

SELF-RATED MENTAL HEALTH

Self-Rated Mental Health:

Age-adjusted percentage of the population aged 18 years or older who reported their own mental health status as being either very good/excellent, or fair/poor.

North East LHIN region:

The North East Local Health Integration Network (NE LHIN) region boundaries normally include the North Bay Parry Sound District Health Unit (NBPSDHU) Region. However, for comparison purposes the NE LHIN region is defined as the whole of the region excluding the NBPSDHU region.

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 calculations:

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 of a significant difference:

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

Overall Self-Rated Mental Health

In 2013/14, more than two thirds of the adult age-standardized population in the NBPSDHU region felt their mental health was very good or excellent, comparable to the percentage for the North East LHIN and Ontario populations (Table 1). About one in thirteen of adults felt their own mental health status was fair or poor in 2013/14, similar compared to the North East LHIN region and Ontario (Table 2).

Percentages for those with very good/excellent mental health and fair/poor mental health in our region were similar to other regions in all time periods.

Table 1. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Very Good or Excellent, By Region, 2007 – 2014

Time period	NBPSDHU Region	North East LHIN Region	Ontario
2007/08	79.5 ^A (74.9, 83.5)	72.1 (69.3, 74.8)	75.4 (74.5, 76.2)
2009/10	76.4 (70.5, 81.4)	74.2 (70.8, 77.4)	74.8 (73.9, 75.7)
2011/12	73.8 (67.3, 79.5)	73.4 (69.1, 77.2)	72.8 (71.7, 73.8)
2013/14	68.4 (61.1, 75.0)	72.0 (68.4, 75.4)	71.1 (70.0, 72.1)

^A Estimate is significantly different from the North East LHIN estimate

Table 2. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Fair or Poor, By Region, 2007 – 2014

Time period	NBPSDHU Region	North East LHIN Region	Ontario
2007/08	5.6 ^E (4.0, 8.0)	5.5 (4.4, 6.9)	5.4 (5.0, 5.9)
2009/10	4.7 ^E (2.8, 7.7)	6.6 (4.8, 9.0)	5.7 (5.2, 6.1)
2011/12	9.3 ^E (6.1, 13.7)	7.0 ^E (4.9, 9.8)	6.3 (5.7, 6.8)
2013/14	7.5 ^E (4.5, 12.2)	7.4 (5.7, 9.6)	6.9 (6.4, 7.5)

^E – Interpret with caution; the estimate is associated with high sampling variability

Self-Rated Mental Health: Gender

Data from 2007 to 2014 was combined to analyze self-rated mental health by gender. Similar percentages of males and females felt their mental health was very good or excellent in our region and the North East LHIN region (Table 3). In Ontario, about 3% more of the male population felt their mental health was very good or excellent compared to females in Ontario. The age-standardized percentage of the adult population who felt their mental health was fair or poor was similar among males and females in all three regions (Table 4).

Table 3. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Very Good or Excellent, By Gender & Region, 2007 – 2014 Combined

Gender	NBPSDHU Region	North East LHIN Region	Ontario
Male (ref.)	73.6 (68.9, 77.9)	74.4 (71.9, 76.7)	75.1 (74.4, 75.8)
Female	76.1 (72.0, 79.7)	71.5 (69.1, 73.7)	72.0 ‡ (71.3, 72.6)

‡ Estimate is significantly different from reference group

Table 4. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Fair or Poor, By Gender & Region, 2007 – 2014 Combined

Gender	NBPSDHU Region	North East LHIN Region	Ontario
Male (ref.)	5.8 ^E (4.1, 8.2)	5.7 (4.6, 7.1)	5.4 (5.1, 5.7)
Female	7.0 (5.2, 9.3)	7.6 (6.2, 9.2)	6.7 (6.4, 7.1)

^E – Interpret with caution; the estimate is associated with high sampling variability

Self-Rated Mental Health: Age Group

Data from 2007 to 2014 was combined to analyze self-rated mental health by age groups. The age-standardized percentage of the adult population who rated their own mental health as very good/excellent, or fair/poor did not vary significantly by age group in any of the three regions (Tables 5 & 6).

Table 5. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Very Good or Excellent, By Age Group & Region, 2007 – 2014 Combined

Age Group (Years)	NBPSDHU Region	North East LHIN Region	Ontario
18-24	80.8 (72.0, 87.4)	73.5 (68.7, 77.9)	75.1 (73.8, 76.4)
25-44	73.3 (68.2, 77.9)	73.5 (70.6, 76.1)	74.4 (73.6, 75.1)
45-64	75.2 (70.9, 79.1)	71.5 (68.9, 74.0)	71.3 (70.4, 72.1)
65 or older	76.1 (68.4, 82.3)	68.5 (63.9, 72.8)	72.9 (71.5, 74.3)

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

Table 6. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Fair or Poor, By Age Group & Region, 2007 – 2014 Combined

Age Group (Years)	NBPSDHU Region	North East LHIN Region	Ontario
18-24	F	5.3 ^E (3.8, 7.4)	5.3 (4.6, 6.0)
25-44	5.8 ^E (3.9, 8.4)	6.7 (5.1, 8.7)	5.5 (5.2, 5.9)
45-64	7.5 (5.7, 9.7)	7.4 (6.3, 8.6)	7.5 (7.0, 7.9)
65 or older	F	7.7 ^E (5.3, 11.2)	5.3 (4.6, 6.1)

E – Interpret with caution; the estimate is associated with high sampling variability

F – Estimate suppressed; too unreliable to be released

Self-Rated Mental Health: Adjusted Household Income

Data from 2007 to 2014 was combined to analyze self-rated mental health by adjusted household income. In all regions, about three of every five adults living in low income households rated their mental health as very good, significantly lower compared to about four of every five adults in high income households (Table 7). Similarly, about ten in every 100 adults in low income households rated their mental health as fair/poor, compared to about three of every 100 adults in high income households (Table 8).

Table 7. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Very Good or Excellent, By Adjusted Household Income Level & Region, 2007 – 2014 Combined

Income Level	NBPSDHU Region	North East LHIN Region	Ontario
Low income	64.9‡ (58.9, 70.5)	60.2‡ (56.6, 63.7)	64.5 (63.5, 65.6)
Mid income	76.7 (71.9, 80.9)	77.3 (74.4, 79.9)	76.1 (75.3, 76.8)
High income (ref.)	83.5 (78.6, 87.5)	78.4 (75.7, 80.9)	U

‡ Estimate is significantly different from reference group

U Estimate for combined sample unavailable as estimate changed significantly between time periods

Table 8. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Fair or Poor, By Adjusted Household Income Level & Region, 2007 – 2014 Combined

Income Level	NBPSDHU Region	North East LHIN Region	Ontario
Low income	10.0‡ (7.6, 13.0)	12.4‡ (10.2, 15.0)	9.8 (9.2, 10.4)
Mid income	6.6 ^E (4.2, 10.2)	4.1 (3.0, 5.5)	4.7 (4.3, 5.0)
High income (ref.)	2.8 ^E (1.7, 4.4)	4.8 ^E (3.4, 6.8)	U

‡ Estimate is significantly different from reference group

^E – Interpret with caution; the estimate is associated with high sampling variability

U Estimate for combined sample unavailable as estimate changed significantly between time periods

Self-Rated Mental Health: Education

Data from 2011 to 2014 was combined to analyze self-rated mental health by highest level of education completed. In all three regions, significantly lower percentages of the adult population rated their mental health as very good or excellent when they had completed less than a high school education compared to the population that had completed a trade, apprenticeship, college, university, or higher education (Table 9). In our region, about eight of every 20 adults who completed less than a high school education rated their mental health as very good/excellent compared to 15 of every 20 adults who completed a trade or higher education. In the North East LHIN region and Ontario, significantly higher percentages of the adult population with less than a high school education rated their mental health as fair or poor, compared to the population who had completed a trade education or higher (Table 10).

Table 9. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Very Good or Excellent, By Highest Level of Education Completed & Region, 2011 – 2014 Combined

Education	NBPSDHU Region	North East LHIN Region	Ontario
Less than high school	41.8‡ (29.1, 55.7)	49.5‡ (40.7, 58.3)	55.6‡ (51.9, 59.3)
Completed high school	68.0 (58.6, 76.0)	67.3‡ (60.5, 73.5)	68.3‡ (66.4, 70.1)
Trade/Apprenticeship/College/University or higher (ref.)	76.1 (70.2, 81.1)	77.2 (74.1, 80.0)	74.6 (73.8, 75.5)

‡ Estimate is significantly different from reference group

Table 10. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Fair or Poor, By Highest Level of Education Completed & Region, 2011 – 2014 Combined

Education	NBPSDHU Region	North East LHIN Region	Ontario
Less than high school	F	18.3‡ (11.6, 27.7)	13.9‡ (11.9, 16.3)
Completed high school	7.3 ^E (4.4, 12)	8.7 ^E (4.8, 15.1)	7.7‡ (6.7, 8.7)
Trade/ Apprenticeship/ College/University or higher (ref.)	7.3 ^E (4.6, 11.4)	5.6 ^E (4.3, 7.3)	5.6 (5.2, 6)

‡ Estimate is significantly different from reference group
 E – Interpret with caution; the estimate is associated with high sampling variability
 F – Estimate suppressed; too unreliable to be released

Self-Rated Mental Health: Aboriginal identity

Data from 2011 to 2014 was combined to analyze self-rated mental health by Aboriginal identity completed. The age-standardized percentage of the adult population who rated their mental health as very good or excellent did not vary significantly between those who identified as Aboriginal and those who did not in our region or the North East LHIN region (Table 11). In Ontario, a significantly lower percentage of adults who identified as Aboriginal rated their mental health as very good or excellent compared to those who did not identify as Aboriginal. About 12% of Ontario adults who identified as Aboriginal rated their mental health as fair or poor, significantly higher compared to those who did not identify as Aboriginal (6%; Table 12).

Table 11. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Very Good or Excellent, By Aboriginal Identity, 2011 – 2014 Combined

Aboriginal Identity	NBPSDHU Region	North East LHIN Region	Ontario
Identified as Aboriginal	62.0 (50.1, 72.6)	70.2 (62.3, 77.1)	62.9‡ (59.2, 66.4)
Did not identify as Aboriginal (ref.)	71.9 (66.5, 76.8)	72.8 (69.8, 75.7)	72.2 (71.4, 73.0)

* Estimate is significantly different from provincial estimate

‡ Estimate is significantly different from reference group

Table 12. Age-Standardized Percentage (95% CI) of Individuals Aged 18 Years or Older Who Reported Their Own Mental Health Status as Being Fair or Poor, By Aboriginal Identity, 2011 – 2014 Combined

Aboriginal Identity	NBPSDHU Region	North East LHIN Region	Ontario
Identified as Aboriginal	F	8.7 ^E (5.8, 12.7)	12.3‡ (9.9, 15.1)
Did not identify as Aboriginal (ref.)	7.5 ^E (5.3, 10.5)	7.3 (5.7, 9.3)	6.5 (6.1, 6.9)

E – Interpret with caution; the estimate is associated with high sampling variability

‡ Estimate is significantly different from reference group

F – Estimate suppressed; too unreliable to be released