit their drinking. Lastly, the majority of Connecticut's adult population in 2014 were adults older than 55 years of age, and more than half were women. Compared to all Connecticut adults, both of these groups were significantly less likely to be counseled on their alcohol use, an alarming indication that a large portion of the population is not benefiting from this preventive intervention.

Limitations of this analysis are that BRFSS data are self-reported and dependent on respondent recall of questions asked to them by a healthcare professional. Additionally, the ASBI module requires respondents to remember a specific event that happened over a time period of two years, which may result in underreporting. Lastly, respondents who refused to answer or did not know the answer to a question were excluded from calculations in this analysis.

Even with these limitations, the BRFSS remains the gold standard for determining prevalence of many health risk behaviors and preventive measures. Understanding ASBI in Connecticut provides valuable information on the implementation of this effective intervention, and informs decisions that help prevent the range of negative outcomes associated with excessive alcohol use. Although all adults should be asked about their alcohol consumption, this analysis shows that certain people are less likely to be asked or receive counseling than others. Additionally, some Connecticut adults were significantly less likely to have had a routine medical checkup in the past two years, and therefore were not screened for alcohol use or offered brief counseling. Increased implementation of ASBI for all Connecticut residents, as well as training and education for healthcare providers could reduce excessive alcohol consumption throughout the state, and the harms related to it.

### Endnotes

1. CDC Features: Alcohol Deaths. Available at <https://www.cdc.gov/features/alcohol-deaths/>.
2. Zheng, X., Stone, C.L. (2017). Health Indicators and Risk Behaviors in Connecticut: Results of the 2015 Connecticut Behavioral Risk Factor Surveillance Survey, Connecticut Department of Public Health, Hartford, Connecticut. Available at <http://www.ct.gov/dph/BRFSS>.
3. World Health Organization. *Global status report on alcohol and health—2014*. Available at [http://www.who.int/substance\\_abuse/publications/global\\_alcohol\\_report/en/](http://www.who.int/substance_abuse/publications/global_alcohol_report/en/).
4. Stone, CL, Brackney, M. (2016). Health Indicators and Risk Behaviors in Connecticut: Results of the 2014 Connecticut Behavioral Risk Factor Surveillance Survey, Connecticut Department of Public Health, Hartford, Connecticut. Available at <http://www.ct.gov/dph/BRFSS>.
5. Jonas, DE, Garbutt, JC, Amick, HR, et. al. Behavioral counseling after screening for alcohol misuse in primary care: a systematic review and meta-analysis for the U.S. Preventive Services Task Force. *Annals of Internal Medicine* 2012; 157(9):645-654.
6. American Public Health Association and Education Development Center, Inc. (2008). Alcohol screening and brief intervention: A guide for public health practitioners. Washington DC: National Highway Traffic Safety Administration, U.S. Department of Transportation.
7. U.S. Preventive Services Task Force. (2004). Screening and behavioral counseling interventions in primary care to reduce risky/harmful alcohol use by adults: Recommendation statement. *Annals of Internal Medicine* 140(7), 554-556.
8. CDC's Alcohol Screening and Brief Intervention Efforts. Available at <https://www.cdc.gov/ncbddd/fasd/alcohol-screening.html>.
9. World Health Organization. Screening and brief intervention for alcohol problems in primary health care. Available at [http://www.who.int/substance\\_abuse/activities/sbi/en/](http://www.who.int/substance_abuse/activities/sbi/en/).

Table 2: Having had a routine checkup and ASBI module question 1

Characteristic	Routine checkup in past two years			Q1. Asked during checkup about alcohol use		
	%	95% CI	n	%	95% CI	n
<b>Total</b>	85.7	(84.5-86.8)	7045	76.6	(74.9-78.2)	4384
<b>Age (yrs)</b>						
18-35	77.6	(74.5-80.7)	769	78.2	(73.6-82.7)	508
35-54	85.2	(83.3-87.0)	2048	82.3	(79.8-84.8)	1406
55+	92.0	(90.9-93.1)	4081	70.7	(68.7-72.8)	2405
<b>Sex</b>						
Men	82.3	(80.5-84.1)	2968	74.6	(72.1-77.2)	1844
Women	88.8	(87.4-90.2)	4077	78.3	(76.2-80.4)	2540
<b>Race/Ethnicity</b>						
White, Non-Hispanic	87.1	(85.9-88.3)	5508	76.9	(75.1-78.8)	3488
Black, Non-Hispanic	90.8	(86.8-94.9)	547	74.0	(68.7-79.4)	311
Hispanic	74.7	(70.4-79.1)	536	79.7	(74.4-85.1)	341
Other, Non-Hispanic	86.0	(81.0-91.0)	306	72.5	(63.2-81.8)	174
<b>Annual Household Income</b>						
<\$35,000	83.1	(80.7-85.4)	1701	70.7	(62.2-74.2)	975
\$35,000-\$74,000	88.2	(86.1-90.3)	1576	75.6	(72.2-79.0)	1016
\$75,000+	86.9	(84.9-88.9)	2502	83.5	(81.4-85.6)	1771
<b>Education</b>						
High school diploma or equivalent	83.3	(81.2-85.4)	2051	71.5	(68.5-74.6)	1189
More than a high school diploma	87.3	(85.9-88.6)	4926	79.7	(77.9-81.5)	3180
<b>Health Insurance Coverage</b>						
Yes	88.5	(87.4-89.5)	6774	77.0	(75.3-78.6)	4235
No	57.6	(51.5-63.7)	254	70.7	(60.1-80.7)	140
<b>Insured by Medicare</b>						
Yes	93.6	(92.4-94.9)	2857	68.2	(65.5-70.9)	1625
No	86.3	(84.8-87.7)	3794	81.3	(79.2-83.3)	2584
<b>Employment Status</b>						
Employed	83.1	(81.5-84.7)	3670	80.5	(78.4-82.6)	2453
Unemployed	83.0	(78.3-87.6)	380	78.2	(72.1-84.2)	238
Homemaker or student	88.3	(84.3-92.3)	458	76.8	(69.8-83.8)	295
Retired	94.3	(92.8-95.7)	2066	65.4	(62.4-68.4)	1153
Unable to work	85.6	(80.7-90.4)	394	72.7	(66.2-79.2)	230
<b>Marital Status</b>						
Married	88.2	(86.9-89.6)	3737	79.4	(77.4-81.4)	2486
Divorced, widowed, separated	89.3	(87.2-91.3)	1983	69.1	(65.9-72.3)	1097
Never married	80.4	(77.5-83.2)	1097	73.8	(69.3-78.3)	655
Member of unmarried couple	72.9	(63.8-82.1)	168	92.2	(88.0-96.4)	124
<b>Current Alcohol Consumption</b>						
Yes	84.9	(83.4-86.5)	4064	81.8	(80.0-83.5)	2855
No	87.1	(85.2-89.0)	2486	69.1	(66.0-72.1)	1495
<b>Excessive Drinking (binge or heavy)</b>						
Yes	79.9	(76.2-83.5)	857	84.8	(81.3-88.3)	657
No	87.3	(86.0-88.5)	5619	75.0	(73.2-76.9)	3658

Table 3: ASBI module questions 2 and 3

Characteristic	Q2. Asked how much they drink			Q3. Screened for binge drinking		
	%	95% CI	n	%	95% CI	n
<b>Total</b>	68.0	(66.2-69.8)	3917	28.1	(26.4-29.9)	1351
<b>Age (yrs)</b>						
18-35	67.7	(62.9-72.6)	441	30.0	(25.5-34.7)	183
35-54	73.9	(71.1-76.8)	1259	32.8	(29.7-35.9)	439
55+	63.2	(60.9-65.4)	2158	23.4	(21.3-25.4)	712
<b>Sex</b>						
Men	66.4	(63.6-69.1)	1668	28.9	(26.3-31.5)	625
Women	69.4	(67.1-71.7)	2249	27.4	(25.1-29.8)	726
<b>Race/Ethnicity</b>						
White, Non-Hispanic	70.1	(68.1-72.1)	3162	24.2	(22.3-26.1)	936
Black, Non-Hispanic	61.2	(55.3-67.2)	261	37.6	(31.5-43.7)	152
Hispanic	67.3	(61.4-73.3)	279	45.8	(39.4-52.1)	182
Other, Non-Hispanic	56.6	(47.2-66.0)	150	*	*	*
<b>Annual Household Income</b>						
<\$35,000	59.3	(55.7-63.0)	827	34.7	(31.2-38.2)	432
\$35,000-\$74,000	67.4	(63.7-71.1)	912	25.8	(22.4-29.3)	306
\$75,000+	77.2	(74.8-79.7)	1643	27.0	(24.0-30.0)	432
<b>Education</b>						
High school diploma or equivalent	60.9	(57.6-64.2)	1012	32.5	(29.4-35.7)	510
More than a high school diploma	72.4	(70.4-74.5)	2892	25.1	(23.1-27.1)	837
<b>Health Insurance Coverage</b>						
Yes	68.7	(66.9-70.5)	3794	28.2	(26.4-30.0)	1296
No	56.8	(46.9-66.9)	114	*	*	*
<b>Insured by Medicare</b>						
Yes	61.6	(58.8-64.4)	1462	28.1	(25.4-31.0)	555
No	72.2	(69.9-74.5)	2313	28.3	(26.0-30.6)	734
<b>Employment Status</b>						
Employed	72.0	(69.7-74.3)	2189	28.1	(25.7-30.4)	674
Unemployed	68.0	(61.0-75.1)	210	36.1	(28.2-44.0)	98
Homemaker or student	64.2	(56.8-71.6)	254	25.1	(18.9-31.3)	84
Retired	59.9	(56.8-63.0)	1053	23.7	(20.9-26.4)	381
Unable to work	63.4	(56.2-70.6)	199	39.9	(32.3-47.5)	112
<b>Marital Status</b>						
Married	72.9	(70.7-75.0)	2257	28.2	(25.9-30.5)	715
Divorced, widowed, separated	58.7	(55.4-62.1)	962	28.0	(24.6-31.4)	361
Never married	62.5	(57.6-67.3)	566	26.5	(22.4-30.6)	231
Member of unmarried couple	83.0	(76.2-89.8)	113	*	*	*
<b>Current Alcohol Consumption</b>						
Yes	74.2	(72.2-76.3)	2642	27.5	(25.3-30.0)	801
No	59.0	(55.8-62.1)	1245	28.9	(26.0-31.9)	536
<b>Excessive Drinking (binge or heavy)</b>						
Yes	78.6	(74.6-82.7)	610	34.8	(29.7-39.8)	221
No	66.0	(64.1-68.0)	3248	26.7	(24.9-28.6)	1104

Estimates marked with an “\*” are not reported because their coefficients of variation are at least 15%



Table 4: ASBI module questions 4 and 5

Characteristic	Q4. Offered advice about risky drinking			Q5. Advised to reduce or quit drinking		
	%	95% CI	n	%	95% CI	n
<b>Total</b>	20.2	(18.7-21.7)	1061	8.2	(7.0-9.4)	289
<b>Age (yrs)</b>						
18-35	29.5	(25.1-33.9)	187	*	*	*
35-54	18.3	(16.0-20.5)	310	8.6	(6.8-10.4)	100
55+	16.0	(14.4-17.7)	548	5.8	(4.5-7.1)	127
<b>Sex</b>						
Men	25.1	(22.7-27.6)	594	12.0	(9.8-14.2)	182
Women	15.9	(14.0-17.7)	467	4.9	(3.8-6.1)	107
<b>Race/Ethnicity</b>						
White, Non-Hispanic	17.8	(16.2-19.5)	767	6.0	(4.9-7.1)	184
Black, Non-Hispanic	26.9	(21.3-32.5)	107	*	*	*
Hispanic	27.0	(21.5-32.6)	105	*	*	*
Other, Non-Hispanic	*	*	*	*	*	*
<b>Annual Household Income</b>						
<\$35,000	24.8	(21.5-28.1)	298	13.5	(10.7-16.4)	106
\$35,000-\$74,000	19.2	(16.2-22.1)	252	*	*	*
\$75,000+	17.4	(15.1-19.6)	360	*	*	*
<b>Education</b>						
High school diploma or equivalent	22.2	(19.4-24.9)	366	11.7	(9.4-14.0)	130
More than a high school diploma	18.9	(17.2-20.7)	694	6.2	(4.9-7.5)	158
<b>Health Insurance Coverage</b>						
Yes	19.9	(18.3-21.4)	1008	8.0	(6.8-9.3)	271
No	*	*	*	*	*	*
<b>Insured by Medicare</b>						
Yes	18.8	(16.5-21.2)	411	9.9	(7.5-12.3)	121
No	20.2	(18.2-22.2)	590	7.1	(5.8-8.5)	147
<b>Employment Status</b>						
Employed	19.3	(17.3-21.2)	541	6.6	(5.3-8.0)	130
Unemployed	24.5	(17.6-31.5)	66	*	*	*
Homemaker or student	23.3	(16.9-29.7)	63	*	*	*
Retired	17.8	(15.3-20.3)	300	8.6	(6.1-11.0)	81
Unable to work	26.8	(20.5-33.0)	89	*	*	*
<b>Marital Status</b>						
Married	17.9	(16.2-19.7)	552	6.7	(5.4-8.1)	140
Divorced, widowed, separated	17.6	(15.0-20.3)	266	*	*	*
Never married	27.5	(23.2-31.8)	212	12.5	(9.0-16.0)	75
Member of unmarried couple	*	*	*	*	*	*
<b>Current Alcohol Consumption</b>						
Yes	21.5	(19.6-23.4)	710	7.9	(6.4-9.4)	189
No	17.9	(15.4-20.4)	337	8.6	(6.5-10.6)	96
<b>Excessive Drinking (binge or heavy)</b>						
Yes	35.0	(30.4-40.0)	273	16.5	(12.3-20.6)	110
No	17.1	(15.5-18.6)	762	17.1	(15.5-18.6)	171

Estimates marked with an “\*” are not reported because their coefficients of variation are at least 15%