



Flipping the Pyramid: Policies and Practices to Decrease Alcohol-Related Crashes

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PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS

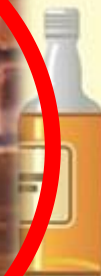
What is a "standard drink" in the US?



12 ounces of beer
5% Alcohol



OR



1.5 ounces of distilled spirits
40% alcohol (80 proof)
e.g., vodka, whiskey, gin, rum

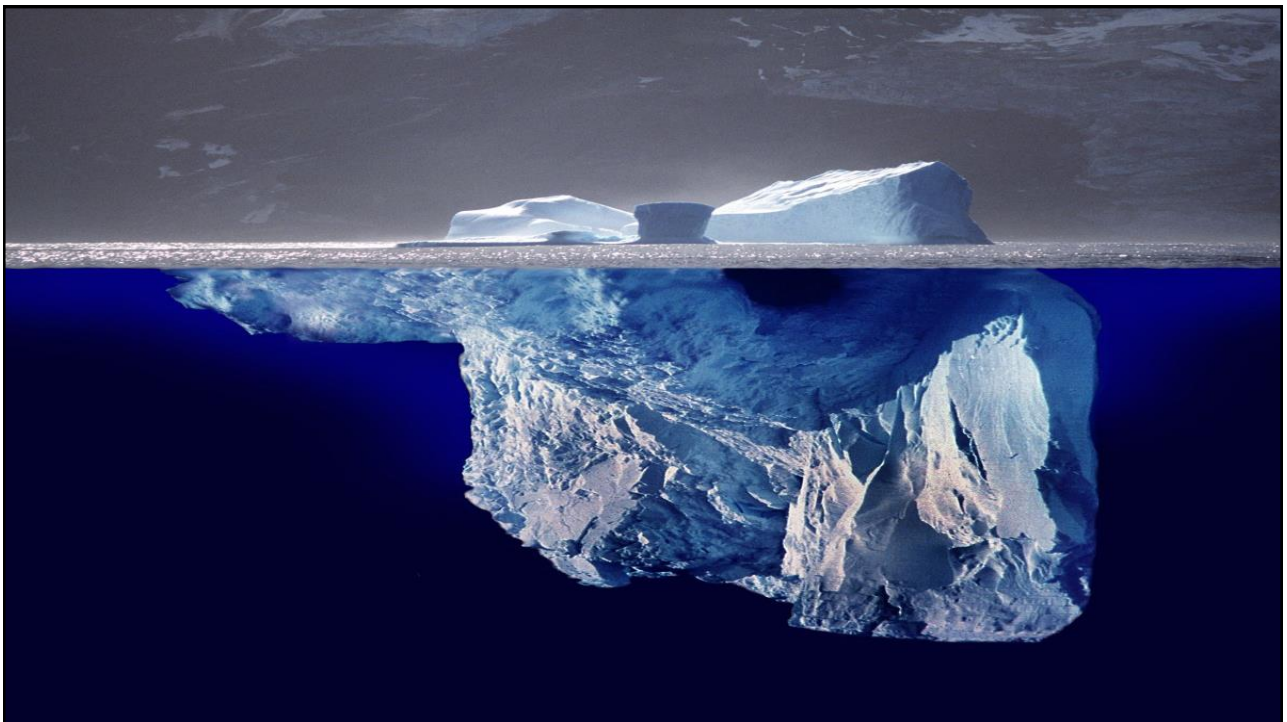


SOURCE: National Institute for Alcohol Abuse and Alcoholism.

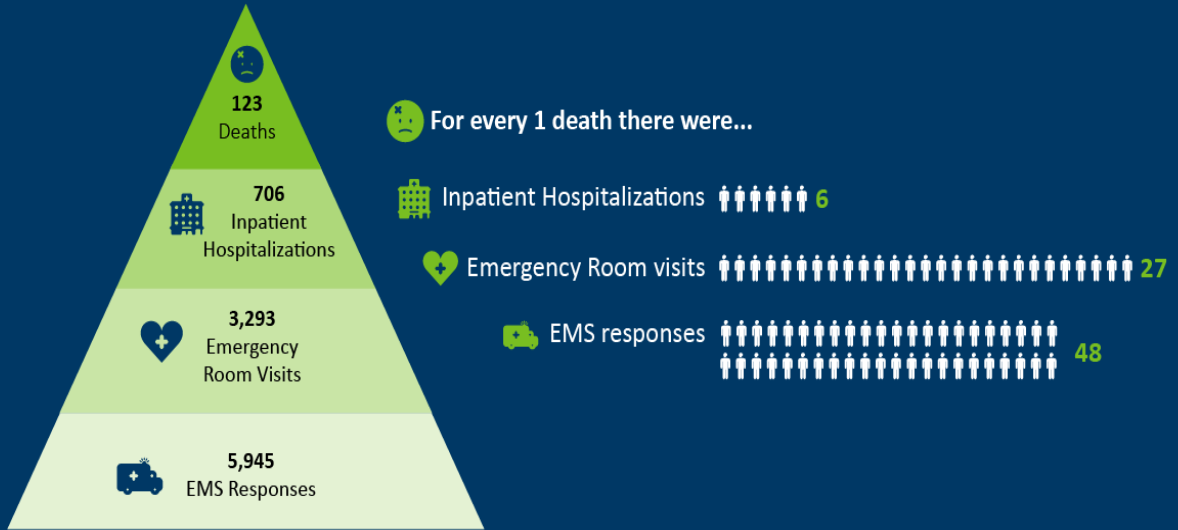
Binge Drinking

Binge drinking is a pattern of drinking that raises a person's blood alcohol concentration to 0.08%.

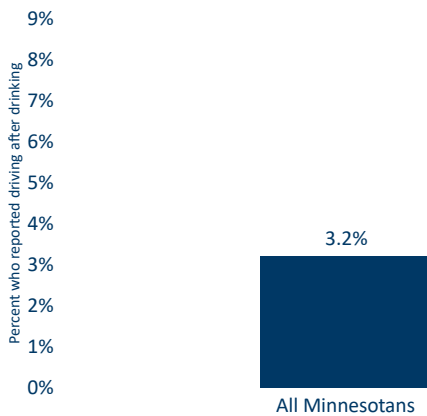
- 5** Five or more drinks on a single occasion for men
- 4** Four or more drinks on a single occasion for women
- 2** Two hours is considered a single occasion.



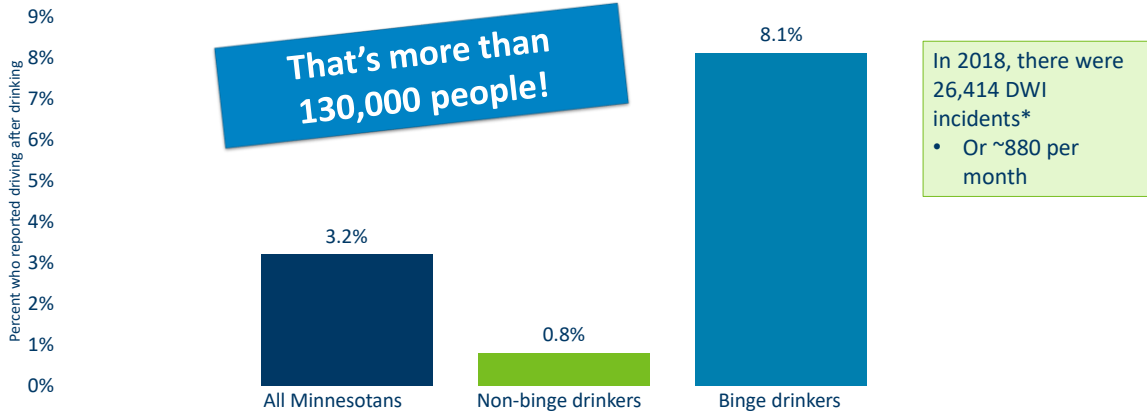
In Minnesota during 2018, alcohol-related MVC were responsible for...



About 3% of Minnesota adults said they drove after drinking "too much"...



...while almost 1 in 10 binge drinkers said they drove after drinking "too much"

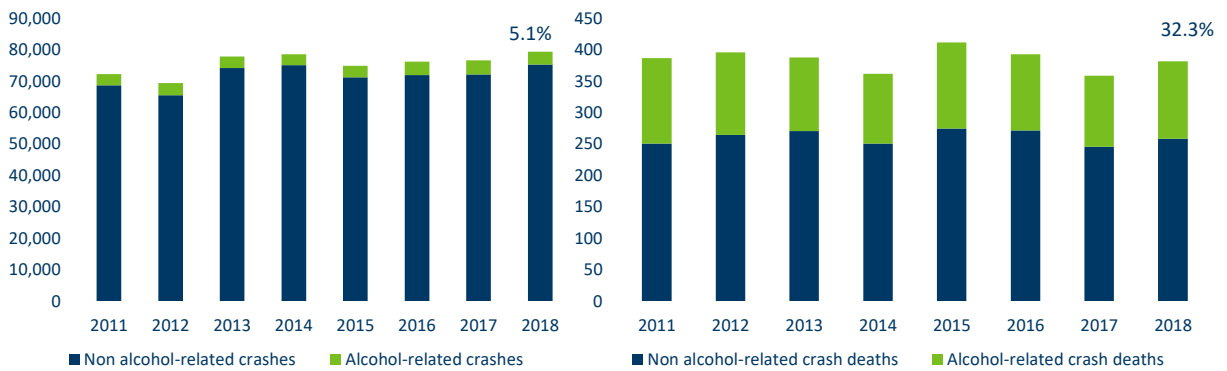


Minnesota Behavior Risk Factor Surveillance System, 2018
[*https://dps.mn.gov/divisions/ots/reports-statistics/Documents/2018-crash-facts.pdf](https://dps.mn.gov/divisions/ots/reports-statistics/Documents/2018-crash-facts.pdf)

How do these numbers fit with what you see in your work?

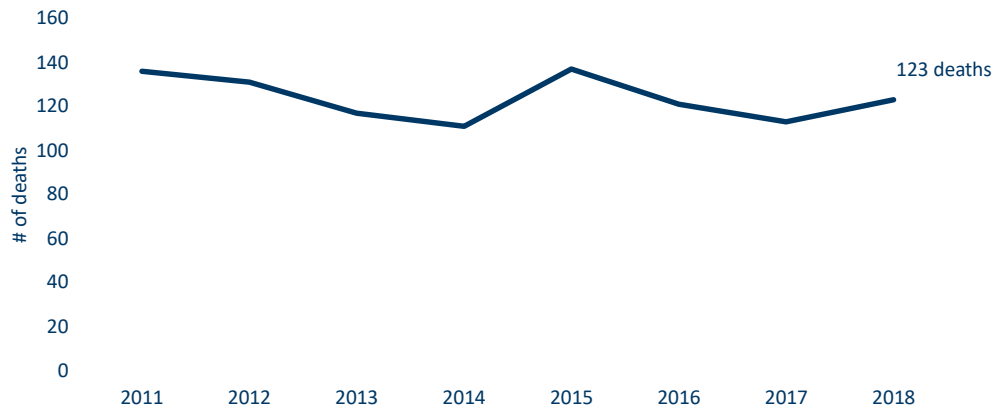
Between 2011 and 2018, 5 – 6% of crashes were alcohol-related

However, about 1/3 of crash deaths were alcohol-related



DPS Office of Traffic Safety Crash Statistics
<https://dps.mn.gov/divisions/ots/reports-statistics/pages/crash-facts.aspx>

The number of alcohol-related crash deaths



DPS Office of Traffic Safety Crash Statistics

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Minnesota Trauma Registry (MNTrauma)

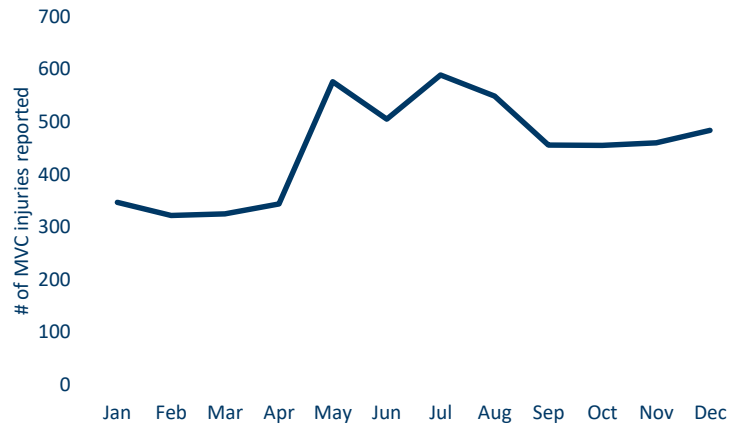
- Collects data for the MN traumatic brain injury and spinal cord injury registries
- Hospitals are required to report cases that meet criteria for major trauma



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The number of motor vehicle crash injuries reported in the trauma system, 2018

- In 2018, there were 5,412 MVC injuries reported in MNTrauma
 - 29% of those patients had a positive BAC
- Note: we do not have information on whether they were driving

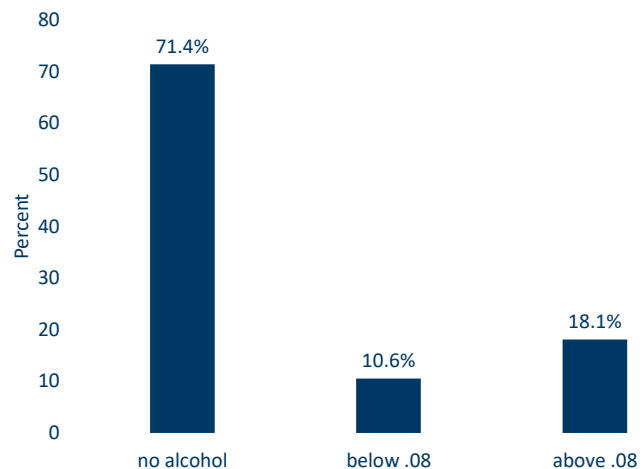


Minnesota Trauma Registry, 2018

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The proportion of MVC injuries, by BAC level

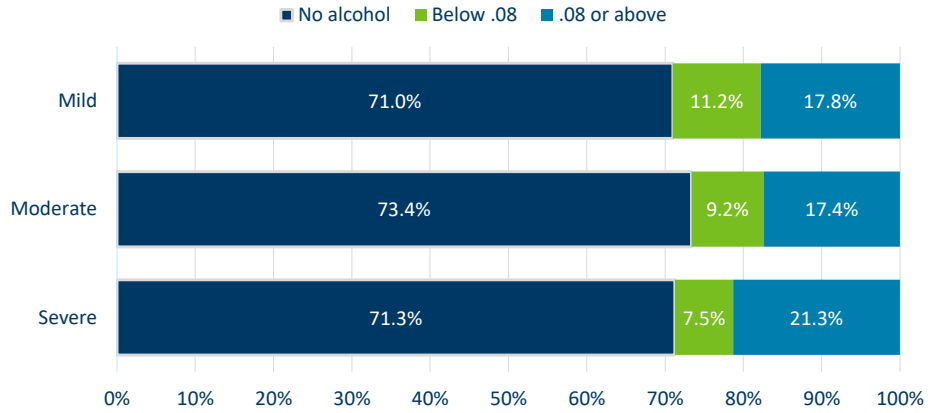
- Eliminating those injuries with a BAC of .08 or above would mean about 520 fewer injuries
- Eliminating those injuries with a BAC of .01 to .079 would reduce the number of injuries by an additional 300



Minnesota Trauma Registry, 2018

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Severe injuries were more likely to have alcohol involvement >.08

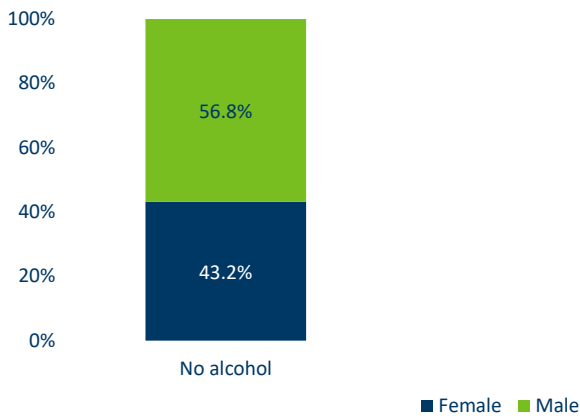


The Injury Severity Score (ISS) is an anatomical scoring system that provides an overall score for patients with multiple injuries

Minnesota Trauma Registry, 2018

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Males are more likely to suffer injuries from crashes overall, but the difference is greater when alcohol is involved



Minnesota Trauma Registry, 2018

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Alcohol is costly

- DPS estimates traffic crashes cost Minnesota \$1.9 billion each year¹
 - 15% of those costs were due directly to alcohol-related crashes in 2018 (more than \$283 million).
- Other estimates of the costs from excessive alcohol use include costs due to lost productivity, criminal justice, services for children with FASD, and more.²
 - The latest estimate shows that excessive alcohol use cost Minnesota \$3.9 billion in 2010, or about \$1.74 per drink.
 - 40% of these costs are born by state and local governments -- \$1.5 billion in 2010, or \$.69 per drink



¹<https://dps.mn.gov/divisions/ots/reports-statistics/Documents/2018-crash-facts.pdf>

²Sacks, Gonzales, Bouchery et al, 2015

So what does this mean?

- Each year, investing in DWI prevention in Minnesota could save:
 - More than 100 premature deaths
 - More than 800 injuries requiring hospital treatment
 - Nearly \$300 million dollars
- Each year, investing in prevention of excessive drinking (such as binge drinking and underage drinking) could save:
 - More than 1,700 deaths
 - \$3.9 billion dollars -- **\$1.74 for each drink consumed**



Thank you!

Comments? Questions?

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