

# GONORRHEA

## Data sources:

NBPSDHU regional gonorrhoea confirmed cases – Ontario Ministry of Health and Long-Term Care, Integrated Public Health Information System (iPHIS), extracted 2015/10/19. Risk factors extracted 2016/11/4.

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 19] 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.

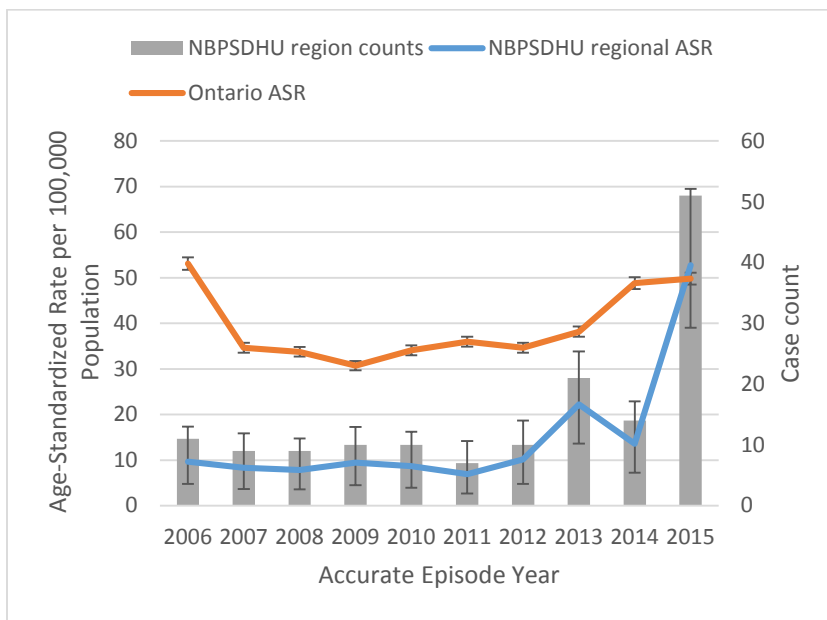
## Interpretation of a significant difference:

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

Fifty-one confirmed cases of gonorrhoea were identified within the NBPSDHU region in 2015, compared to a median number of 10 cases per year between 2006 and 2014 (see Figure 1 & Table 1). However, the age-standardized rate (ASR) for confirmed gonorrhoea cases in the NBPSDHU region was similar to the Ontario rate for 2015. The age-standardized rate has been stable in both regions between 2006 and 2015.

Figure 1. Count and Age-Standardized Rate per 100,000 Population of Confirmed Gonorrhoea Cases, by Region, 2006 – 2015



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## Definitions:

### *Gonorrhea case:*

Includes confirmed cases as defined by the Ministry of Health & Long-Term Care

(Infectious Diseases Protocol: Gonorrhea, Appendix B. Available from

[http://www.health.gov.on.ca/en/pro/programs/publichealth/oph\\_standards/docs/gonorrhoea\\_cd.pdf](http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/gonorrhoea_cd.pdf))

Table 1. Count and Age-Standardized Rate per 100,000 Population of Confirmed Gonorrhea Cases, 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                  | 11                          | 9.7<br>(4.8, 17.4)                              | 53.1<br>(51.7, 54.5)                   |
| 2007                  | 9                           | 8.3<br>(3.7, 15.9)                              | 34.6<br>(33.5, 35.7)                   |
| 2008                  | 9                           | 7.8<br>(3.6, 14.8)                              | 33.8<br>(32.7, 34.9)                   |
| 2009                  | 10                          | 9.4<br>(4.5, 17.3)                              | 30.7<br>(29.7, 31.7)                   |
| 2010                  | 10                          | 8.6<br>(3.9, 16.2)                              | 34.1<br>(33, 35.2)                     |
| 2011                  | 7                           | 6.9<br>(2.7, 14.2)                              | 36.0<br>(34.9, 37.1)                   |
| 2012                  | 10                          | 10.2<br>(4.7, 18.6)                             | 34.6<br>(33.6, 35.7)                   |
| 2013                  | 21                          | 22.2<br>(13.6, 33.9)                            | 38.2<br>(37.1, 39.3)                   |
| 2014                  | 14                          | 13.6<br>(7.2, 22.9)                             | 48.8<br>(47.6, 50.1)                   |
| 2015                  | 51                          | 52.8<br>(39, 69.5)                              | 49.8<br>(48.5, 51.1)                   |

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## Sex-Specific Rates

Age-standardized rates between males and females in the NBPSDHU region were statistically similar for all years between 2006 and 2015 (see Figure 2 & Table 2). The rate for females in the NBPSDHU region was about 70% higher than the Ontario rate in 2015 (32.6 cases per 100,000 population).

Figure 2. Age-Standardized Rate per 100,000 Population of Confirmed Gonorrhoea Cases, by Sex, NBPSDHU region, 2006 – 2015

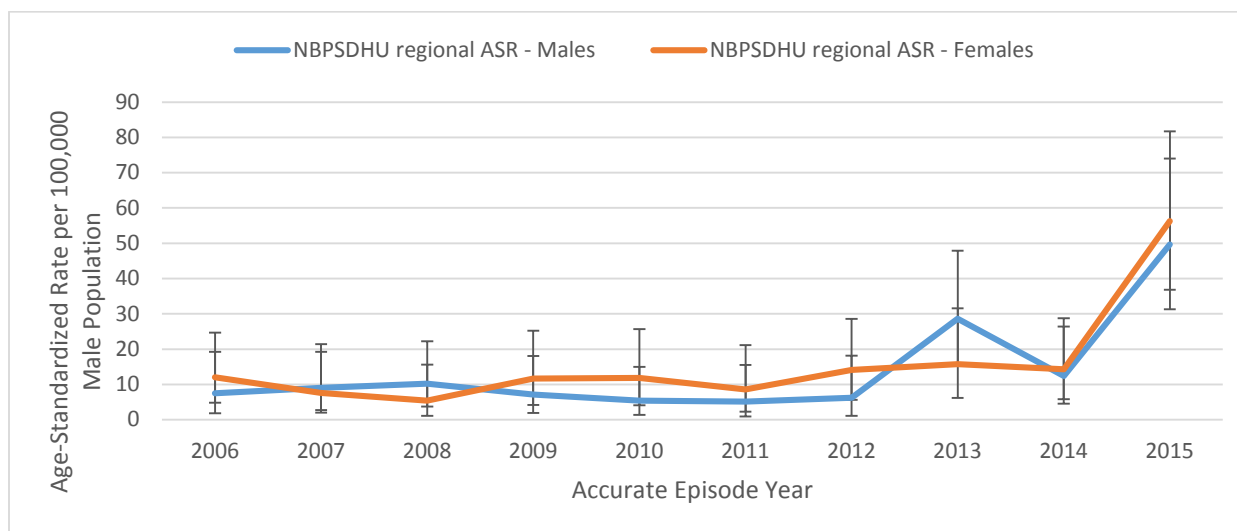


Table 2. Age-Standardized Rate per 100,000 Population of Confirmed Gonorrhoea Cases, by Sex, NBPSDHU Region, 2006 – 2015

| Accurate episode year | NBPSDHU Regional Age-Standardized Rate among Males (95% CI) | NBPSDHU Regional Age-Standardized Rate among Females (95% CI) |
|-----------------------|---|---|
| 2006                  | 7.5<br>(1.9, 19.2)  | 12.0<br>(4.8, 24.6)   |
| 2007                  | 9.0<br>(2.7, 21.4)  | 7.6<br>(2.0, 19.2)  |
| 2008                  | 10.2<br>(3.7, 22.2)   | 5.4<br>(1.1, 15.6)  |
| 2009                  | 7.1<br>(1.9, 18)  | 11.7<br>(4.2, 25.2)   |
| 2010                  | 5.4<br>(1.3, 15)  | 11.8<br>(4.1, 25.6)   |
| 2011                  | 5.2<br>(0.9, 15.6)  | 8.6<br>(2.3, 21.2)  |
| 2012                  | 6.2<br>(1.1, 18.1)  | 14.1<br>(5.6, 28.6)   |
| 2013                  | 28.6<br>(15.4, 47.9)  | 15.7<br>(6.2, 31.6)   |
| 2014                  | 12.4<br>(4.5, 26.4)   | 14.3<br>(5.8, 28.8)   |
| 2015                  | 49.7<br>(31.3, 74)  | 56.3<br>(36.8, 81.7)  |

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## Risk Factors

Most cases (79 or 76.7%) that occurred between 2011 and 2015 were missing a risk factor in their client record. No condom use during a sexual encounter was the most commonly reported risk factor (23.3% of all cases between 2011 and 2015).