# LOW RISK ALCOHOL DRINKING GUIDELINE

# Drinking in Excess of the Low Risk Alcohol Drinking Guidelines (LRADG):

Age-standardized percentage of individuals 19 years or older who reported drinking in excess of the Low Risk Alcohol Drinking Guidelines (LRADG), i.e.:

- Males that drank more than 15 drinks per week, females that drank more than 10 drinks per week OR
- Males that drank more than 3 drinks per day, females that drank more than 2 drinks per day OR
- Males or females with less than 2 nondrinking days a week OR
- Males or females that drank 5 or more drinks on any one occasion in the previous year

#### Data sources:

Canadian Community Health Survey 2007/08, 2009/10, 2011/12, 2013/14, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

#### Rate calculation:

Crude rates were age-standardized using the Direct Method and standard 2011 Canadian population.

## Data analysis for Canadian Community Health Survey (CCHS) data:

The confidence intervals and variance were measured using the bootstrapping method, calculated with STATA IC/14.2 (2014).

#### Interpretation if a significant difference:

A statistic interpreted as 'significantly different' from another is an estimate found to be statistically meaningful, in such a way that the difference between two estimates is unlikely due to chance and represents a real difference. Error bars noted in figures within this report illustrate 95% confidence intervals. If there is no overlap in range, the difference can be described as statistically significant.

#### **Overall**

In 2013/14, the age-standardized percentage of adults of legal drinking age in the North Bay Parry Sound District Health Unit (NBPSDHU) region who exceeded the Low Risk Alcohol Drinking Guidelines (LRADG) was similar to the same percentage in Ontario (Table 1). In previous years (2007-12), this percentage was significantly higher in our region compared to Ontario. Percentages have not changed significantly since 2007/08 in any of the three regions.

Table 1. Age-Standardized Percentage (95%) of Individuals Aged 19 Years or Older Who Reported Drinking in Excess of the Low Risk Alcohol Drinking Guidelines, By Region, 2007/08 – 2013/14

Time period	NBPSDHU Region	North East LHIN Region	Ontario
2007/08	48.7*	47.3*	38.7
	(44.4, 52.9)	(45.0, 49.7)	(37.9, 39.6)
2009/10	50.3*	50.4*	39.3
	(44.3, 56.3)	(47.8, 52.9)	(38.3, 40.2)
2011/12	49.5*	50.7*	39.7
	(43.9, 55.1)	(47.5, 54)	(38.6, 40.7)
2013/14 <sup>e</sup>	48.0	50.1*	40.6
	(41.0, 55.1)	(47.0, 53.1)	(39.6, 41.7)

<sup>\*</sup> Estimate is significantly different from provincial estimate

#### Gender

Data from 2007 to 2012 was combined to analyze drinking in excess of the LRADG by gender. About two in three males exceeded the LRADG in our region, significantly higher compared to about one in two males in Ontario (Table 2). The age-standardized percentage of adults who exceed the LRADG was significantly higher among males compared to females in all three regions.

Table 2. Age-Standardized Percentage (95%) of Individuals Aged 19 Years or Older Who Reported Drinking in Excess of the Low Risk Alcohol Drinking Guidelines, By Gender & Region, 2007 – 2012 Combined

Gender	NBPSDHU Region	North East LHIN Region	Ontario
Male	61.4* ‡	60.2* ‡	49.0 ‡
	(57.3, 65.3)	(57.6, 62.7)	(48.1, 49.9)
Female	38.9	38.6	30.0
	(34.6, 43.4)	(36.1, 41.1)	(29.3, 30.8)

 $<sup>\</sup>ensuremath{^{*}}$  Estimate is significantly different from provincial estimate

<sup>‡</sup> Estimate is significantly different from reference group



 $<sup>^{\</sup>rm 0}$  In 2013/14, females who drank 4 or more drinks on any one occasion in the previous year were categorized as exceeding the LRADG

#### Adjusted Household Income:

The population's household income adjusted for family size, divided into three equally sized groups (lowest income, middle income, and highest income). Household income is divided by the squared number of persons in that household, for each person. For example, lowest income represents the one third of households with the lowest income per household size and the third tertile represents the one third of households with the highest income per household size.

### **Age Group**

Data from 2007 to 2012 was combined to analyze drinking in excess of the LRADG by age groups. The age-standardized percentages of the population aged 25 years or older who participated and reported drinking in excess of the LRADG were significantly higher in our region compared to Ontario (Table 3).

Table 3. Age-Standardized Percentage (95%) of Individuals Aged 19 Years or Older Who Reported Drinking in Excess of the Low Risk Alcohol Drinking Guidelines, By Age Group & Region, 2007 – 2012 Combined

Age Group (Years)	NBPSDHU Region	North East LHIN Region	Ontario
19-24	73.1	70.5*	59.7
	(60.4, 82.9)	(63.4, 76.7)	(57.6, 61.9)
25-44	56.9*	60.2*	44.2
	(51.3, 62.3)	(56.8, 63.5)	(43.3, 45.1)
45-64	45.3*	42.0*	34.8
	(39.7, 50.9)	(39.1, 44.9)	(33.8, 35.7)
65 or older	26.5*	24.7*	21.2
	(21.9, 31.7)	(22.2, 27.4)	(20.5, 21.9)

<sup>\*</sup> Estimate is significantly different from provincial estimate

## **Adjusted Household Income**

Data from 2007 to 2012 was combined to analyze drinking in excess of the LRADG by adjusted household income. Drinking in excess of the LRADG was similar across all household income levels in our region (Table 4). Significantly higher percentages of the population living in low and mid income households drank in excess of the LRADG compared to the same income level households in Ontario. In the North East LHIN region and Ontario, significantly higher percentages of the population living in middle and high income households were drinking heavily compared to those in low income households.

Table 4. Age-Standardized Percentage (95%) of Individuals Aged 19 Years or Older Who Reported Drinking in Excess of the Low Risk Alcohol Drinking Guidelines, By Adjusted Household Income Level & Region, 2007 – 2012 Combined

Income Level	NBPSDHU Region	North East LHIN Region	Ontario
Low income	44.6*	42.6*	30.5
(ref.)	(38.4, 50.9)	(39, 46.3)	(29.4, 31.6)
Mid income	55.0*	52.7* ‡	43.6 ‡
	(49.8, 60.2)	(49.1, 56.3)	(42.6, 44.7)
High income	48.0	50.2* ‡	42.0 ‡
	(42.7, 53.4)	(47.5, 52.9)	(41.2, 42.9)

<sup>\*</sup> Estimate is significantly different from provincial estimate

<sup>‡</sup> Estimate is significantly different from reference group



#### **Unemployment:**

Those involuntarily unemployed is defined by the population who had not worked at a job or business in the past week, had not been absent from work in the past week, and had looked for work in the past four weeks. Employment is defined by the population who had worked at a job or business in the past week, or had been absent from work in the past week.

#### **Education**

Data from 2011/12 was used to analyze drinking in excess of the LRADG by highest level of education completed. The age standardized percentage of those who drank in excess of the LRADG was significantly higher among those who had completed a trade/apprenticeship/college/university or higher education in our region (51%) compared to those with the same level of education in Ontario (42%; Table 5). Drinking in excess of the LRADG did not vary

Table 5. Age-Standardized Percentage (95%) of Individuals Aged 19 Years or Older Who Reported Drinking in Excess of the Low Risk Alcohol Drinking Guidelines, By Highest Level of Education Completed & Region, 2011/12

Education	NBPSDHU Region	North East LHIN Region	Ontario
Less than high	36.8	41.8	39.6
school (ref.)	(26.5, 48.5)	(33.1, 51.0)	(36.0, 43.2)
Completed high	45.9	49.0	39.8
school	(37.3, 54.7)	(41.4, 56.7)	(37.7, 42.0)
Trade/	50.8*	55.1* ‡	41.8
Apprenticeship/	(43.7, 57.9)	(51.1, 58.9)	(40.4, 43.3)
College/			
University			
or higher			

<sup>\*</sup> Estimate is significantly different from provincial estimate

significantly by education level in our region.

## Unemployment

Data from 2007 to 2012 was combined to analyze drinking in excess of the LRADG by employment status. Drinking in excess of the LRADG did not vary significantly by employment status in any of the three regions (Table 6). Drinking in excess of the LRADG was significantly higher among those who were employed and those involuntarily unemployed in our region and the North East LHIN region compared to those in Ontario.

Table 6. Age-Standardized Percentage (95%) of Individuals Aged 19 Years or Older Who Reported Drinking in Excess of the Low Risk Alcohol Drinking Guidelines, By Employment Status & Region, 2007 – 2012 Combined

Employment status	NBPSDHU Region	North East LHIN Region	Ontario
Employed	56.7*	55.0*	44.6
	(46.2, 66.5)	(52.4, 57.7)	(43.8, 45.5)
Involuntarily	58.4*	56.6*	41.6
unemployed	(54.1, 62.5)	(46.9, 65.8)	(38.4, 44.8)

<sup>\*</sup> Estimate is significantly different from provincial estimate



<sup>‡</sup> Estimate is significantly different from reference group

## **Aboriginal identity**

Data from 2011/12 was used to analyze drinking in excess of the LRADG by Aboriginal identity. Drinking in excess of the LRADG did not vary significantly by Aboriginal identity in our region or in the North East LHIN region (Table 7). Drinking in excess of the LRADG was significantly higher among those who did not identify as Aboriginal in our region and in the North East LHIN region compared to those in Ontario.

Table 7. Age-Standardized Percentage (95%) of Individuals Aged 19 Years or Older Who Reported Drinking in Excess of the Low Risk Alcohol Drinking Guidelines, By Aboriginal Identity & Region, 2011/12

Aboriginal Identity	NBPSDHU Region	North East LHIN Region	Ontario
Identified as	55.2	47.4	50.7 ‡
Aboriginal	(44.0, 65.9)	(38.8, 56.1)	(46.6, 54.8)
Did not identify	48.8*	52.3*	40.6
as Aboriginal	(42.8, 54.7)	(48.2, 56.4)	(39.5, 41.7)
(ref.)			

<sup>\*</sup> Estimate is significantly different from provincial estimate

<sup>‡</sup> Estimate is significantly different from reference group