



**NABCA**  
RESEARCH

# The Blurring of Alcohol Categories

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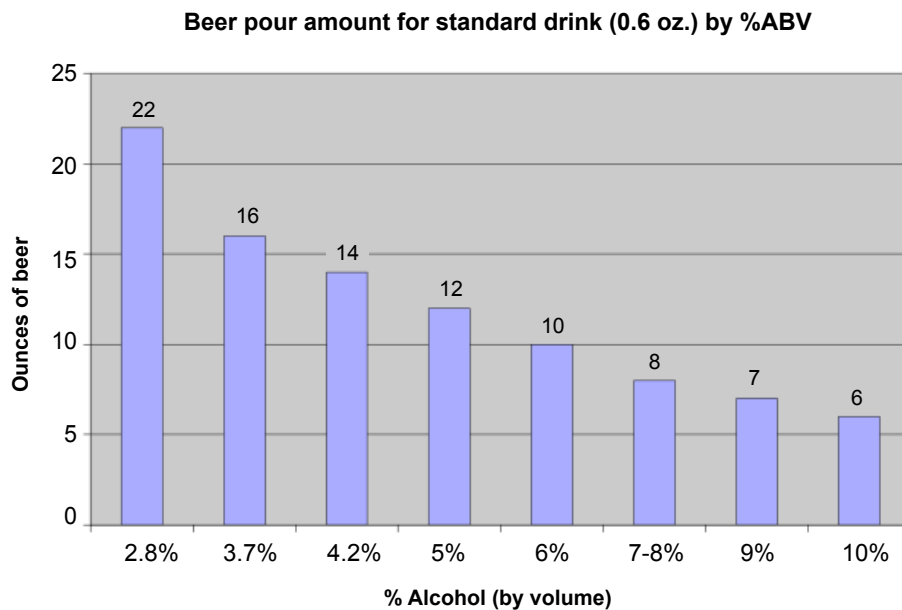
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# Drink Alcohol Content

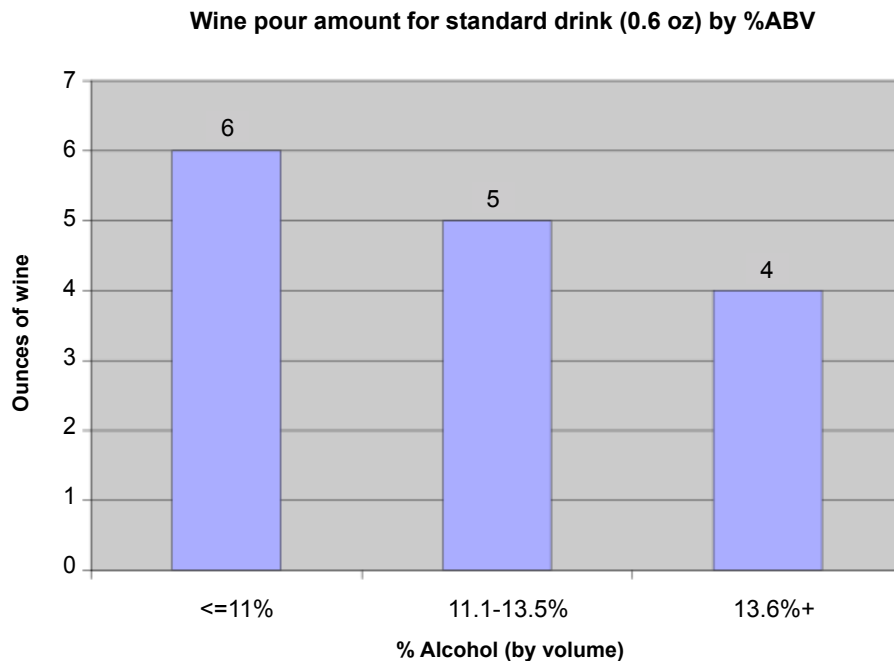
The US standard drink contains 0.6oz of ethanol. This is also 14 grams of ethanol and is equivalent to 12oz of beer at 5% alcohol by volume (%ABV), 5oz of wine at 12%ABV or 1.5oz of spirits at 40%ABV. Other countries also have a national standard drink or unit size with alcohol contents ranging from 8 to 23.5 grams of ethanol (Turner, 1990). This means there is not an international standard drink size for alcoholic beverages.

One major difficulty in determining or communicating information about standard drink or unit pour sizes is the variability of %ABV within beverage types. A 2.8%ABV beer like Miller 64 has half the alcohol of a 5.6% beer like Sierra Nevada Pale Ale and 1/3 the alcohol of an 8.4% beer, similar to some malt liquors. This makes it difficult to provide a common pour size for beer. Similarly, wines vary widely such that a US standard drink would require a 6oz pour at 10%ABV, a 5oz pour at 12%ABV and a 4oz pour at 15%ABV, all fairly common alcohol levels in wines. Figures 1, 2 and 3 illustrate the differing pour sizes for a standard drink at varying %ABV levels for beer, wine and spirits.

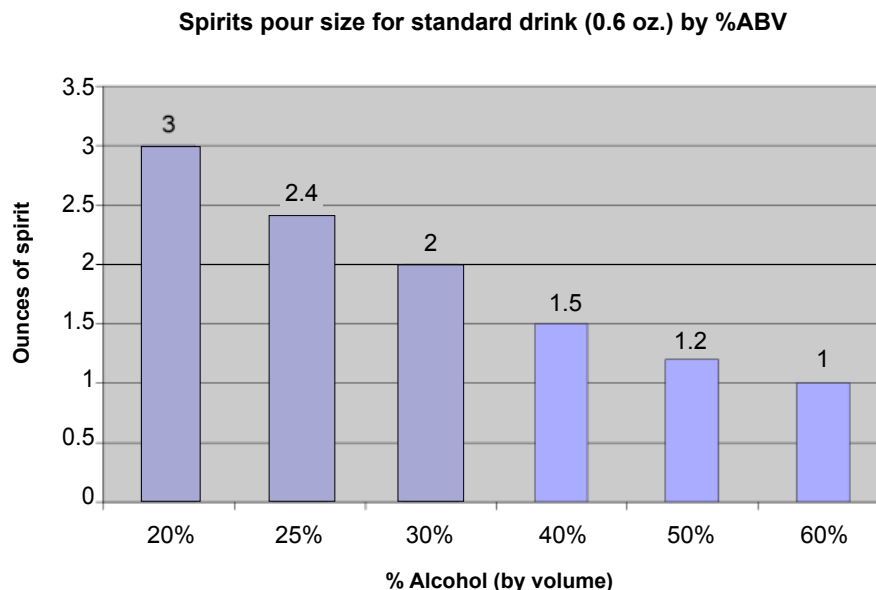
**Figure 1:**



**Figure 2:**



**Figure 3:**



Because drinkers cannot easily discriminate between %ABV levels in drinks, labeling of %ABV and standard drinks (or per container) would allow drinkers to track their intake. Understanding and adhering to drinking guidelines, moderating alcohol intake to insure a blood alcohol content (BAC) that is legal for driving, or limiting alcohol intake for other health, safety or personal reasons all involve accurately tracking alcohol intake. (Kerr and Stockwell, 2012)

Drink alcohol content varies by beverage type, context and a variety of demographic and individual factors. Studies have found that wine and mixed spirits drinks have the most alcohol in bars and restaurants, averaging about 1.5 US standard drinks, while shots of spirits and bottled beers have the least, about 1 standard drink. (Kerr et al., 2008) Drinks poured at home are more variable than bar drinks. Beer and wine pours tend to be smaller than a standard drink on average while spirits pours are consistent and include some very large drinks. (Kerr et al., 2009)

## Differential regulation and taxation by beverage type

In the US, alcohol taxes are usually levied in terms of dollars per beverage gallon. In some cases rates differ by %ABV category, for example a higher rate on spirits above 50%ABV in California, but mostly they do not. Some states also have additional ad valorem taxes (as a % of price like the sales tax) that often apply only to on-premise sales, but in a few states, such as Maryland with a 3% rate, these taxes apply to on-premise and off-premise sales of all beverage types and in some states, such as Tennessee, there are both premise type and beverage-specific ad valorem taxes. The Federal spirits tax, at \$27 per ethanol gallon, is the only case where the tax is on alcohol content rather than beverage volume. In contrast, many other countries tax beer and spirits in terms of alcohol content. Control states mainly use mark-ups on the producer price, including federal tax, rather than beverage volume based taxes. Beer is typically taxed at the lowest rates with wine in the middle and spirits at the highest rates.

Many states allow beer to be sold in supermarkets, convenience stores, gas stations or drug stores where spirits are not allowed. Six control states (Iowa, Maine, Michigan, Ohio, West Virginia and Wyoming) allow spirits to be sold in grocery stores or gas and convenience stores. A few states like, California, also have on-premise beer and wine only licenses.

## Differential regulation and taxation by beverage type (cont.)

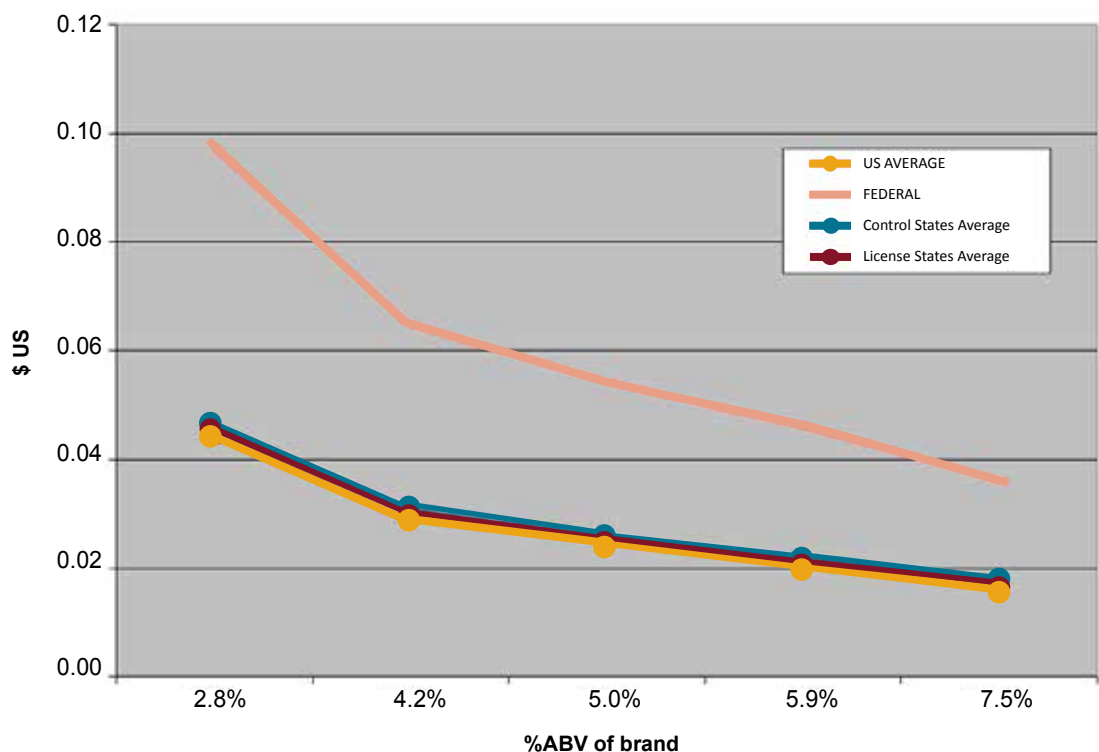
**Table A: US State and Federal Beer Tax Rates per Std. Drink by %ABV**

| State                | % ABV   |         |         |         |         |
|----------------------|---------|---------|---------|---------|---------|
|                      | 2.8%    | 4.2%    | 5%      | 5.9%    | 7.5%    |
| Alabama              | \$0.176 | \$0.117 | \$0.098 | \$0.083 | \$0.066 |
| Alaska               | 0.179   | 0.119   | 0.100   | 0.085   | 0.067   |
| Arizona              | 0.027   | 0.018   | 0.015   | 0.013   | 0.010   |
| Arkansas             | 0.027   | 0.026   | 0.022   | 0.018   | 0.014   |
| California           | 0.033   | 0.022   | 0.019   | 0.016   | 0.013   |
| Colorado             | 0.013   | 0.009   | 0.008   | 0.006   | 0.005   |
| Connecticut          | 0.032   | 0.021   | 0.018   | 0.015   | 0.012   |
| Delaware             | 0.027   | 0.018   | 0.015   | 0.013   | 0.010   |
| District of Columbia | 0.015   | 0.010   | 0.008   | 0.007   | 0.006   |
| Florida              | 0.080   | 0.054   | 0.045   | 0.038   | 0.030   |
| Georgia              | 0.142   | 0.095   | 0.080   | 0.068   | 0.053   |
| Hawaii               | 0.156   | 0.104   | 0.087   | 0.074   | 0.058   |
| Idaho                | 0.025   | 0.017   | 0.014   | 0.012   | 0.009   |
| Illinois             | 0.031   | 0.021   | 0.017   | 0.015   | 0.012   |
| Indiana              | 0.019   | 0.013   | 0.011   | 0.009   | 0.007   |
| Iowa                 | 0.032   | 0.021   | 0.018   | 0.015   | 0.012   |
| Kansas               | 0.030   | 0.020   | 0.017   | 0.014   | 0.011   |
| Kentucky             | 0.013   | 0.009   | 0.008   | 0.006   | 0.005   |
| Louisiana            | 0.054   | 0.036   | 0.030   | 0.025   | 0.020   |
| Maine                | 0.059   | 0.039   | 0.033   | 0.028   | 0.022   |
| Maryland             | 0.015   | 0.010   | 0.008   | 0.007   | 0.006   |
| Massachusetts        | 0.018   | 0.012   | 0.010   | 0.009   | 0.007   |
| Michigan             | 0.033   | 0.022   | 0.019   | 0.016   | 0.013   |
| Minnesota            | 0.013   | 0.017   | 0.014   | 0.012   | 0.009   |
| Mississippi          | 0.054   | 0.036   | 0.030   | 0.025   | 0.020   |
| Missouri             | 0.010   | 0.007   | 0.006   | 0.005   | 0.004   |
| Montana              | 0.023   | 0.016   | 0.013   | 0.011   | 0.009   |
| Nebraska             | 0.052   | 0.035   | 0.029   | 0.025   | 0.019   |
| Nevada               | 0.027   | 0.018   | 0.015   | 0.013   | 0.010   |
| New Hampshire        | 0.050   | 0.033   | 0.028   | 0.024   | 0.019   |
| New Jersey           | 0.020   | 0.013   | 0.011   | 0.010   | 0.008   |
| New Mexico           | 0.069   | 0.046   | 0.038   | 0.033   | 0.026   |
| New York             | 0.018   | 0.012   | 0.010   | 0.009   | 0.007   |
| North Carolina       | 0.089   | 0.059   | 0.050   | 0.042   | 0.033   |
| North Dakota         | 0.027   | 0.018   | 0.015   | 0.013   | 0.010   |
| Ohio                 | 0.030   | 0.020   | 0.017   | 0.014   | 0.011   |

Table A (cont.)

| State                  | % ABV          |                |                |                |                |
|------------------------|----------------|----------------|----------------|----------------|----------------|
|                        | 2.8%           | 4.2%           | 5%             | 5.9%           | 7.5%           |
| Oklahoma               | \$0.060        | \$0.045        | \$0.038        | \$0.032        | \$0.025        |
| Oregon                 | 0.013          | 0.009          | 0.008          | 0.006          | 0.005          |
| Pennsylvania           | 0.013          | 0.009          | 0.008          | 0.006          | 0.005          |
| Rhode Island           | 0.018          | 0.012          | 0.010          | 0.009          | 0.007          |
| South Carolina         | 0.129          | 0.086          | 0.072          | 0.061          | 0.048          |
| South Dakota           | 0.045          | 0.030          | 0.025          | 0.021          | 0.017          |
| Tennessee              | 0.023          | 0.016          | 0.013          | 0.011          | 0.009          |
| Texas                  | 0.032          | 0.022          | 0.019          | 0.016          | 0.012          |
| Utah                   | 0.069          | 0.046          | 0.038          | 0.033          | 0.026          |
| Vermont                | 0.044          | 0.030          | 0.025          | 0.021          | 0.034          |
| Virginia               | 0.043          | 0.029          | 0.024          | 0.020          | 0.016          |
| Washington             | 0.044          | 0.029          | 0.024          | 0.021          | 0.016          |
| West Virginia          | 0.030          | 0.020          | 0.017          | 0.014          | 0.011          |
| Wisconsin              | 0.010          | 0.007          | 0.006          | 0.005          | 0.004          |
| Wyoming                | 0.003          | 0.002          | 0.002          | 0.002          | 0.001          |
| <b>Control Average</b> | <b>\$0.046</b> | <b>\$0.031</b> | <b>\$0.026</b> | <b>\$0.022</b> | <b>\$0.018</b> |
| <b>License Average</b> | <b>\$0.044</b> | <b>\$0.030</b> | <b>\$0.025</b> | <b>\$0.022</b> | <b>\$0.017</b> |
| <b>Federal</b>         | <b>\$0.097</b> | <b>\$0.065</b> | <b>\$0.054</b> | <b>\$0.046</b> | <b>\$0.036</b> |
| <b>US Average</b>      | <b>\$0.045</b> | <b>\$0.030</b> | <b>\$0.026</b> | <b>\$0.022</b> | <b>\$0.017</b> |

Chart A: US State and Federal Beer Tax Rates per Std. Drink by %ABV (Table A)



## Table B

**Table B: US State and Federal Spirits Tax Rates per Std. Drink by %ABV**

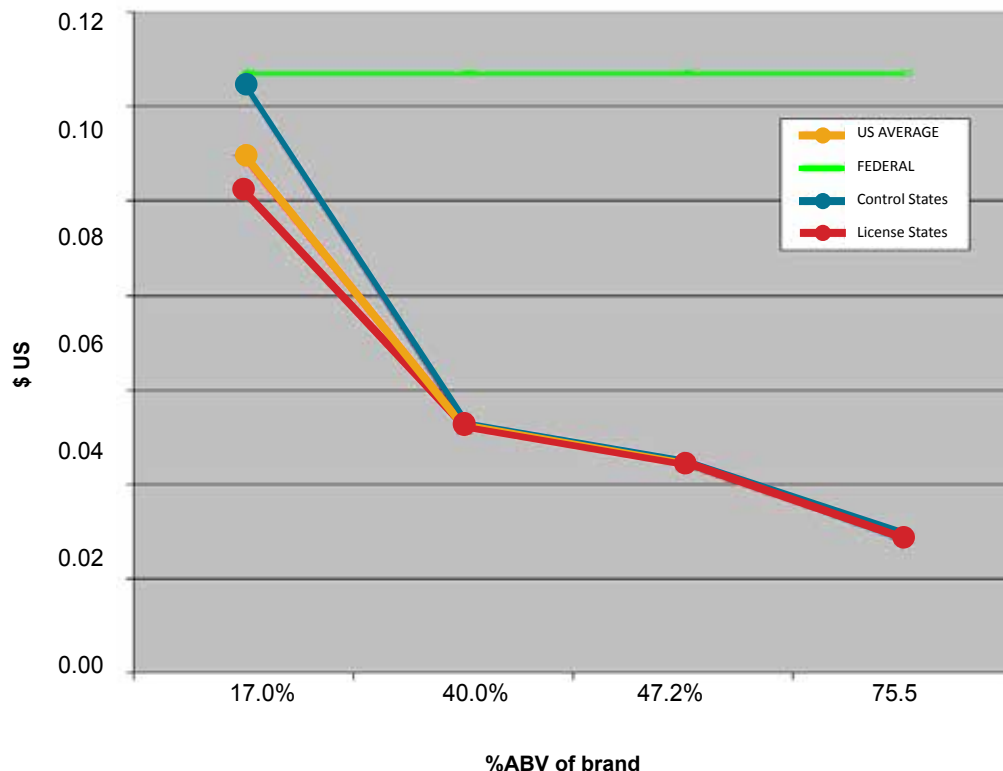
| State                | % ABV   |         |         |         |
|----------------------|---------|---------|---------|---------|
|                      | 17.0%   | 40.0%   | 47.2%   | 75.5%   |
| Alabama              | \$0.122 | \$0.052 | \$0.044 | \$0.028 |
| Alaska               | 0.069   | 0.150   | 0.127   | 0.079   |
| Arizona              | 0.008   | 0.004   | 0.003   | 0.002   |
| Arkansas             | 0.069   | 0.029   | 0.025   | 0.016   |
| California           | 0.091   | 0.039   | 0.033   | 0.041   |
| Colorado             | 0.063   | 0.027   | 0.023   | 0.014   |
| Connecticut          | 0.124   | 0.053   | 0.045   | 0.028   |
| Delaware             | 0.100   | 0.064   | 0.054   | 0.034   |
| District of Columbia | 0.041   | 0.018   | 0.015   | 0.009   |
| Florida              | 0.062   | 0.076   | 0.064   | 0.059   |
| Georgia              | 0.105   | 0.044   | 0.038   | 0.024   |
| Hawaii               | 0.165   | 0.070   | 0.059   | 0.037   |
| Idaho                | 0.179   | 0.076   | 0.064   | 0.040   |
| Illinois             | 0.020   | 0.053   | 0.045   | 0.028   |
| Indiana              | 0.074   | 0.031   | 0.027   | 0.017   |
| Iowa                 | 0.142   | 0.060   | 0.051   | 0.032   |
| Kansas               | 0.069   | 0.029   | 0.025   | 0.016   |
| Kentucky             | 0.053   | 0.023   | 0.019   | 0.012   |
| Louisiana            | 0.069   | 0.029   | 0.025   | 0.016   |
| Maine                | 0.084   | 0.036   | 0.030   | 0.019   |
| Maryland             | 0.041   | 0.018   | 0.015   | 0.009   |
| Massachusetts        | 0.112   | 0.047   | 0.040   | 0.025   |
| Michigan             | 0.197   | 0.084   | 0.071   | 0.044   |
| Minnesota            | 0.139   | 0.059   | 0.050   | 0.031   |
| Mississippi          | 0.100   | 0.042   | 0.036   | 0.022   |
| Missouri             | 0.006   | 0.002   | 0.002   | 0.001   |
| Montana              | 0.103   | 0.044   | 0.037   | 0.023   |
| Nebraska             | 0.103   | 0.044   | 0.037   | 0.023   |
| Nevada               | 0.036   | 0.042   | 0.036   | 0.022   |
| New Hampshire        | -0.029  | 10.012  | -0.011  | -0.007  |
| New Jersey           | 0.121   | 0.052   | 0.044   | 0.027   |
| New Mexico           | 0.167   | 0.071   | 0.060   | 0.038   |
| New York             | 0.070   | 0.075   | 0.064   | 0.040   |
| North Carolina       | 0.158   | 0.067   | 0.057   | 0.036   |
| North Dakota         | 0.069   | 0.029   | 0.025   | 0.016   |
| Ohio                 | 0.165   | 0.070   | 0.059   | 0.037   |



Table B (cont.)

| State                  | % ABV          |                |                |                |
|------------------------|----------------|----------------|----------------|----------------|
|                        | 17.0%          | 40.0%          | 47.2%          | 75.5%          |
| Oklahoma               | \$0.153        | \$0.065        | \$0.055        | \$0.035        |
| Oregon                 | 0.288          | 0.122          | 0.104          | 0.065          |
| Pennsylvania           | 0.050          | 0.021          | 0.018          | 0.011          |
| Rhode Island           | 0.103          | 0.044          | 0.037          | 0.023          |
| South Carolina         | 0.075          | 0.032          | 0.027          | 0.017          |
| South Dakota           | 0.108          | 0.046          | 0.039          | 0.024          |
| Tennessee              | 0.121          | 0.052          | 0.044          | 0.027          |
| Texas                  | 0.066          | 0.028          | 0.024          | 0.015          |
| Utah                   | 0.145          | 0.062          | 0.052          | 0.033          |
| Vermont                | 0.159          | 0.068          | 0.057          | 0.036          |
| Virginia               | 0.197          | 0.084          | 0.071          | 0.044          |
| West Virginia          | 0.027          | 0.011          | 0.010          | 0.006          |
| Wisconsin              | 0.090          | 0.038          | 0.032          | 0.020          |
| Wyoming                | 0.033          | 0.014          | 0.012          | 0.007          |
| <b>Control Average</b> | <b>\$0.125</b> | <b>\$0.053</b> | <b>\$0.045</b> | <b>\$0.028</b> |
| <b>License Average</b> | <b>\$0.102</b> | <b>\$0.052</b> | <b>\$0.044</b> | <b>\$0.029</b> |
| <b>Federal</b>         | <b>\$0.127</b> | <b>\$0.127</b> | <b>\$0.127</b> | <b>\$0.127</b> |
| <b>US Average</b>      | <b>\$0.109</b> | <b>\$0.053</b> | <b>\$0.045</b> | <b>\$0.029</b> |

Chart B: US State and Federal Spirits Tax Rates per Std. Drink by %ABV (Table B)



## Defining beer, wine and spirits products: Current definitions and recent changes

We attempted to find information on state's definitions of beer, wine and spirits through several sources, including the NABCA Survey Book, states' websites and contacting Alcoholic Beverage Control personnel. We were unable to determine the definitions of beer for 26 states, of wine for 24 states and of spirits for 23 states.

Although the federal government has established definitions for alcoholic beverage types, most states further define these categories so that there is no uniform definition across states. While definitions for alcoholic beverage types differ across states, they tend to be variations based on specific alcohol content limits and details of how the beverages are produced. Alcohol content is expressed as the percentage alcohol by volume (%ABV) or percent alcohol by weight (%ABW). Alcohol is lighter than water, the other main ingredient, so that %ABV will always be a higher percentage than %ABW. States use either a combination of alcohol by weight and alcohol by volume, or just one or the other in their definitions. Here we will convert all alcohol by weight definitions to alcohol by volume (by multiplying ABW by 1.25).

### Beer

Generally, states define beer as a fermented beverage with alcohol content less than 6%ABV, although a few states have even higher alcohol content limits (ex. West Virginia and Alabama). State's beer definitions can be very simple. Maine, for example, defines beer as a fermented product to which no spirits are added. Other states define beer by how the product is made, as well as the percentage alcohol by volume limit. Oregon defines beer as "malt beverage with less than 6%ABV." In Ohio, beer is defined as all beverages brewed or fermented from malt with an alcohol content between 0.5%ABV and 12%ABV. Other states, such as Montana, have even more complex definitions. Montana defines beer as *a malt beverage with less than 8.75% ABV or a malt beverage containing more than 8.75% ABV but not more than 14% ABV, that must be made by the alcoholic fermentation of an infusion or decoction, or a combination of both, in potable brewing water, of malted cereal grain; and the sugars used for fermentation of the "beer" must be at least 75% derived from malted cereal grain, measured as a percentage of the total dry weight of the fermentable ingredients. Additionally, beer must not contain caffeine or other stimulants.*

Few states further define specific categories of beers. These categories are defined in a similar fashion as beer (percent alcohol by volume and/or how the product is made); some states go even further by listing what the category includes and does not include. For example, Oregon defines malt beverage as: *"grain fermentation not more than 14% by volume. Includes beer, ale, stout. Does not include rice fermentation alcohol."*

California's definition does not include alcohol content limits, but does have a similar definition of beer:

*"Beer" means any alcoholic beverage obtained by the fermentation of any infusion or decoction of barley, malt, hops, or any other similar product, or any combination thereof in water, and includes ale, porter, brown, stout, lager beer, small beer, and strong beer but does not include sake, known as Japanese rice wine.*

It is interesting to note that California clearly states that sake, a Japanese alcoholic beverage, is not defined as beer; as discussed later, sake can be defined as either wine or spirits, depending on the state.

Vermont's definition of malt is even more specific. For malt liquor/heavy beer, Vermont noted that:

*if such a beverage has an alcohol content of more than 6% and has terminal specific gravity of less than 1.009, it shall be deemed to be a spirit and not a malt beverage.*

Contrasting Vermont's detailed definition, West Virginia has a very simple definition of malt liquor/heavy beer, simply stating *"more than 12 percent by volume" as its definition.*

Table 1: Beer Definitions Based on Alcohol Content Limit and How Product is Made

| State                        | Alcohol Content Limit<br>(%ABV Range)  | Beer Type Defined by How<br>Product is Made |
|------------------------------|--|---|
| Alabama                      | 0.5% – 13.9%                           | yes   |
| Arizona                      | – **                                   | yes   |
| Arkansas                     | 0.5% – 6.25%                           | yes   |
| California                   | – **                                   | yes   |
| Connecticut                  | > 0.5%                                 | yes   |
| Delaware                     | > 0.5%                                 | yes   |
| Florida                      | – **                                   | yes   |
| Idaho                        | – **                                   | yes   |
| Iowa                         | 0.5% – 6.25%                           | yes   |
| Maine                        | – **                                   | yes   |
| Michigan                     | – **                                   | yes   |
| Mississippi                  | < 8%                                   | – **  |
| Montana                      | Malt < 8.75%<br>Alcohol beverage < 14% | yes   |
| Montgomery Co.<br>(Maryland) | 0.5% – 6%                              | yes   |
| Nevada                       | – **                                   | yes   |
| New Hampshire                | – **                                   | yes   |
| North Carolina               | 0.5% – 15%                             | yes   |
| Ohio                         | 0.5% – 12%                             | yes   |
| Oregon                       | < 6%                                   | yes   |
| Pennsylvania                 | > 0.5%; cider 0.5% - 5.5%              | yes   |
| Utah                         | 0.5% – 4%                              | – **  |
| Vermont                      | – **                                   | – **  |
| Virginia                     | ≥0.5%                                  | yes   |
| *Washington                  | 0.5% – 10%                             | yes   |
| West Virginia                | 0.5% – 12%                             | yes   |

\* On June 1, 2012, Washington became a license state.

\*\* “–” State does not define beer in terms of alcohol by volume and/or by how it is made.

## Beer (cont.)

| State                         | Alcohol Content Limit<br>(%ABV Range)   | Beer Type Defined by How<br>Product is Made |
|-------------------------------|---|---|
| <b>MALT BEVERAGE</b>          |   |   |
| Minnesota                     | $\geq 0.5\%$<br>Flavored malt:<br>1) $\leq 6\%$ and more than 50% its alcohol content from<br>fermentation<br>(2) $> 6\%$ and 1.5% of alcohol content from flavors and<br>non-beverage ingredients with alcohol | yes   |
| Montana                       | —**   | yes   |
| Oregon                        | $< 14\%$  | yes   |
| South Dakota                  | At least 0.625%   | yes   |
| Vermont                       | 1% – 8%   | yes   |
| Wyoming                       | $\geq 0.5\%$  | yes   |
| <b>CIDER</b>                  |   |   |
| Colorado                      | 0.5 – 7%  | yes   |
| Minnesota                     | 0.5 – 7%  | yes   |
| Montana                       | 0.5% – 6.9%   | yes   |
| Ohio                          | 0.5% – 7.5%   | yes   |
| Oregon                        | $< 7\%$   | no  |
| South Dakota                  | 0.5% – 12.5%  | yes   |
| Virginia                      | $< 7\%$   | yes   |
| *Washington                   | 0.5% – 7%   | yes   |
| <b>MALT LIQUOR/HEAVY BEER</b> |   |   |
| Arkansas                      | —**   | yes   |
| Colorado                      | 4%ABV   | yes   |
| Mississippi                   | $> 5\%$   | no  |
| Montana                       | $> 8.75\%$  | no  |
| Utah                          | $> 4\%$   | yes   |
| Vermont                       | $> 6\%$   | no  |
| *Washington                   | 0.5%ABV – 10%   | no  |
| West Virginia                 | $> 12\%$  | no  |

\* On June 1, 2012, Washington became a license state.

\*\* “—” State does not define beer in terms of alcohol by volume.

Several states modified their definition of beer between the period of 2004 and 2012. These changes included an increase in the alcohol limit or addition of text that limits the availability of beer.

**Table 2: States with Changes to Beer Definition Between 2004-2014**

|                       |   |
|-----------------------|---|
| <b>Alabama</b>        | 2010: AL increased %ABV limit from 6% to 13.9%, but only certain retailers can sell the higher ABV's. Others must continue to sell beer with limits of 6%.  |
| <b>Mississippi</b>    | 2012: MS increased its limit from 5% to 10%.  |
| <b>Montana</b>        | 2009: Prior to 2009, MT definition was very simple. It defined beer as malt beverage containing no more than 8.75%ABV. However, in 2009, the definition was changed which limited availability of cheap high alcohol content beverages.<br>The new law added a new category for beer with alcohol content up to 14%ABV. These beers can be sold in grocery stores if they a) are fermented from malted cereal grain and b) 75% of the product was made from malted cereal grain.<br>The new definition also specified that beer does not include caffeinated or stimulant-enhanced beverages. |
| <b>New Hampshire</b>  | 2010: NH added in its definition that the "Commission may approve specialty beer greater than 12%."   |
| <b>North Carolina</b> | 2008: NC increased its ABV limit from 6% to 15%.  |
| <b>West Virginia</b>  | 2010: WV increase the ABV limit from 4.20%ABW or 6%ABV, whichever is greater to 9.6%ABW or 12%ABV, whichever is greater.<br>WV also increased ABV limit of malt liquor/heavy beer from 6% to 12% in 2010  |
| <b>Texas</b>          | 2012: Prior to 2012, Texas required all malt beverages higher than 4% alcohol by weight to be labeled "ale" or "malt liquor" while any beverage higher than 4% alcohol by weight could not be labeled as "beer." After a court ruling that overturned that rule, the Texas Alcoholic Beverage Commission updated requirements so brewers may label their malt product whatever they like as long as the alcohol content is included on the label.   |
| <b>Ohio</b>           | 2014: As of 2014, the Ohio legislature is considering a proposal to increase its ABV limit from 12% to 21%.   |

## Wine

States generally define wine as an alcoholic beverage made by fermenting fruits or other agricultural products, and containing no more than 24%ABV. Mississippi however, defines wine in terms of a lower limit of 6.25%ABV. Additionally, Mississippi, along with Maine, does not include "other agricultural products" or a similar phrase in their definition, and does not include drinks such as sake, a Japanese rice wine. This leaves such drinks unclassified. Utah includes in its definition "fermentation of fruits... or like substances," that can potentially classify sake as wine. Alabama, Montgomery County, MD, and Oregon do not include the process of how the product is made in their definition.

Most states have broken down further the definition of wine into separate classes. Michigan clearly states in its definition that it does not distinguish between table wines, fortified/dessert wines, or sparkling ciders. Ohio and Mississippi include fortified/dessert wines in their table wine definitions. For fortified wine, Vermont neither includes alcohol by volume limits, nor how the products is made, but simply lists it as wine "possessing the characteristics" of Port, Sherry, etc.

### Defined as wine:

- CA: vermouth, sake
- CT: vermouth, fortified wine, cider, artificial or imitation wine or compound sold as still wine
- FL: sparkling wine, champagnes, combination of the two, vermouths and like products
- MT: vermouth, cider, sherry and sake

## Wine (cont.)

**Table 3: Wine Definitions Based on Alcohol Content Limit and How Product is Made**

| State                        | Alcohol Content Limit (%ABV Range)                                     | Wine Class Defined by How Product is Made |
|------------------------------|--|---|
| Alabama                      | < 24%  | – **                                      |
| Arizona                      | ≤ 24%  | yes                                       |
| Arkansas                     | Light wine: 0.5% – 5%<br>0.625% – 6.25%                                | yes                                       |
| California                   | ≤24%   | yes                                       |
| Colorado                     | 0.5% – 21%   | yes                                       |
| Connecticut                  | Includes still wine ≥ 0.3%   | yes                                       |
| Florida                      | –  | yes                                       |
| Idaho                        | < 16%  | yes                                       |
| Iowa                         | 5% – 21.25%  | yes                                       |
| Maine                        | ≤ 24%  | yes                                       |
| Michigan                     | ≤ 21%  | yes                                       |
| Minnesota                    | 0.5% – 24%   | yes                                       |
| Mississippi                  | >6.25%   | yes                                       |
| Montana                      | 0.5 – 24%  | yes                                       |
| Montgomery Co.<br>(Maryland) | 14% – 24%  | – **                                      |
| Nevada                       | – **   | yes                                       |
| New Hampshire                | Domestic: 6% - 24%<br>Fortified: 15.5% - 24%<br>Table wine: 6% - 15.5% | yes                                       |
| North Carolina               | ≤16%   | yes                                       |
| Ohio                         | 0.5% – 21%   | yes                                       |
| Oregon                       | < 14%  | – **                                      |
| Pennsylvania                 | > 0.5%   | yes                                       |
| South Dakota                 | 0.625% – 30%   | yes                                       |
| Utah                         | – **   | yes                                       |
| Vermont                      | 1% – 16%   | yes                                       |
| Virginia                     | ≥0.5%:<br>Fortified wine < 21%   | yes                                       |
| *Washington                  | 0.5% – 24%;<br>Table wine: < 14%                                       | yes                                       |
| West Virginia                | – **   | yes                                       |
| Wyoming                      | – **   | – **                                      |

| State                             | Alcohol Content Limit<br>(%ABV Range) | Wine Class Defined by How<br>Product is Made |
|-----------------------------------|---------------------------------------|--|
| <b>FORTIFIED/DESSERT WINE</b>     |                                       |  |
| Alabama                           | 16.5% – 24%                           | yes  |
| Connecticut                       | Wine with alcohol content increased   | – **   |
| Florida                           | > 17.259%                             | – **   |
| North Carolina                    | 16 – 24%                              | yes  |
| Vermont                           | – **                                  | characteristics                              |
| *Washington                       | > 14%                                 | yes  |
| West Virginia                     | 14.1% – 16%                           | – **   |
| <b>SPARKLING WINE</b>             |                                       |  |
| Connecticut                       | – **                                  | yes  |
| *Washington                       | – **                                  | yes  |
| <b>VERMOUTH</b>                   |                                       |  |
| *Washington                       | – **                                  | characteristics                              |
| <b>LOW-ALCOHOL DAIRY COCKTAIL</b> |                                       |  |
| Minnesota                         | < 3.2%                                | – **   |

\* On June 1, 2012, Washington became a license state.

\*\* “–” State does not define wine in terms of alcohol by volume and/or by how it is made.

Several states have also made changes to their wine definition since 2004.

**Table 4: States with Changes to Wine Definition Between 2004-2014**

|                       |   |
|-----------------------|---|
| <b>Alabama</b>        | <p>2010: AL dropped the description of how wine is made. It also changed the limit from 14.9% ABV in 2009 to 16.5%ABV.</p> <p>AL also changed its definition of fortified wine to wine with 16.5% - 24%ABV (was 14.9% - 24% in earlier years) and also added to its definition how the product is made.</p>   |
| <b>Montana</b>        | <p>2010: MT added specific language on table wine, defining it as no more than 16%ABV only. There is no mention of table wine in previous years, only a definition of wine in the broader sense.</p> <p>2009: MT adopted a more detailed definition of wine which in prior years only included the ABV limit of 16% and noted that the definition included cider. In 2009, the definition was changed to include a description of how the product is made, with an alcohol content of 0.5-24%ABV. It also added a clause that classified other products as wine, if the product is “made in the manner of wine and labeled and sold as wine”.</p> |
| <b>North Carolina</b> | <p>2005: NC added alcohol content for unfortified wine (any wine 16% or less ABV), and also added lower limit for fortified wine (any wine &gt;16% -24%ABV). In 2004, only fortified wine had an alcohol limit and it was only listed as “has an alcohol content of not more than 24%ABV.”</p>  |
| <b>West Virginia</b>  | <p>2008: WV added alcohol content limit (14.1% - 16%ABV) to its definition.</p>   |

## Spirits

Like beer and wine, states do not have a uniform definition for spirits. Definitions are usually some variation of the percentage alcohol by volume and the process through which spirits are made. Oregon’s definition is simple and defines spirits as an alcoholic beverage other than wine, cider or malt beverage. It does not mention the production process or alcohol content. Montana’s definition is quite detailed and clearly states that spirits do not include beer and table wine, but do include any caffeinated or stimulant-enhanced malt beverage. Similarly, Minnesota’s definition is quite detailed:

*(1) intoxicating liquors, including ethyl alcohol, hydrated oxide of ethyl, spirits of wine, whiskey, rum, brandy, gin, and other distilled spirits, including all dilutions and mixtures, for nonindustrial use;*

*(2) any beverage that would be classified as a flavored malt beverage except that the alcohol contribution from flavors and other non-beverage materials exceeds 49 percent of the alcohol content of the product; or*

*(3) any beverage that would be classified as a flavored malt beverage except that the beverage contains more than six percent alcohol by volume, and more than 1.5 percent of the volume of the finished product consists of alcohol derived from flavors and other non-beverage ingredients that contain alcohol.*

Sake and similar drinks, though often classified as wine, can often “transcend” categories and fall in the category of spirits. For example, West Virginia defines sake as wine.

“Coolers” is another category of alcoholic beverages that is classified differently. Coolers are generally not defined. Connecticut is unique in defining liquor coolers. Unlike other states that define flavored malt beverages as beer, Minnesota defines flavored malt as spirits (see definition above.)

Pennsylvania has no distinct definition for spirits. It defines spirits in the same manner as wine; defining both as liquor. The state defines liquor as any alcoholic beverage with more than 0.5%ABV that is not pure ethyl alcohol or malt or brewed beverages (beer).

**Table 5: Spirits Definitions Based on Alcohol Content Limit and How Product is Made**

| State       | Alcohol Content Limit (%ABV Range)  | Spirits Categories Defined by How Product is Made |
|-------------|---|---|
| Alabama     | ≥0.5%   | yes   |
| Arizona     | > 0.5%  | yes   |
| Arkansas    | > 26.25%  | yes   |
| California  | – **  | yes   |
| Colorado    | ≥0.5%   | yes   |
| Connecticut | Liquor cooler: ≤ 7%   | yes   |
| Delaware    | > 0.5%  | – **  |
| Florida     | – **  | yes   |
| Idaho       | – **  | yes   |
| Iowa        | > 6.25%   | yes   |
| Maine       | – **  | yes   |
| Michigan    | > 21%   | yes   |
| Minnesota   | Malt beverage except alcohol contribution for flavor and non-beverage exceeds 49% alcohol content;<br>Flavored malt except beverage contains more than 6%ABV... | – **  |



| State                        | Alcohol Content Limit (%ABV Range) | Spirits Categories Defined by How Product is Made |
|------------------------------|------------------------------------|---|
| Mississippi                  | > 4%                               | yes   |
| Montana                      | ≥0.5%ABV                           | yes   |
| Montgomery County (Maryland) | > 24%                              | yes   |
| Nevada                       | ≥0.5%                              | – **  |
| New Hampshire                | > 6%                               | yes   |
| North Carolina               | – **                               | yes   |
| Ohio                         | > 21%                              | – **  |
| Oregon                       | – **                               | – **  |
| Pennsylvania                 | > 4%                               | yes   |
| South Dakota                 | > 0.625%ABV                        | – **  |
| Utah                         | ≥0.5%                              | yes   |
| Vermont                      | > 16%                              | yes   |
| Virginia                     | – **                               | yes   |
| *Washington                  | Includes wine > 24%                | yes   |
| West Virginia                | Beer > 12%                         | yes   |
| Wyoming                      | ≥0.5%                              | yes   |

\* On June 1, 2012, Washington became a license state.

\*\* “–” State does not define spirits in terms of alcohol by volume and/or by how it is made.

Only three control states had any modification to their definition of spirits since 2004.

**Table 6: States with Changes to Spirits Definition Between 2004-2014**

|                      |  |
|----------------------|--|
| <b>Idaho</b>         | 2006: ID added a definition for spirits. Prior to that, spirits was not previously defined.  |
| <b>Montana</b>       | 2009: MT adopted a very detailed definition, by adding another spirits category to include caffeinated or stimulant-enhanced malt beverages. Prior to 2009, spirits was defined as an alcoholic beverage except beer and table wine. |
| <b>West Virginia</b> | 2010: WV included the alcohol content limit (over 12%ABV) for beer classified as spirits.  |

## New products, especially flavored malt beverages with high alcoholic strength, have complicated beverage type definitions for both consumers and regulators.

The mixing of categories started when spirits brands became interested in capturing the policy-based advantages of beer, which included lower tax rates, the greater variety of stores where beer can be sold and advertising on television. They did this by creating Flavored Malt Beverages (FMB's), which are malt products stripped of beer flavor and then flavored with fruit, soda and spirits. More recently, the spirits category has been growing steadily while beer sales have been flat and spirits brands have ended their long self-imposed ban on broadcast television advertising in addition to their considerable advertising expenditures on cable and satellite television. Now, beer wants to be more like spirits, so they are also using the FMB category and creating flavored beers, often with higher %ABV's of 6%, 8%, 10% or even 12%ABV, which is similar to the strength of mixed spirits drinks.

High strength craft and import specialty beers are driving changes in the definition of beer in some states where higher %ABV beers were previously prohibited or limited.

A recent ruling in California states that spirits can be added to malt beverages classified as beer. This ruling is based on the definition of beer and spirits in CA and reverses a policy that taxed and regulated these beverages as spirits. Fortified wine, which is wine with spirits added, has always complicated beverage definitions and now perhaps fortified beer will do the same, if brewers take advantage of this ruling.

Ciders made from apples or other fruit also complicate the three beverage type categories and could be classified as wine or beer depending on the specific definition. Some states would consider cider as wine while others would consider it beer. These two main beverage types are generally treated as similar in terms of taxes and availability so it may not make much difference in most cases. This distinction is important because low tax on cider in the United Kingdom, specifically relative to beer or wine, have led to the popularity of a higher %ABV versions of cider there.

## New and older products that blur beverage type definitions

**Flavored Malt Beverages** are malt liquors of varying %ABV (some up to 12%ABV) that do not have a beer taste but have added sugars and flavors. The packaging of high strength FMB's in large sizes can contain up to 5 standard drinks in a 23.5oz can at 12%ABV. Some now have sugar and flavors added with the beer taste retained. The same flavors and %ABV could be accomplished with a spirits or wine base, but malt is chosen because beer has the lowest tax rates and can be sold in more places, as noted above.

Brands in the flavored malt beverages category include Bud Light Lime-A-Rita and Straw-Ber-Rita. These products have 8% ABV with some states having 6% ABV available. Anheuser Busch's marketing for these beverages noted that consumers were already adding Bud Light products into margaritas so these new items created "a new level of convenience."

Ice beer is another strong beer type, usually 5.5-5.9%ABV.

## Marijuana Infused Products

With the legalization of marijuana in Washington State, Colorado, Oregon, and Alaska and possibly more states in the future, the market for marijuana infused products has developed quickly. An example of this is a Colorado company which makes more than 100 marijuana infused products including candies and chocolates as well as non-edible products such as lotion and massage oil. The company also has non-alcoholic beverages infused with marijuana.

Marijuana infused spirits already exist in the marketplace. European distillers sell cannabis absinthe and a low-volume distiller in America introduced vodka distilled with hemp seed, its label noting that the product has no traces of THC, the psychoactive component of cannabis. In 2015, the state of Iowa approved the sale of vodka from an Iowa-based distillery that combines gluten free vodka with organic hemp seeds.

Several non-commercial websites also provide recipes for Marijuana infused alcohol. One California cannabis grower is developing marijuana infused “wine tinctures” for sale, with a celebrity endorser already on board. The health hazards associated with marijuana infused alcohol are not yet fully understood. The public health community has expressed concerns about combining marijuana, a hallucinogen with depressant aspects, with alcohol, also a depressant. According to the American Psychological Association magazine *Psychology Today*, the combination of drinking and marijuana can potentially lead to excessive drinking and alcohol poisoning. It could also cause paranoia, panic, anxiety, and other “very unpredictable” effects.

## More diverse beer products

More brands with both low and high strengths are becoming available, complicating alcohol intake tracking for beer drinkers. Brands include Bud Lite Platinum, with 6%ABV and a sweeter taste (like malt liquor) branded as light beer (which usually has around 4.2%ABV). This is about 50% more alcohol per bottle.

Strong craft beers often have 6-7% ABV, with many examples of 9, 10, 12% ABV or higher.

Strong import beers such as those from Belgium are 8-10%ABV or higher. These products tend to be more expensive than other beers.

Low strength beers like Miller 64 and Bud Select 55 that have 2.6-2.8%ABV are now widely available. These kinds of beer did not exist five years ago. Unlike the deliberate tax incentive for lower strength beers in the Australian case, these beers are taxed at higher rates per standard drink than regular beers and tend to have relatively high prices.

**Wine coolers** no longer exist because a beer base can do the same thing at a lower tax, even the iconic Bartles and Jaymes “wine cooler” is now made with malt.

**Cider** is a small category but is likely to grow and has somewhat higher %ABV's than beer. Ciders may be classified as wine, beer or cider. Crispin (5-6.9%ABV) was recently bought by MillerCoors for expansion and more activity in this category is expected.

**Fortified wine** usually has its own tax rates but is sold with wine rather than spirits in most states.

**Prepared cocktails** are classified, taxed and regulated as spirits. Brands include Jack Daniels, Bacardi, Jose Cuervo, Smirnoff and other prepared cocktails (1.75L or 12 oz. 4 packs).

## What forces are driving these trends?

In the 1980's demand shifted away from spirits toward beer. This made spirits producers and marketers want to be like beer with the ability to provide ready-to-drink (RTD) bottles and cans, pay lower tax rates, have wider availability in convenience stores and grocery stores, and advertise on television. Spirits producers and marketers have gotten many of these things. Now spirits and wine are growing relative to beer in per capita share and beer producers and marketers want to be more like spirits.

More flavors and new flavors are appearing in a quicker product cycle; an increase in higher alcohol content brands and more variation in brand alcohol contents are available. This is seen in new low strength Miller 64 (2.8%ABV) and high strength Bud Lite Platinum and Four Loko at 6% and 12%ABV, respectively. More new brands are likely around 6% and 8% due to the popularity of Bud Lite Platinum in particular. In 2014, MillerCoors launched a new product called Smith & Forge Hard Cider with a 6% ABV. It is specifically marketed to males. This follows in the footsteps of other ciders in the marketplace with a 4.5% ABV.

In addition, MillerCoors will launch the Henry's Hard Soda brand in 2016 starting with a hard ginger ale and hard orange soda, both at 4.2% alcohol by volume. Hard sodas came into the spotlight with Coney Island Hard Root Beer and Not Your Father's Root Beer launching nationwide in 2015, along with a series of hard soda products by a New York State brewery at 5.9% ABV.

## Conclusion

Better understanding of how much ethanol is being consumed is needed to prevent over-consumption, unknowingly.



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## References

Kerr WC, Patterson D, Greenfield TK (2009) Differences in the measured alcohol content of drinks between black, white and Hispanic men and women in a US national sample. *Addiction* 104(9):1503-1511. PMID: PMC2747628

Kerr WC, Patterson D, Koenen MA, Greenfield TK (2008) Alcohol content variation of bar and restaurant drinks in Northern California. *Alcohol Clin Exp Res* 32(9):1623-1629. PMID: PMC2574782

Kerr WC, Stockwell T (2012) Understanding standard drinks and drinking guidelines. *Drug and Alcohol Review* 31(2):200-205.

Turner C (1990) How much alcohol is in a 'standard drink'? An analysis of 125 studies. *Br J Addict* 85:1171-1175.

Anheuser-Busch. Bud Light Lime Introduces a New Take on the Margarita with Bud Light Lime 'Lime-a-Rita'. Press Release. April 23, 2012.

Scharff, Constance. "The Dangers of Combining Alcohol and Marijuana." *Psychology Today*. May 6, 2014.



## The Blurring of Alcohol Categories

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