

Advancing Health Equity in Health Care

Tuberculosis

Highlights

- Tuberculosis rates are unchanging over time for the general population.
- The inequality gap is very high and stable over time for the general population.
- From 1995 to 2011, 55% of tuberculosis cases occurred for people living in the highest areas of deprivation, compared to 10% in the areas of lowest deprivation.
- Click [here](#) to learn more about data sources and methods.

Between January 1, 1995 and December 31, 2011 there were 145 tuberculosis cases for Saskatoon residents. There were 66 cases among men and 79 cases among women. In the city as a whole tuberculosis cases increased by 492% from 0.013 to 0.064 cases per 1000 people between 1995 and 2011 (*Figure 1 and Figure 2*). As a result of no cases of tuberculosis cases among residents of the least deprived areas, the disparity rate ratios could not be calculated. The disparity rate difference increased by 763% from 0.02 in 1995 to 0.21 in 2011 (*Figure 3*).

Figure 1: Crude Tuberculosis Rate per 1000 Population by Quintile of Deprivation, Saskatoon, 1995 to 2011.

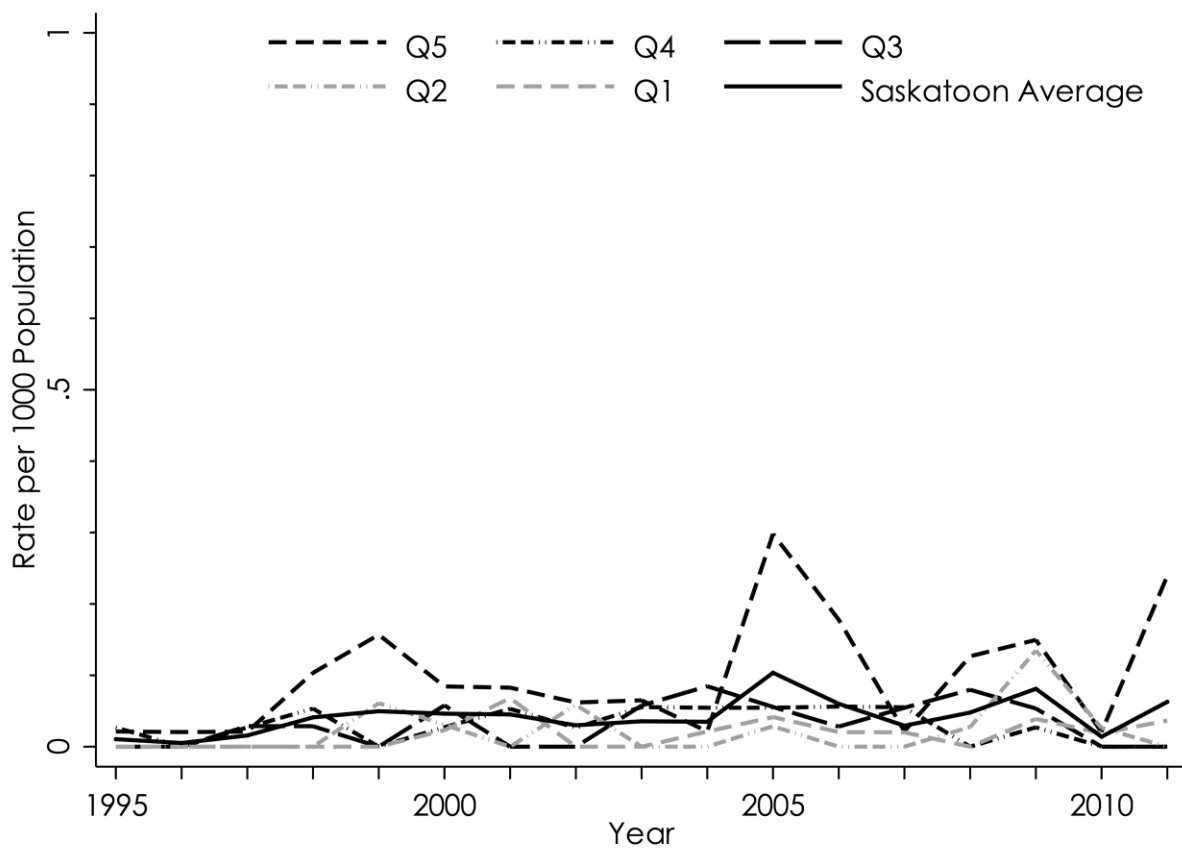
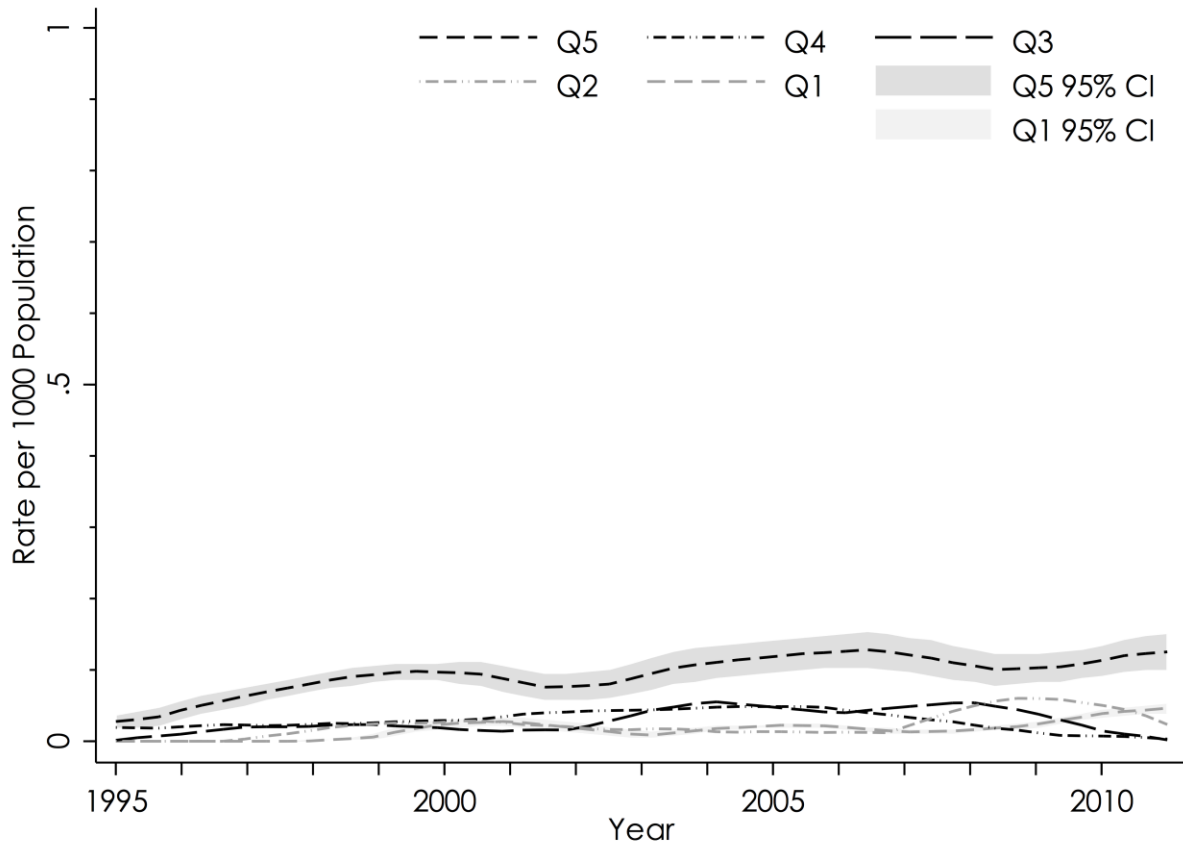
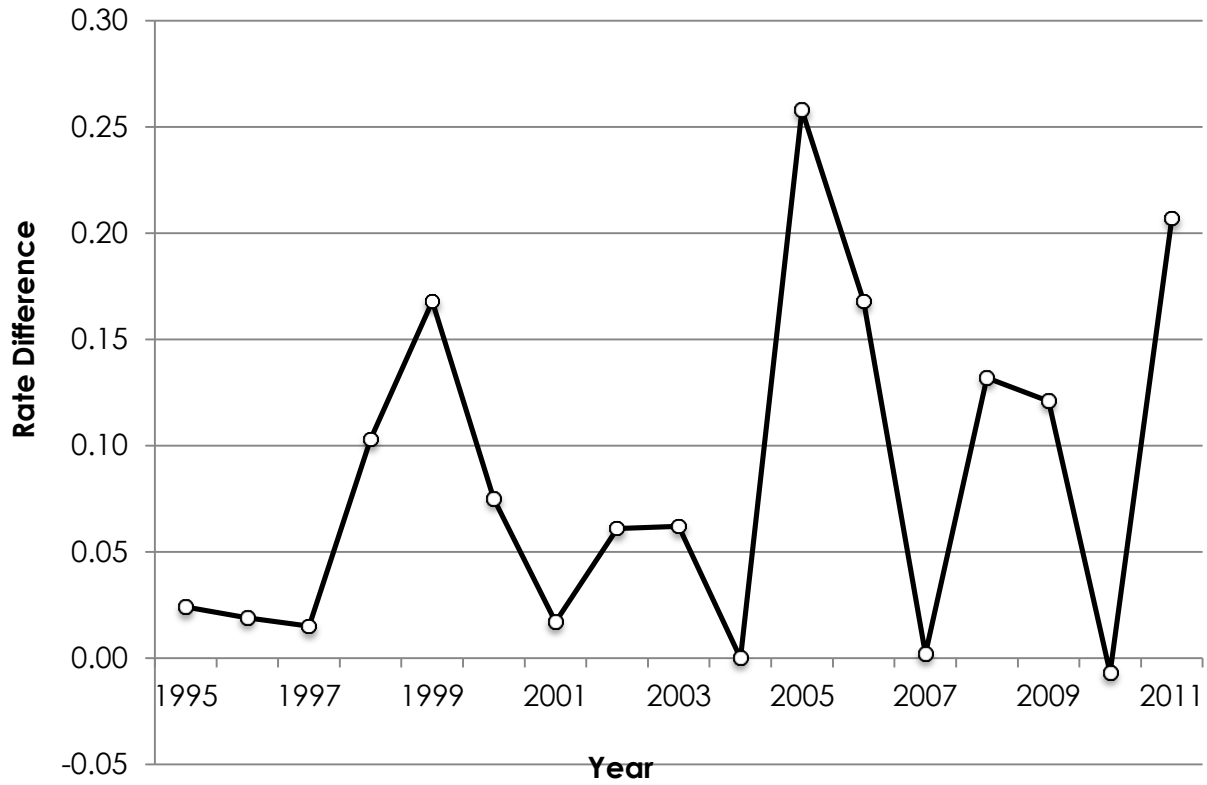


Figure 2: Adjusted Tuberculosis Rate per 1000 Population by Deprivation Area, Saskatoon, 1995 to 2011.



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 Tuberculosis Rate Ratio and Rate Differences between the Highest and Lowest Quintiles of Deprivation, Saskatoon, 2004 to 2011.



The Lorenz curve for all years combined shows that 55% of tuberculosis cases occurs among residents in areas of highest deprivation, representing 24% of the total population of Saskatoon. In contrast, 10% of tuberculosis cases occurs for those residing in areas of least deprivation, representing 23% of the population.

Figure 4: Age and Sex Adjusted Lorenz Curve for Tuberculosis, Saskatoon, 1995-2011.

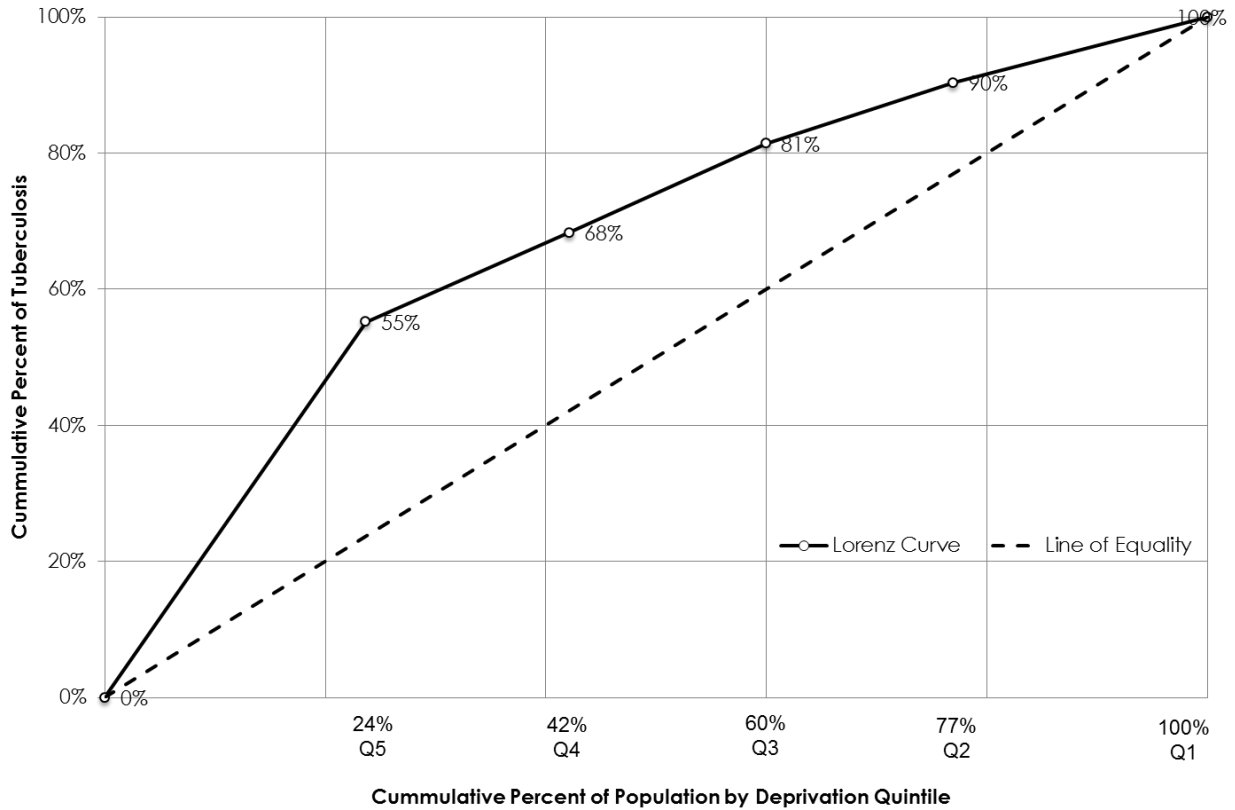


Figure 5 shows that the Gini coefficient for tuberculosis cases was 0.58 (95% CI: 0.56 to 0.61) in 1995 and was 0.56 (95% CI: 0.54 to 0.57) in 2011. A Gini coefficient ranging from 0.23 to 0.58 represents a high degree of inequality for tuberculosis cases in Saskatoon.

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

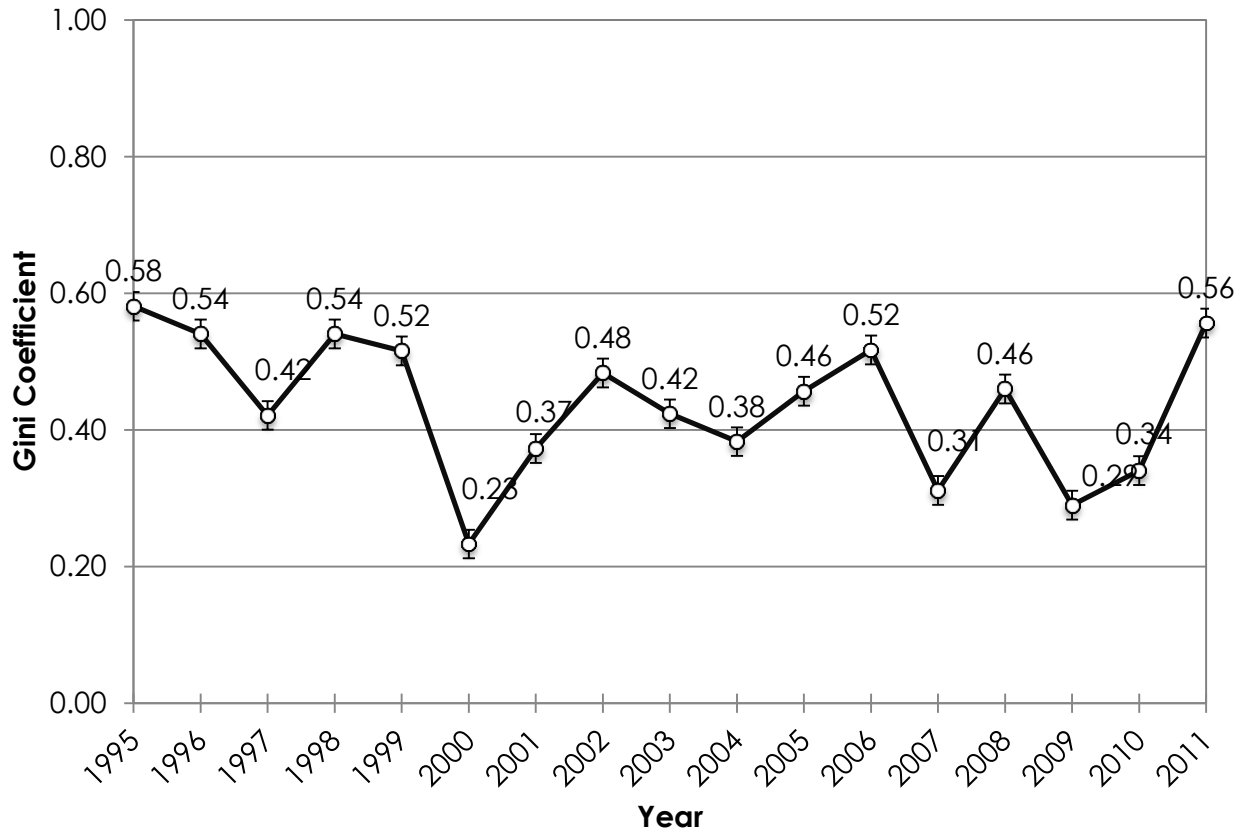


Table 1: Tuberculosis Rate Ratios for Sex, Age, Quintile of Deprivation, Saskatoon, 1995 and 2011.

Tuberculosis	Robust					
Rates	RR	Std. Err.	z	P>z	[95% Conf. Interval]	
Sex						
Male	1.00	-	-	-	-	-
Female	1.20	0.20	1.08	0.28	0.86	1.67
Age Category						
0 to 14	1.00	-	-	-	-	-
15 to 29	1.22	0.31	0.77	0.44	0.74	2.01
30 to 44	0.95	0.26	-0.17	0.87	0.56	1.63
45 to 64	1.11	0.30	0.38	0.71	0.65	1.90
65+	0.82	0.33	-0.49	0.62	0.37	1.82
Deprivation Quintiles						
Q5	1.00	-	-	-	-	-
Q4	1.53	2.13	0.31	0.76	0.10	23.50
Q3	0.00	0.00	-13.63	0.00	0.00	0.00
Q2	0.00	0.00	-15.06	0.00	0.00	0.00
Q1	0.00	0.00	-14.07	0.00	0.00	0.00
Year						
1995	1.00	-	-	-	-	-
1996	0.56	0.74	-0.44	0.66	0.04	7.50
1997	0.79	1.09	-0.17	0.86	0.05	11.86
1998	3.08	3.26	1.06	0.29	0.39	24.47
1999	6.16	6.53	1.71	0.09	0.77	49.18
2000	3.15	3.59	1.01	0.31	0.34	29.44
2001	2.64	2.92	0.88	0.38	0.30	23.06
2002	2.01	2.18	0.64	0.52	0.24	16.88
2003	1.97	2.29	0.58	0.56	0.20	19.32
2004	0.81	1.10	-0.16	0.88	0.06	11.81
2005	10.01	10.49	2.20	0.03	1.28	78.01
2006	6.43	6.59	1.82	0.07	0.86	47.91
2007	0.68	0.90	-0.29	0.77	0.05	9.23
2008	3.94	4.03	1.34	0.18	0.53	29.26
2009	4.87	5.25	1.47	0.14	0.59	40.27
2010	0.63	0.86	-0.34	0.73	0.04	9.27
2011	7.33	7.42	1.97	0.05	1.01	53.34

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.