How are we Drinking in Nova Scotia:

Impacts and Influences.

Alcohol Consumption in Nova Scotia

Hazardous, or heavy alcohol consumption (heavy drinking is defined as having at least 15 drinks per week for men and at least 8 drinks per week for women; CDC, 2014) represents an epidemic. Globally, alcohol consumption accounts for 3.3 million deaths (5.9% of global mortality) and is an attributing factor to over 200 different diseases, and injuries (World Health Organization, 2014). As a group one carcinogen, alcohol was attributable to 337,400 deaths from cancer worldwide in 2012 (Rehm & Shield, 2013). Furthermore, Rehm and Shield (2013) documented that alcohol was attributable for 493,300 deaths caused by liver cirrhosis, and 669,300 deaths caused by injury in 2012 alone.

Unfortunately, these global implications also translate to the national and provincial levels. The national rate of hazardous alcohol consumption in Canada is 17.4%. Disappointingly, Nova Scotia's rate of hazardous drinking surpasses the national average by 4.9% (Statistics Canada, 2012). This high rate of heavy alcohol consumption has direct systemic impacts. A 2006 cost-benefit analysis of provincial revenue from alcohol sales in Nova Scotia found that while the provincial revenue reached $224 million, the provincial healthcare, judicial, and lost productivity costs totalled $242.9 million (Strang, 2011; as cited in Public Health Services & Capital District Authority, 2013). Specifically, the healthcare system incurred 3000 hospital visits and 42,000 hospital days due to alcohol use in Nova Scotia, in 2007 alone (Nova Scotia Health Promotion and Protection, Addiction Services Alcohol Task Force, 2007).

A 2008 study found that in Nova Scotia, 33.7% of females and 54.7% of males drank heavily on at least one occasion in the previous year, while 17.7% of the population reported drinking heavily in the previous month. An age sensitive analyses this 2008 report found 61.9% of Nova Scotians between the ages of 19-24 reported recurring monthly heavy drinking patterns, whereas 9.7% of those aged 65 and over reported the same (Schrans, Schellinck, & Macdonald, 2008). Importantly, people tend to underestimate, or underreport their levels of drinking by approximately 75% (Stockwell, Zhao, & MacDonald, 2014). Strikingly, the average provincial age of the onset of alcohol consumption is 13.4. Of students between grades 7-12, 50% had reported consuming alcohol in the previous year, while 27% had reported binge drinking within the same time period (Student Drug Use Survey, 2012). With these numbers in mind, it is evident that the recommended safer drinking guidelines are not adhered to frequently enough. Canada's low-risk drinking guidelines state that while there are no "no risk guidelines", alcohol consumption should be limited to 10 drinks per week, without exceeding 2 drinks per day for women; and for men, 15 drinks per week, without exceeding 3 drinks per day (where a "drink" refers to 12oz. of 5% alcohol such as beer, 5 oz. of 12% alcohol such as wine, and 1.5 oz. of 40% alcohol such as distilled spirits; Canadian Centre on Substance Abuse, 2012).

Alcohol and Injury

Aside from the primary consequences of alcohol use, there are secondary detriments that affect the lives of others. A 2007 study found that more than 240,000 people had reported harm from another's alcohol use in Nova Scotia, while 30.5% of students between grades 7-12 reported experiencing harm from alcohol (Addiction Services Alcohol Task Group, 2007). According to a 2008 report on Nova Scotia's culture of alcohol, the two most prevalently reported harms were to one's social life and health (9%, and 7.6% respectively). The same report also found that heavy drinkers expressed detriments to the same variables, but at greater rates (25.5%, and 22.4% respectively; Schrans, Schellinck, & Macdonald, 2008).

Likewise to the national results (World Health Organization, 2007), heavy drinking is closely associated with unintentional injury in Nova Scotia (Asbridge, Azagba, Langille, & Rasic, 2014). For example, accidents involving all-terrain vehicles alone were associated with alcohol use 56% of the time (Sibley & Tallon, 2002). Furthermore, while drunk-driving penalties act as a deterrent, the percentage of Nova Scotians whom reported driving a vehicle within two hours of consuming either one, or two servings of alcohol are high (74%, and 15% respectively; Jones, Rogers, Lewis, & Macdonald, 2011). In general, alcohol represents the most significant contributing factor to intentional and unintentional injuries. That is, motor vehicle accidents, falls, violence, and suicides (Department of Health Promotion and Protection & Injury Free Nova Scotia, 2010). At the national level, a 2005 analysis demonstrated that unintentional injuries involving alcohol use were associated with a total of 46,861 potential life years lost (PYLLs; Patra, Taylor, & Rehm, 2009). Importantly, the research community reinforces the notion that alcohol is a significant factor to intentional injury, including suicide (Ali et al., 2013).

Critically, a Nova Scotian report on regional violence and crime (Clairmont, 2014) identified the need to alter contemporary perceptions and drinking patterns within Nova Scotia. Specifically, in order to effectively decrease rates of sexual assaults, governmental actions are necessary to decrease heavy drinking levels. In a 2008 report, alcohol-related abuse (verbal and/or physical) were found to affect 33.7% of Nova Scotians between the ages of 19-24 (Schrans, Schellinck, & Macdonald, 2008).

Reduce Rates of Alcohol Consumption, Reduce Rates of Injury

Reducing overall rates of alcohol-attributable injury requires a population-level approach, as overall rates of intentional and unintentional injuries are associated with patterns of both heavy (Cherpitel et al., 2012), and non-heavy drinking (Rossow, Bogstand, Normann, & Ekeberg, 2013). Evidence-based methods to effectively address this problem include instituting or maintaining monopolized governmental control over systems of alcohol retail, limiting alcohol marketing, and reducing access to, and availability of alcohol (Babor et al., 2010).

Limiting alcohol marking is an important step towards reducing the overall burden of alcohol as research suggests that increased exposure to alcohol advertisements decreases the age at which children start to drink (Snyder, Milici, Slater, & Strizhakova, 2006) and increases the amount of alcohol they will consume thereafter (Garfield, Chung, & Rathouz, 2003; Collins, Ellickson, McCaffrey, & Hambarsoomians, 2007; Smith & Fozcroft, 2009; Fogarty & Chapman, 2012). Given this information, it is important to note that the alcohol industry spends an average of $1 trillion annually on alcohol marketing (Institute of Alcohol Studies, 2013).

Research demonstrates that increased access to and availability of alcohol, increases overall levels of alcohol consumption (Weistzman, Folkman, Lemieux Folkman, & Wechsler, 2003; Zhu, Gorman, & Horel, 2004; Babor et al., 2010). Furthermore, increased alcohol retail outlet density is associated with higher rates of accidents, assaults (Zhu, Gorman, & Horel, 2004; Day, Breetzke, Kingham, & Campbell, 2012), youth suicide, youth drunk driving, and sexually transmitted diseases (Grubesic et al., 2012). Also of note is the evidence that demonstrates how governmentally controlled monopolies of alcohol retail systems are associated with lesser rates of population-level alcohol consumption and alcohol-related harms, as compared to privatized alcohol retail systems (Norstrom et al., 2010; Stockwell et al., 2010; Popova et al., 2012; WHO, 2014). Evidence demonstrates that the privatization of Alberta's alcohol retail outlet system was been found to be significantly related to increased rates of suicide (Zalcman & Mann, 2007).

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