

# The Health Index

## ALCOHOL & CHRONIC DISEASE

May, 2014

### KEY POINTS:

- Nearly 60% of Middlesex- London residents were not aware of the association between daily alcohol use and cancer. This was significantly higher than for other chronic diseases and Fetal Alcohol Spectrum Disorder (FASD).
- There were differences in awareness levels across gender, age groups, income levels, education levels and in London compared to Middlesex County.

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### BACKGROUND

We live in a culture of drinking in Canada, where alcohol consumption is considered normal, expected and celebratory. As such, we are inundated by messages from alcohol producers that portray alcohol as being the ideal accompaniment to everything from cottage life and sporting events to corporate and social success. Often left out of these messages are the devastating consequences of alcohol-related problems that affect not only the consumer, but also their families and the greater public.

Alcohol consumption is associated with a range of negative short and long term health outcomes. The major burden of morbidity and mortality related to alcohol use falls into two main categories: injuries (e.g.,

unintentional injuries, violence, risky sexual behaviours, and alcohol poisoning) and chronic disease (e.g., cardiovascular conditions, cancers, neuropsychiatric conditions, and gastrointestinal problems) (1). Alcohol-related harms are costing Canadians billions of dollars each year in direct health care and law enforcement costs and indirectly in lost productivity due to illness and premature death (2). When looking at changing behaviours around alcohol use, it is imperative to understand the knowledge and attitudes that surround alcohol consumption and perceived negative outcomes.

The objective of this evaluation was to determine public awareness, knowledge and attitudes about alcohol-related risk factors for chronic diseases.

### AWARENESS OF ALCOHOL-RELATED CHRONIC DISEASES

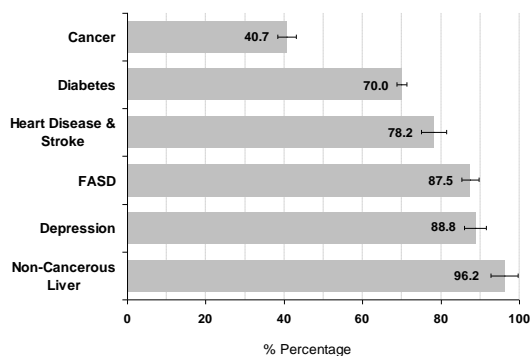
To determine population awareness of alcohol-related risks for chronic diseases, respondents were asked if they had heard or think that alcohol increases their risk for cancer, heart disease and stroke, depression, diabetes, diseases of the liver and fetal alcohol spectrum disorder (FASD).

To respond to these questions participants could reply with ‘yes’, ‘no’, ‘it depends on how much you drink’ or ‘don’t know’. Those who responded ‘it depends on the amount you drink’ for cancer and FASD were classified as not aware. There has not been a “safe limit” set for the amount of alcohol associated with an increased risk of cancer (3) and abstaining from alcohol during pregnancy is the prudent choice to avoid FASD (4).

Awareness in the population ranged from a high of 96.2% for liver disease to a low of 40.7% for cancer. Figure 7 shows the percentage of adults who have heard of or think that alcohol is a risk factor for each chronic disease and FASD.

**Figure 7: Percentage of adults who were aware that alcohol is a risk factor for various chronic diseases and FASD**

Aged 19 and Older in Middlesex-London



**Gender:** A higher proportion of women were aware that alcohol can cause FASD when compared to men (91.8% vs. 81.75%, respectively). For all other conditions, awareness between men and women was equal.

**Age:** Adults aged 19-24 were the most aware of the associations between alcohol and chronic diseases whereas adults aged 65 and over were the least aware of these relationships. This relationship was not seen in cancer.

**Income:** There were no differences across income categories with the exception of depression and diabetes. For both diseases the highest earning households had significantly higher awareness of their association with alcohol than the lowest earning households.

**Education:** Across most chronic diseases and FASD, awareness was least prevalent among those with less than high school education when compared to those with high school education or greater. For diseases of the liver/stomach and FASD, a positive trend was observed between awareness level and educational advancement.

**Area:** For those living in London, awareness about the alcohol-related risks of FASD was significantly greater than among those living in Middlesex County. For all other conditions, there was no difference in awareness.

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## DISCUSSION

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The goal of this evaluation was to determine the public’s knowledge around alcohol as a risk factor for chronic disease. Although research documenting the role of alcohol in the development of multiple chronic diseases continues to grow, it has not received the full attention it deserves. In high-income countries like Canada, alcohol continues to be the second largest risk factor for disability adjusted life years (DALYs) and puts countless Canadians at risk for alcohol-related problems (5). Within our RRFSS analysis, awareness of alcohol as a risk factor for chronic diseases was wide-ranging among the various conditions. While most respondents were able to identify diseases of the liver, depression and FASD, awareness about the link between daily alcohol use and cancer was significantly lower with nearly 60% of people unaware. Other data shows that although awareness was highest among the young adult population, they were also found to be

the least willing to change their drinking patterns. Conversely, the older population aged 65+ were the most willing to change their patterns of drinking yet were least likely to be aware of the connection between alcohol and chronic conditions (data not shown).

It is evident from the current findings that the Middlesex-London Health Unit's initiatives must address the lack of knowledge regarding the links between alcohol and chronic disease – especially its links with cancer. Future alcohol-related public health programming will require multipronged strategies including:

- counteracting the influence of alcohol promotion/advertising;
- addressing alcohol accessibility;
- routine universal alcohol screening by healthcare providers;
- countermeasures that address pro-alcohol norms found in the community, school and family environment;
- addressing the link between alcohol use and other drugs; and,
- preventing, detecting and treating depression and alcohol misuse.

### ***Future Directions***

Local programming will work towards the long-term goals of the Ontario Public Health Standards 2008 for the Prevention of Injury and Substance Misuse and Chronic Disease Prevention:

1. To reduce the frequency, severity, and impact of preventable injury and of substance misuse.
2. To reduce the burden of preventable chronic diseases of public health importance.

To achieve these goals there needs to be alignment with the Recommendations for a National Alcohol Strategy (6), the work of the Ontario Public Health Association Alcohol Prevention Working Group and the Ontario Public Health Standards where the end goal is a “culture of moderation”. Consideration must also be given to the

National Low-Risk Alcohol Drinking Guidelines (LRADG).

In the short-term, the Middlesex-London Health Unit will continue to educate the public and healthcare practitioners about the National LRADGs and the link between alcohol and chronic disease. It is important that both the general public and practitioners have the knowledge about alcohol-related injury and chronic disease along with the appropriate tools to counteract the negative outcomes.

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## **METHODS & DEFINITIONS**

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The Rapid Risk Factor Surveillance System (RRFSS) is a population health survey conducted in partnership with several health units in Ontario and is administered by the Institute for Social Research (ISR) at York University. Random samples of Middlesex-London residents aged 18 and over are interviewed to find out about their health, health behaviours, and awareness of health-related issues.

### **Survey**

#### **Alcohol and Chronic Disease Module:**

**Question 1:** Now I would like to ask you about some chronic health problems and drinking alcohol. Have you ever heard that drinking alcohol everyday may increase your risk of cancer?

**Question 2:** I would like to read a list of chronic health problems to you. Please tell me if you think that drinking alcohol can cause those health problems?

**a:** First, Heart Disease and Stroke?

**b:** What about Depression?

**c:** Diabetes?

**d:** Diseases of the Liver or Stomach, other than cancer?

**e:** And what about, Fetal Alcohol Spectrum Disorder?

## Analysis

This data was collected from January to August 2010. There was a total sample size of 812 respondents, restricted to adults aged 19 and over.

Only statistically significant results were reported here. All analyses were conducted using SPSS v.19.0.

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## REFERENCES

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1. Babor T., et al. (2010). *Alcohol: No Ordinary Commodity: Research and Public Policy – Second Edition*. WHO. Oxford: Oxford University Press.
2. Rehm, J., et al. (2006). *The Costs of Substance Abuse in Canada 2002*. Retrieved from [http://www.ccsa.ca/2006\\_CCSA\\_Documents/ccsa-011332-2006.pdf](http://www.ccsa.ca/2006_CCSA_Documents/ccsa-011332-2006.pdf)
3. Cancer Care Ontario. (2014). *Cancer Risk Factors in Ontario: Alcohol*. Toronto: Queen's Printer for Ontario. Retrieved from [www.cancercare.on.ca/alcoholreport](http://www.cancercare.on.ca/alcoholreport)
4. Canadian Medical Association. (2009). *CMA Policy – Fetal Alcohol Spectrum Disorder*. Retrieved from <http://www.cma.ca/policybase>
5. World Health Organization. (2009). *Global Health Risks: Mortality and burden of disease attributable to selected major risks*. Retrieved from [http://www.who.int/healthinfo/global\\_burden\\_disease/global\\_health\\_risks/en/index.html](http://www.who.int/healthinfo/global_burden_disease/global_health_risks/en/index.html)
6. National Alcohol Strategy Working Group (2007). *Reducing Alcohol-Related Harm in Canada: Toward a Culture of Moderation*. Retrieved from <http://www.ccsa.ca/Eng/KnowledgeCentre/OurPublications/Priorities/Pages/default.aspx>

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## CONTACTS

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Author: Ramona Kyabaggu, Program Evaluator &  
Melissa Knowler, Public Health Nurse  
Environmental Health & Chronic Disease Services  
Middlesex-London Health Unit

Contact: Sarah Maaten, Epidemiologist  
Environmental Health & Chronic Disease Services  
Middlesex-London Health Unit  
50 King Street London, ON N6A 5L7  
Phone: (519) 663-5317 ext. 2609  
Email: [sarah.maaten@mlhu.on.ca](mailto:sarah.maaten@mlhu.on.ca)

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