

# HEPATITIS B

## Data sources:

NBPSDHU regional hepatitis B confirmed and probable cases – Ontario Ministry of Health and Long-Term Care, Integrated Public Health Information System (iPHIS), extracted 2015/10/25.

Public Health Ontario. Query: Ontario: Counts by Age and Gender. Toronto, ON: Ontario Agency for Health Protection and Promotion 2016 Oct 19 [cited 2016 Oct 25] Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Query/Pages/default.aspx>

NBPSDHU & Ontario Population – 2006-2015 Population estimates, IntelliHEALTH database, Ministry of Health and Long-Term Care [2016/10/25]

## Rate calculations:

Crude rates were age-standardized using the Direct Method and standard 1991 Canadian population. Confidence intervals (95%) were calculated for age-standardized rates based on the gamma distribution (Fay and Feuer, 1997. Tiwari and al., 2006) in STATA IC/14.1 (2013) for the North Bay Parry Sound District Health Unit (NBPSDHU) region and Ontario.

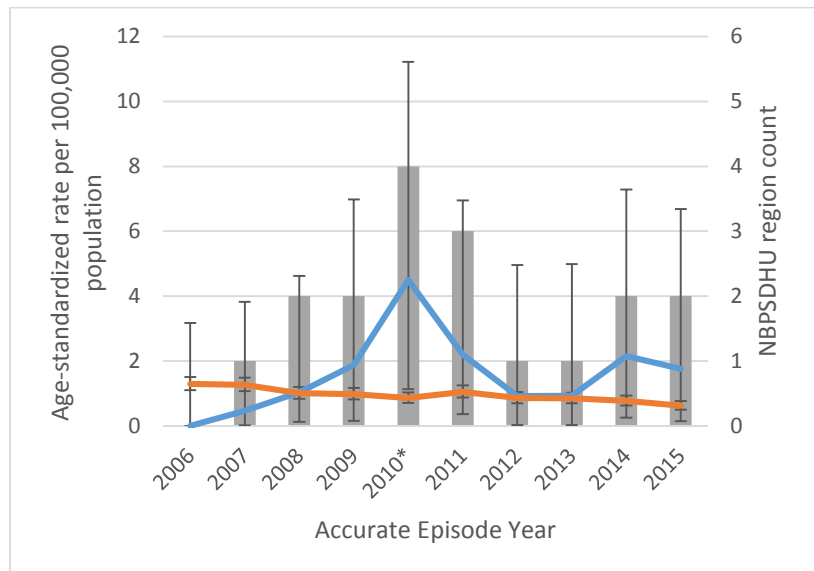
## Interpretation of a significant difference:

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, the difference can be described as statistically significant.

## Overall rates of Hepatitis B

In 2015, two cases of hepatitis B were identified within the NBPSDHU region (see Figure 1 & Table 1). The age-standardized rate (ASR) for confirmed hepatitis B cases in the NBPSDHU region remained stable between 2006 and 2015, while the age-standardized rate for Ontario has decreased significantly to about half the 2006 rate.

Figure 1. Count and Age-Standardized Rate per 100,000 Population of Hepatitis B Cases (Confirmed & Probable), by Region, 2006 – 2015



\* Age-standardized rate (ASR) for the NBPSDHU region is significantly higher than the Ontario rate during the corresponding calendar year.

# HEPATITIS B

## Definitions:

### *Hepatitis B case:*

Generally includes confirmed and probable acute cases of hepatitis B as defined by the Ministry of Health & Long-Term Care (Infectious Diseases Protocol: Gonorrhoea, Appendix B. Available from [https://secure.publichealthontario.ca/en/DataAndAnalytics/Query/layouts/xviewer.aspx?id=en/DataAndAnalytics/Query/PowerPivot/Counts\\_by\\_Disease\\_and\\_Year.xlsx&DefaultItemOpen=1.](https://secure.publichealthontario.ca/en/DataAndAnalytics/Query/layouts/xviewer.aspx?id=en/DataAndAnalytics/Query/PowerPivot/Counts_by_Disease_and_Year.xlsx&DefaultItemOpen=1.))

As of April 28, 2009, a probable case classification was added, with the subsequent addition of a carrier classification as of January 1<sup>st</sup>, 2012 to capture chronic cases. Prior to this addition, Hepatitis B virus carriers may not have been reported consistently across health units.

Table 1. Count and Age-Standardized Rate per 100,000 Population of Confirmed Hepatitis B Cases (Confirmed & Probable), by Region, 2006 – 2015

Accurate Episode Year	NBPSDHU Regional Case Count	NBPSDHU Regional Age-Standardized Rate (95% CI)	Ontario Age-Standardized Rate (95% CI)
2006	0	0.0 (0.0, 3.2)	1.3 (1.1, 1.5)
2007	1	0.5 (0, 3.8)	1.3 (1.1, 1.5)
2008	2	1.0 (0.1, 4.6)	1.0 (0.8, 1.2)
2009	2	1.9 (0.2, 7)	1.0 (0.8, 1.2)
2010	4	4.5 (1.1, 11.2)	0.9 (0.7, 1)
2011	3	2.2 (0.4, 7.0)	1.0 (0.9, 1.2)
2012	1	0.9 (0.0, 5.0)	0.9 (0.7, 1)
2013	1	0.9 (0.0, 5.0)	0.8 (0.7, 1)
2014	2	2.2 (0.3, 7.3)	0.8 (0.6, 0.9)
2015	2	1.8 (0.1, 6.7)	0.6 (0.5, 0.8)

# HEPATITIS B

---

## Risk Factors

The majority of confirmed hepatitis B cases in the NBPSDHU region between 2010 and 2015 had risk factors specified in their client record (12/13; 92.3%; see Table 2). Travel or living in a country where hepatitis B is endemic, and being unimmunized were the top two risk factors identified.

Table 2. Count and Percentage of Cases (Confirmed & Probable) of Hepatitis B, by Risk Factor, NBPSDHU region, 2011-2015

<b>Risk Factors</b>	<b>NBPSDHU Region Count 2010-2015 (Percentage)</b>
<b>Travel or live in a country where hepatitis B is endemic</b>	5 (38.5%)
<b>Unimmunized</b>	5 (38.5%)
<b>Travel outside of province</b>	4 (30.8%)
<b>More than one sex contact in the last two years</b>	3 (23.1%)
<b>Sex with opposite sex</b>	3 (23.1%)
<b>Shared personal items (e.g., toothbrush, razor blades)</b>	3 (23.1%)