

Advancing Health Equity in Health Care

Sexually Transmitted Infections - Chlamydia

Highlights

- Chlamydia rates are unchanging over time for the general population.
- The inequality gap is very high but showing signs of decreasing over time for the general population.
- The Disparity Rate Ratio is significantly decreasing over time.
- The gap between those living in areas of highest and lowest deprivation is narrowing.
- From 2004 to 2010, 45% of chlamydia infections occurred for people living in the highest areas of deprivation, compared to 11% in the areas of lowest deprivation.
- Click [here](#) to learn more about data sources and methods.

Between January 1, 2004 and December 31, 2010 there were 6,396 chlamydia infections for Saskatoon residents. There were 2,387 infections among men and 4,009 infections among women. In the city as a whole chlamydia infections increased by 46% from 3.3 to 4.9 infections per 1000 people between 2004 and 2010 (Figure 1 and Figure 2). Figure 3 shows the disparity rate ratio and disparity rate difference for age and sex standardized chlamydia rates. The disparity rate ratio decreased by 30% from 4.2 in 2004 to 3.0 in 2010. The disparity rate difference increased by 6% from 4.9 in 2004 to 5.2 in 2010.

Figure 1: Crude Chlamydia Rate per 1000 Population by Quintile of Deprivation, Saskatoon, 2004 to 2010.

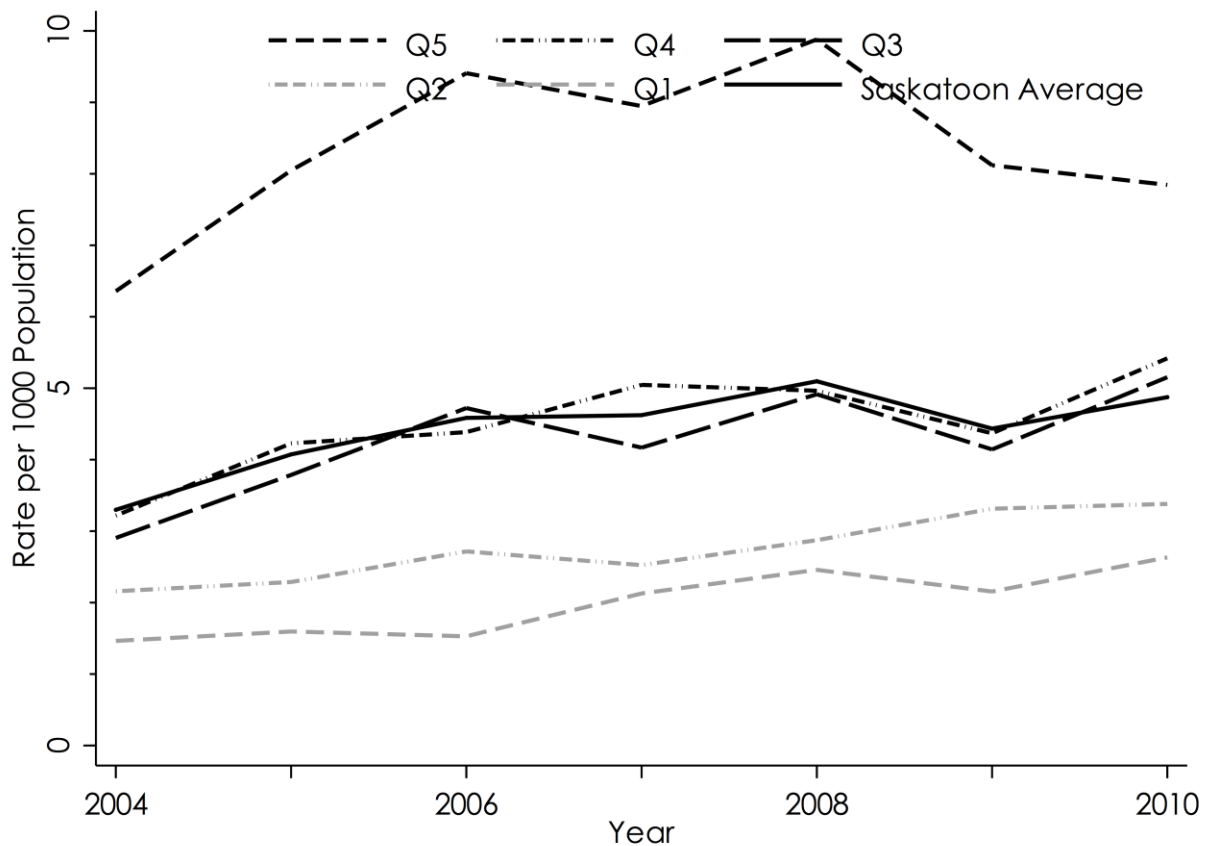
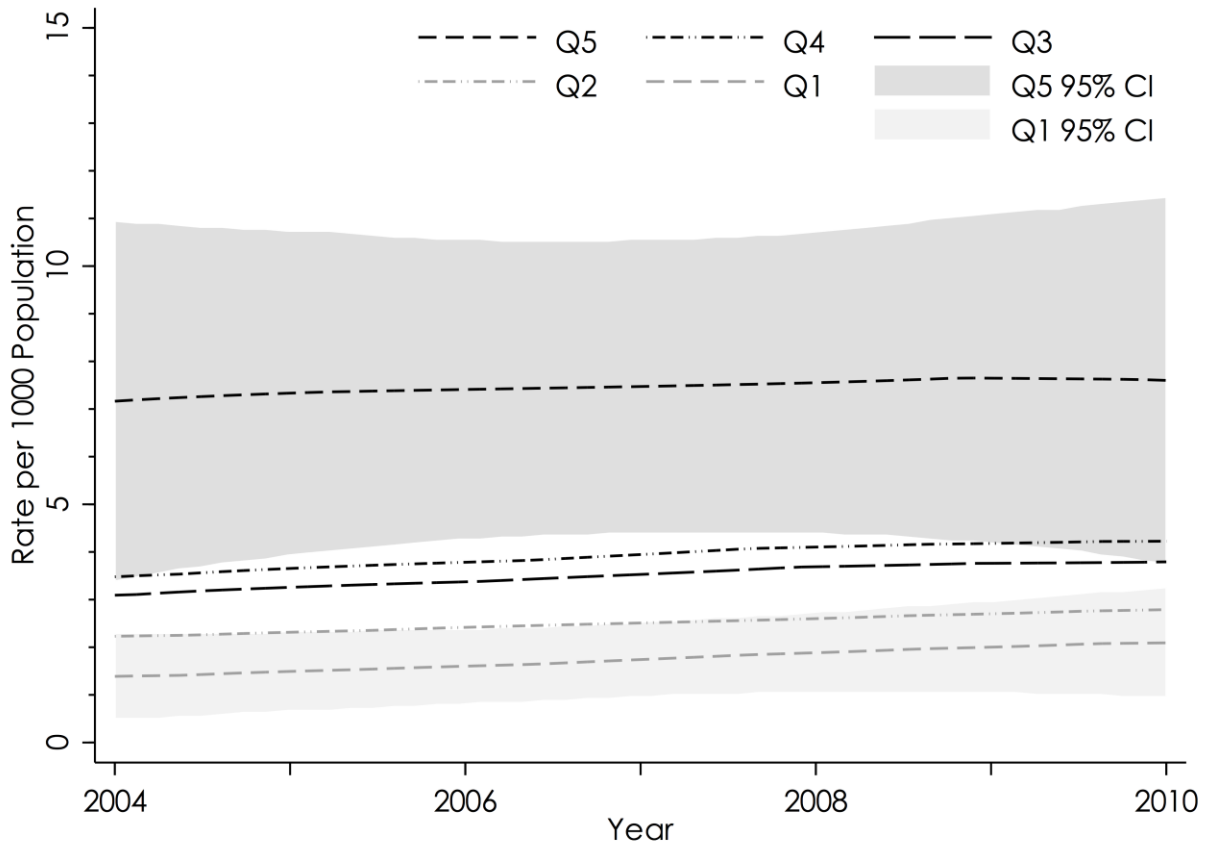
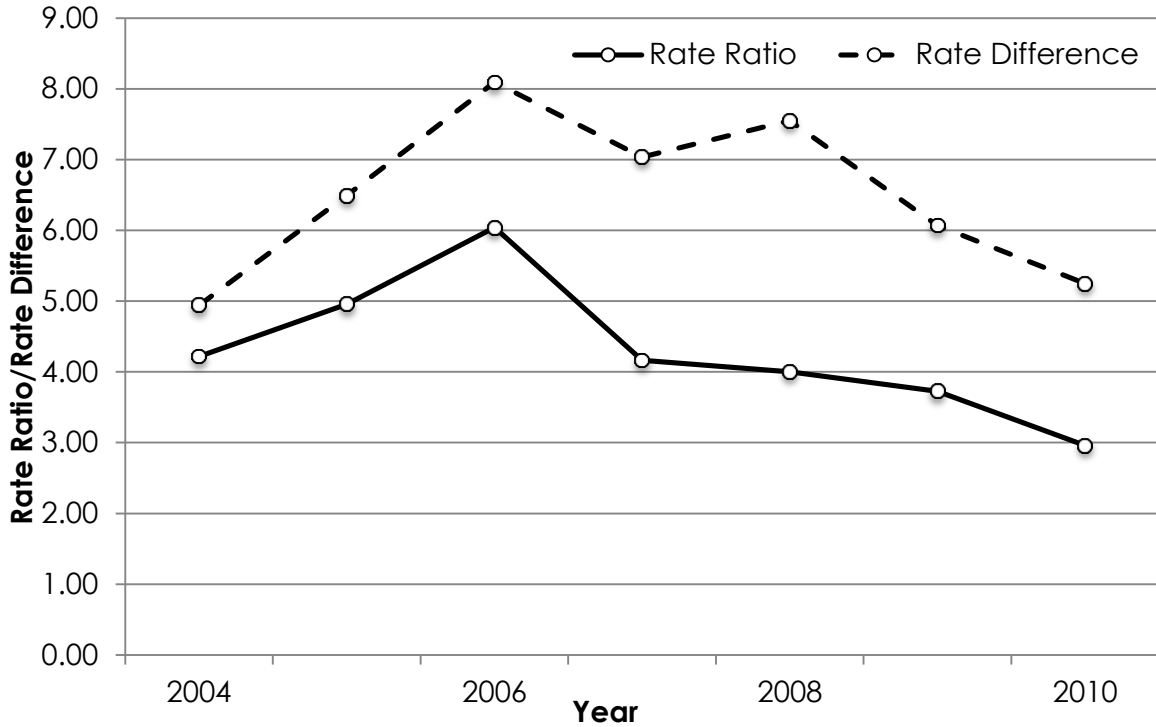


Figure 2: Adjusted Chlamydia Rate per 1000 Population by Deprivation Area, Saskatoon, 2004 to 2010.



Note: Model is a negative binomial regression and includes age, sex, year, quintile of deprivation and a year*quintile of deprivation interaction term as dependent variables. The model is offset by the log of population size and robust standard errors were estimated.

Figure 3: Age and Sex Standardized Chlamydia Rate Ratio and Rate Differences between the Highest and Lowest Quintiles of Deprivation, Saskatoon, 2004 to 2010.



The Lorenz curve for all years combined shows that 45% of the chlamydia infections occurs among residents in areas of highest deprivation, representing 23% of the total population of Saskatoon. In contrast, 11% of chlamydia infections occurs for those residing in areas of least deprivation, representing 24% of the population.

Figure 4: Age and Sex Adjusted Lorenz Curve for Chlamydia, Saskatoon, 2004 to 2010.

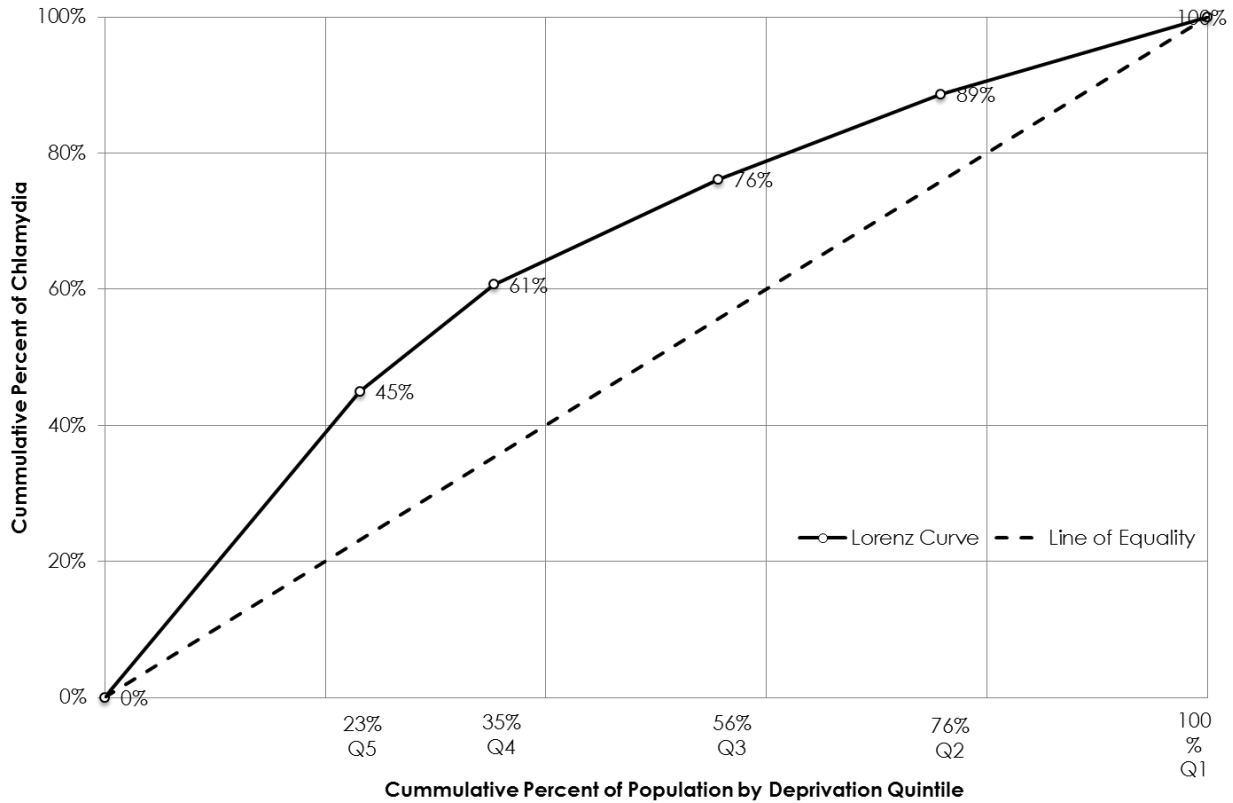


Figure 5 shows that the Gini coefficient for chlamydia infections was 0.29 (95% CI: 0.25 to 0.33) in 2004. The Gini coefficient did not change significantly between 2004 and 2010 (Gini=0.25, 95% CI: 0.20 to 0.29). The Gini coefficient ranging from 0.33 to 0.25 represents a high degree of inequality for chlamydia infections for Saskatoon residents.

Figure 5: Age and Sex Adjusted Gini Coefficients for Chlamydia, Saskatoon, 2004 to 2010.

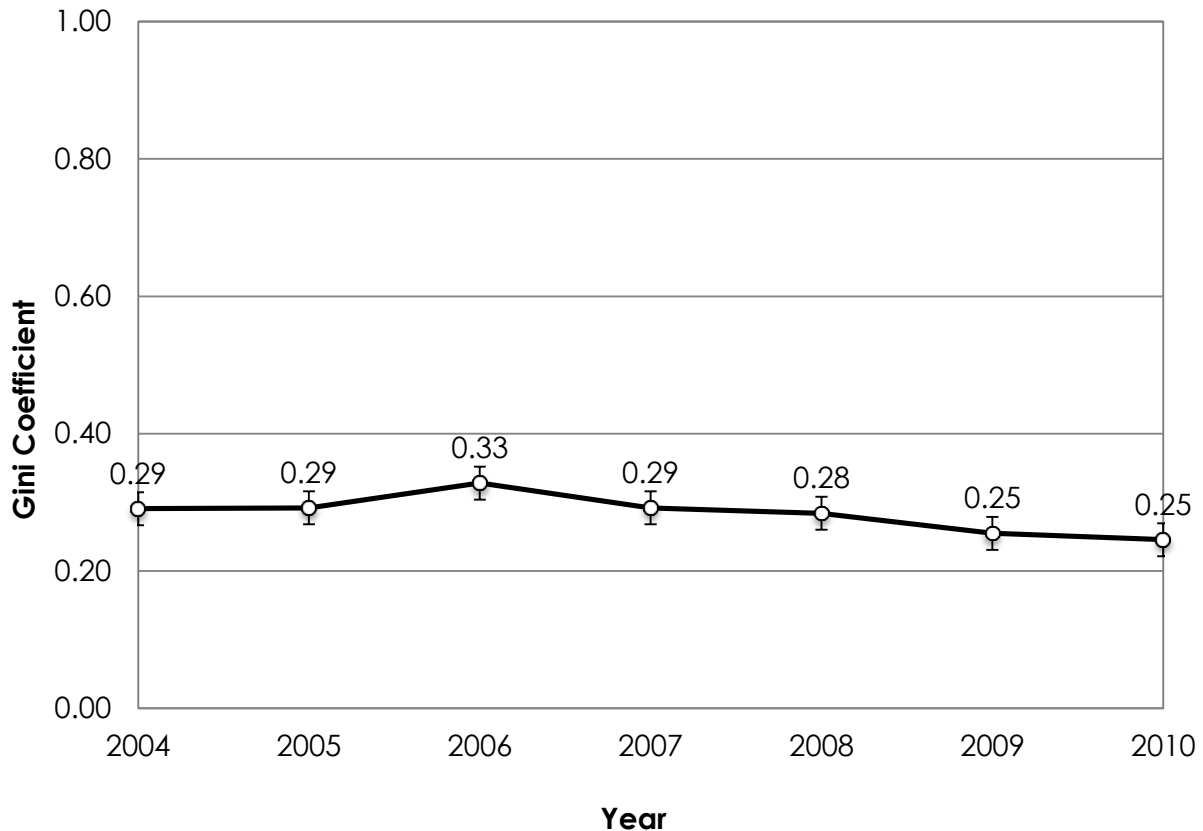


Table 1: Chlamydia Rate Ratios for Sex, Age, Quintile of Deprivation, Saskatoon, 1995 and 2011.

Chlamydia	Robust					
Rates	RR	Std. Err.	z	P>z	[95% Conf. Interval]	
Sex						
Male	1.00	-	-	-	-	-
Female	1.67	0.05	17.52	0.00	1.57	1.77
Age Category						
0 to 14	1.00	-	-	-	-	-
15 to 29	55.08	11.05	19.98	0.00	37.17	81.62
30 to 44	8.81	1.82	10.51	0.00	5.87	13.21
45 to 64	1.07	0.27	0.26	0.80	0.65	1.76
65 +	0.12	0.08	-3.33	0.00	0.04	0.42
Deprivation Quintiles						
Q5	1.00	-	-	-	-	-
Q4	0.66	0.05	-5.76	0.00	0.57	0.76
Q3	0.53	0.03	-10.15	0.00	0.47	0.60
Q2	0.51	0.06	-6.04	0.00	0.41	0.63
Q1	0.23	0.02	-15.09	0.00	0.19	0.28
Year						
2004	1.00	-	-	-	-	-
2005	1.25	0.09	3.22	0.00	1.09	1.43
2006	1.58	0.13	5.48	0.00	1.34	1.86
2007	1.45	0.11	5.06	0.00	1.26	1.67
2008	1.56	0.11	6.42	0.00	1.36	1.78
2009	1.30	0.13	2.64	0.01	1.07	1.59
2010	1.19	0.10	2.13	0.03	1.01	1.40

Note: Model is a negative binomial regression and includes age, sex, year, quintile of deprivation and a year*quintile of deprivation interaction term as dependent variables. The model is offset by the log of population size and robust standard errors were estimated.