

CHLAMYDIA

Data sources:

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

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.

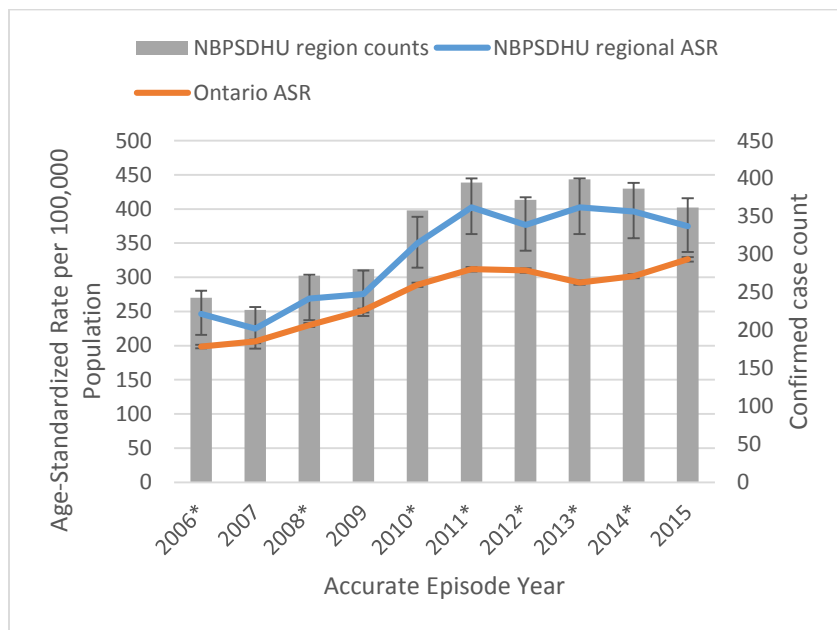
Interpretation of a significant difference:

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

In 2015, the North Bay Parry Sound District Health Unit (NBPSDHU) age-standardized rate (ASR) for chlamydia was 15% higher than the Ontario rate, but statistically similar to the Ontario rate. The age-standardized rates for both Ontario and the NBPSDHU region increased significantly between 2006 and 2011, and remained stable between 2011 and 2015.

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



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

CHLAMYDIA

Definitions:

Chlamydia case:

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

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

http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/chlamydia_cd.pdf.)

Table 1. Count and Age-Standardized Rate per 100,000 Population of Confirmed Chlamydia 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	243	246.5 (215.7, 280.2)	198.5 (195.9, 201.1)
2007	227	224.8 (195.8, 256.6)	206.0 (203.3, 208.7)
2008	272	269.0 (237.3, 303.6)	230.2 (227.4, 233.1)
2009	281	275.3 (243.4, 310.0)	251.4 (248.4, 254.3)
2010	358	350.0 (314.1, 388.7)	289.1 (286.0, 292.3)
2011	395	402.5 (363.2, 444.7)	311.8 (308.6, 315.1)
2012	372	376.6 (338.7, 417.3)	309.9 (306.7, 313.2)
2013	399	402.6 (363.4, 444.5)	292.1 (289.0, 295.3)
2014	387	396.3 (357.3, 438.1)	301.7 (298.6, 304.9)
2015	362	374.9 (336.9, 415.7)	326.4 (323.1, 329.7)

CHLAMYDIA

Sex-Specific Rates

The age-standardized rate for confirmed chlamydia cases among females was significantly higher than the rate for males in the NBPSDHU region between 2006 and 2015 (see Figure 2 & Table 2). In 2015, the rate for females was about one and a half times that of the rate for males. Since 2006, the rate of chlamydia cases among males has almost doubled (76% increase), while the rate for females has increased by about 42%.

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

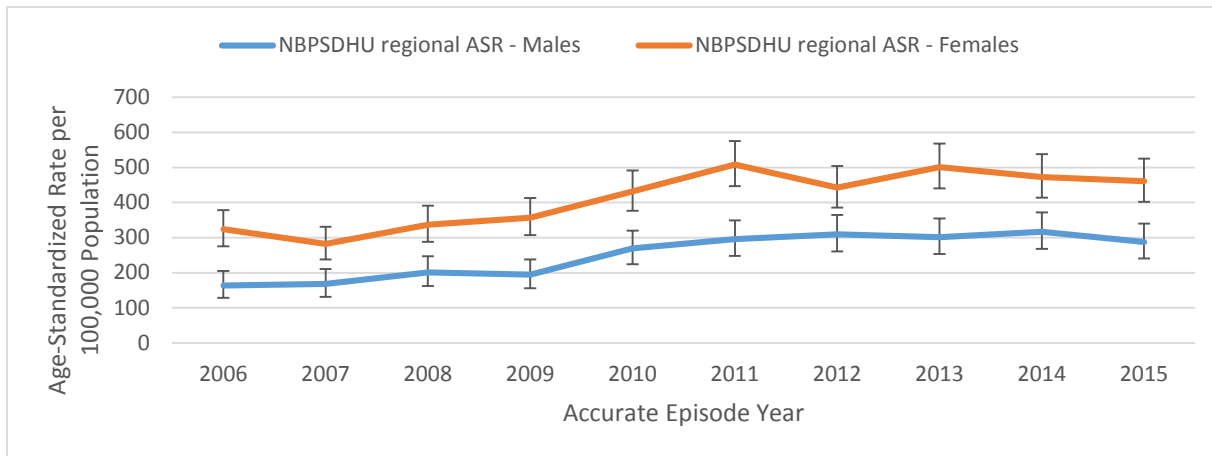


Table 2. Age-Standardized Rate per 100,000 Population of Confirmed Chlamydia Cases, by Sex, NBPSDHU Region, 2006 – 2015

Accurate episode year	NBPSDHU Regional Age-Standardized Rate among Males (95% CI)	NBPSDHU Regional Age-Standardized Rate among Females (95% CI)
2006	163.4 (128.2, 204.6)	323.9 (275.0, 378.4)
2007	168.0 (131.4, 210.7)	281.8 (237.8, 331.2)
2008	201.2 (161.9, 246.6)	336.9 (288.2, 391.1)
2009	194.3 (156.2, 238.2)	357.1 (306.8, 412.8)
2010	269.1 (224, 320.1)	431.2 (376.2, 491.6)
2011	295.6 (248, 349.1)	508.2 (446.8, 575.1)
2012	309.6 (260.4, 364.6)	442.3 (385.8, 504.2)
2013	301.1 (253.3, 354.7)	501.4 (440.7, 567.6)
2014	317.0 (267.8, 372.1)	473.1 (414.1, 537.8)
2015	287.6 (240.8, 340.3)	461.0 (402.4, 525.3)

CHLAMYDIA

Age & Sex-Specific Rates

Age-specific rates for confirmed chlamydia cases are illustrated for the population aged 15 – 54 in Figure 3 and Table 3.

In 2015, females aged between 20 and 24 years had the highest chlamydia rates in the NBPSDHU region of all sex-age group combinations. Rates were higher in females compared to males in all age groups except for the 40 to 44, and 45 to 49 year age groups. Between 2006 and 2015, rates among males aged 15 to 19, and 20 to 24 years almost doubled.

Figure 3. Age-Specific Rate per 100,000 Population of Confirmed Chlamydia Cases, by Age Group, NBPSDHU region, 2015

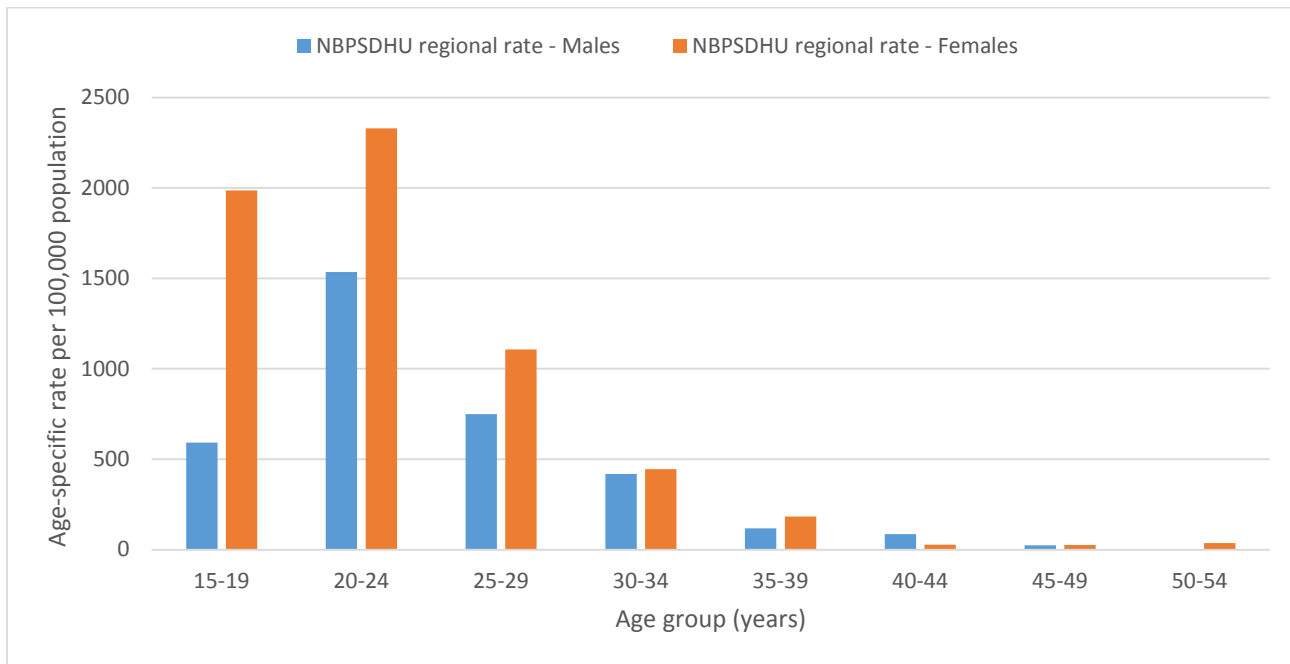


Table 3. Age-Specific Rate per 100,000 Population of Confirmed Chlamydia Cases, by Age Group, NBPSDHU region, 2015

Age Group (Years)	Age-Specific Rate among Males	Age-Specific Rate among Females
15 - 19	592.6	1,986.4
20 – 24	1,536.1	2,329.7
25 - 29	750.4	1,106.6
30 – 34	418.0	445.8
35 – 39	117.8	183.9
40 – 44	86.5	27.9
45 – 49	24.3	25.3
50 – 54	0.0	35.7

CHLAMYDIA

Risk Factors

The majority of cases confirmed with Chlamydia over the 2011-15 time period did not have a risk factor specified in their client record (see Table 4). The most common risk factor reported by chlamydia cases in the NBPSDHU region was no condom used during sexual contact.

Table 4. Count and Percentage of Confirmed Cases of Chlamydia, by Risk Factor, NBPSDHU region, 2011-2015

Risk Factors	NBPSDHU Region Count 2011-2015 (Percentage)
Missing a risk factor	1539 (80.4%)
No condom	358 (18.7%)
Sex with opposite sex	40 (2.1%)
New sexual contact in the past two months	48 (2.5%)
More than one sex contact in the last six months	36 (1.9%)