The DRAM, Vol. 4(5) - How many cocktails? That depends on your day job

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The Behavioral Risk Factor Surveillance System (BRFSS) is an annual, state-based telephone survey run by the Centers for Disease Control and Prevention (CDC). The BRFSS gathers information from a national population sample about the leading causes of death from health risk behaviors. This research informs preventative health practices. Jarman et al. (2007) used the 2004 and 2005 North Dakota BRFSS data to study the relationship between occupation and binge drinking. In this week's BASIS, we report the findings from this study and discuss their potential public health benefits.

North Dakota's BRFSS Survey had a 62% response rate in 2004 and a 58% response rate in 2005. The cross-sectional survey provided information about a total of 7055 participants. Researchers used health insurance information to assess the relationship between binge drinking and health insurance (e.g., coverage and use based on cost barriers).

Researchers found that self-reported binge drinking was more prevalent among the employed respondents (24.1%) than the unemployed (10.8%). Among the employed, excessive alcohol consumption (see Figure) was most prevalent among: farm/ranch employees (45.3%); food/drink servers (33.4%); and farm/ranch owners (32.5%). According to the study, 19.8% of all North Dakota adults engaged in binge drinking at the time the survey was administered. Of those binge drinkers who were employed, 37.6% reported engaging in three or more binge drinking episodes within the past 30 days. However, because this study was cross-sectional, researchers could not establish either a temporal relationship between work and binge drinking, or a causal relationship between occupation and binge drinking. The red section of the bar graph in Figure 1 represents the occupations of the 37.6% employed binge drinkers.

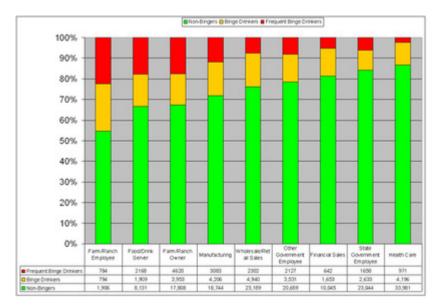


Figure. Prevalence of binge drinking and frequent binge drinking in North Dakota occupations (adapted from Jarman et al., 2007). Click image to enlarge.

The potential recall bias of self-reports is an important study limitation. Geography limits the generalizability of study results. Farm/ranch workers make-up approximately 14% of the North Dakota population. Other states might have many fewer citizens in these occupations, and farm/ranch workers in other states might exhibit different behavior. The prevalence of binge drinking could depend on a number of factors that vary across states such as number of metropolitan areas, most and least prevalent occupation, availability of alcohol, etc.

Although there are limitations to the representativeness of these results, the North Dakota findings encourage further research to investigate the extent to which excessive alcohol consumption varies across occupations. Following the North Dakota example, the BRFSS survey could be used in other states to assess the relationship between alcohol consumption rates and different occupations. This information, specific to each state, could then be used to help states determine which professions are at an increased risk for excessive alcohol consumption and the health issues that accompany it.

Jarman et al. (2007) noted that farm/ranch workers and food/drink servers, groups with the highest rates of binge drinking, also had the lowest rates of health insurances coverage. They also reported that 26.6% of binge drinkers, compared to 4.2% of non-bingers, cited cost as a barrier to acquiring health insurance. The relationship between occupation and binge drinking might be further confounded by the availability and purchase of health insurance.

—Ingrid R. Maurice

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References

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