

# Advancing Health Equity in Health Care

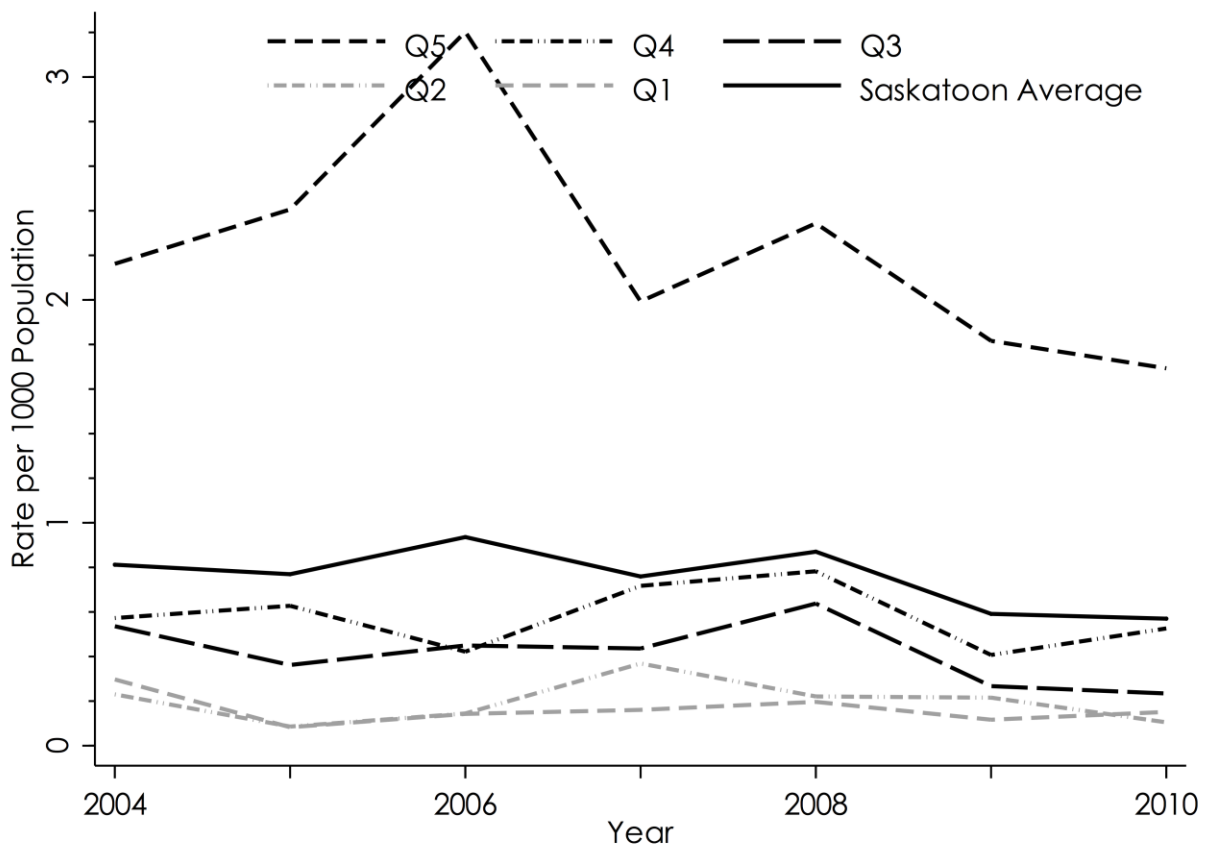
## Blood Borne Infections - Hepatitis C

### Highlights

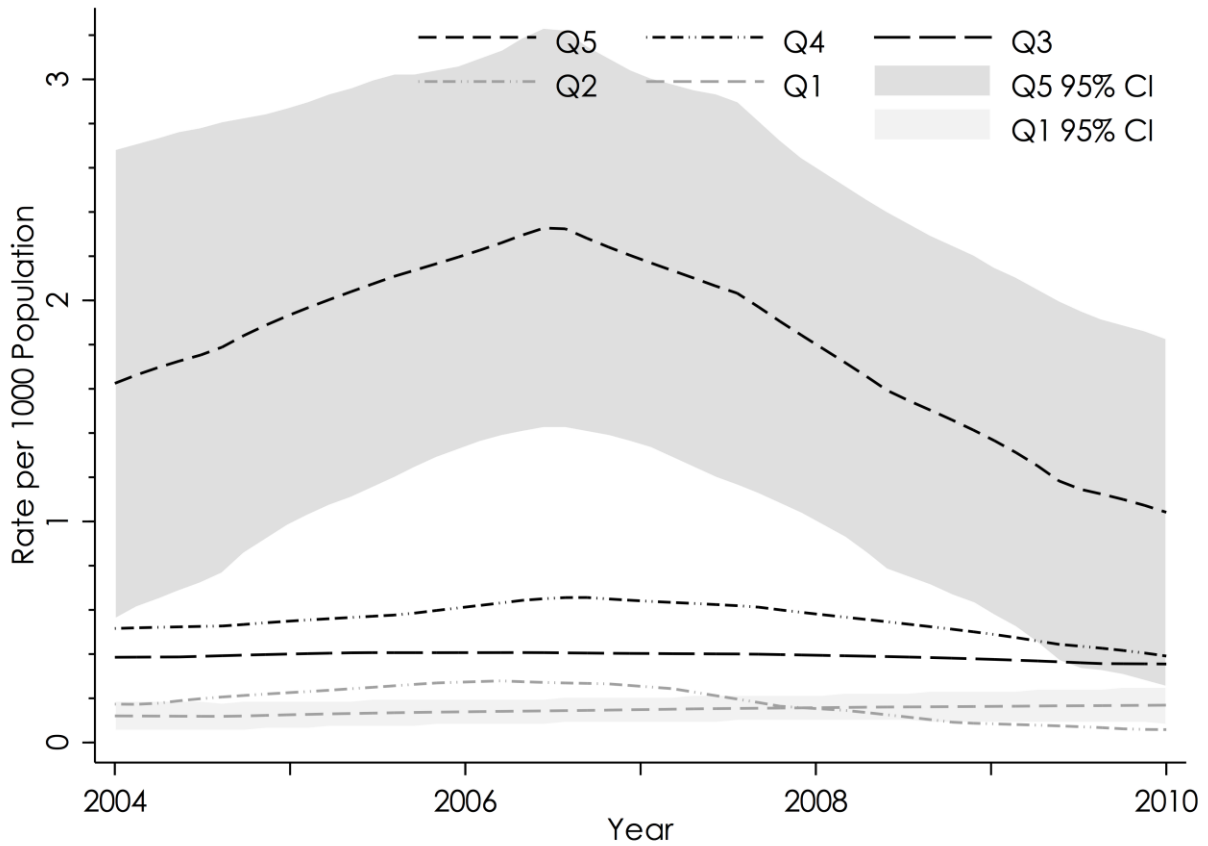
- Hepatitis C rates are decreasing over time for the general population.
- The inequality gap is very high and increasing over time for the general population.
- From 2004 to 2010, 66% of Hepatitis C cases occurred for people living in the highest areas of deprivation, compared to 5% in the areas of lowest deprivation.
- Click [here](#) to learn more about data sources and methods.

Between January 1, 2004 and December 31, 2010 there were 1,090 Hepatitis C infections among Saskatoon residents. There were 581 infections among men and 509 infections among women. In the city as a whole Hepatitis C infections decreased by 30% from 0.81 to 0.57 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 Hepatitis C rates. The disparity rate ratio increased by 42% from 7.8 in 2004 to 11.1 in 2010. The disparity rate difference decreased by 21% from 1.9 in 2004 to 1.5 in 2010.

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

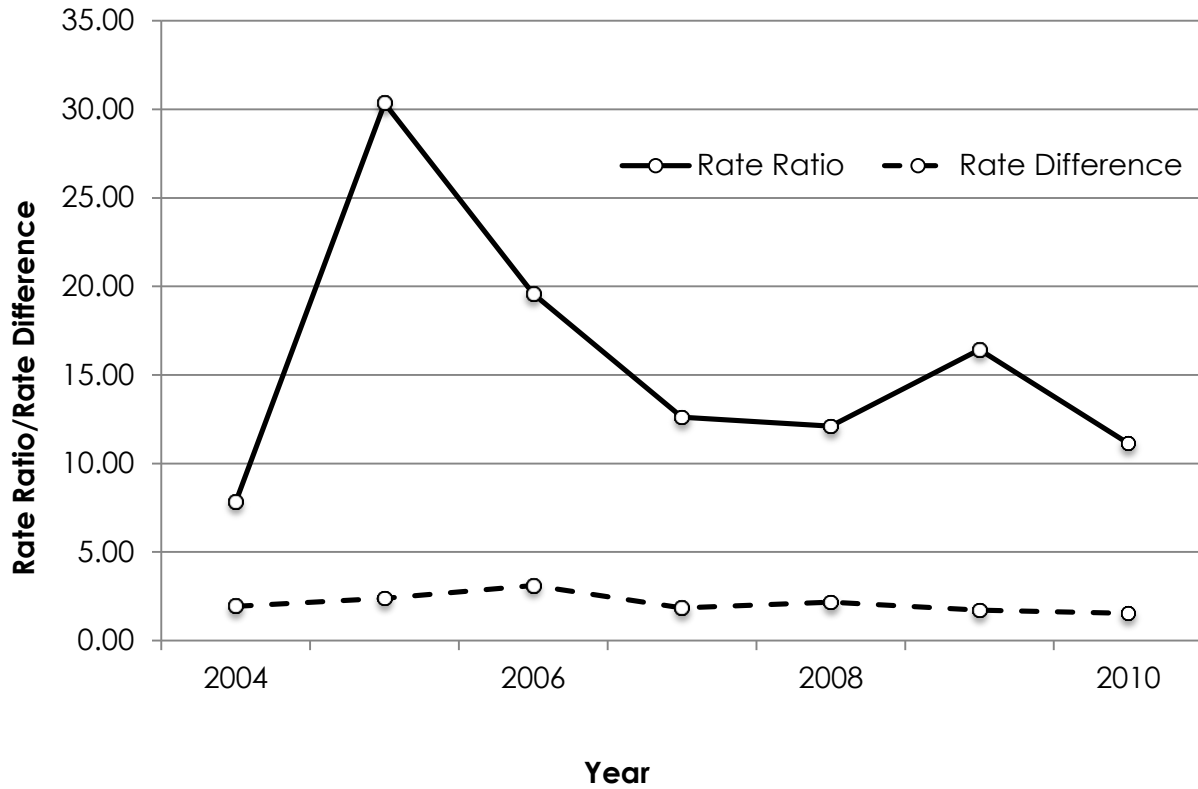


**Figure 2: Adjusted Hepatitis C Rate per 1000 Population by Deprivation Area, Saskatoon, 2004 to 2010.**



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 Hepatitis C 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 66% of the Hepatitis C infections occurs among residents in areas of highest deprivation, representing 23% of the total population of Saskatoon. In contrast, 5% of Hepatitis C infections occurs for those residing in areas of least deprivation, representing 24% of the population.

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

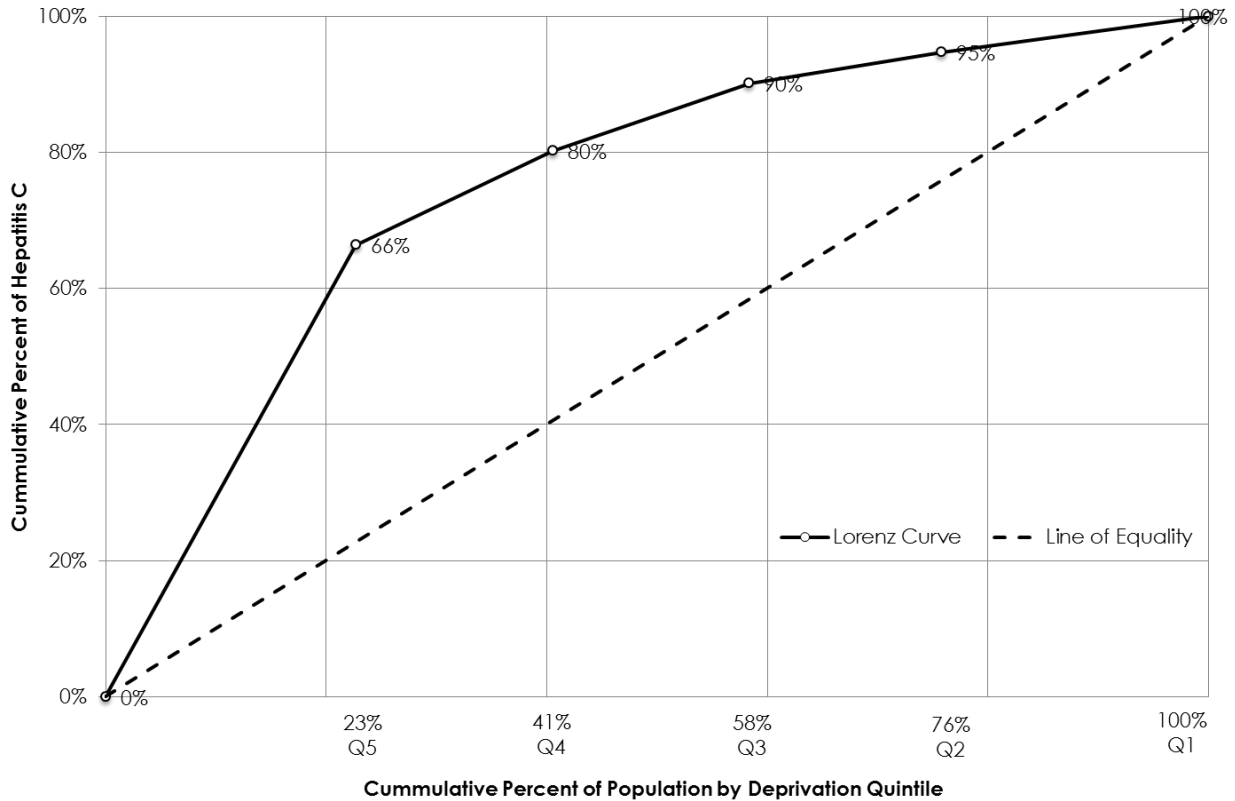
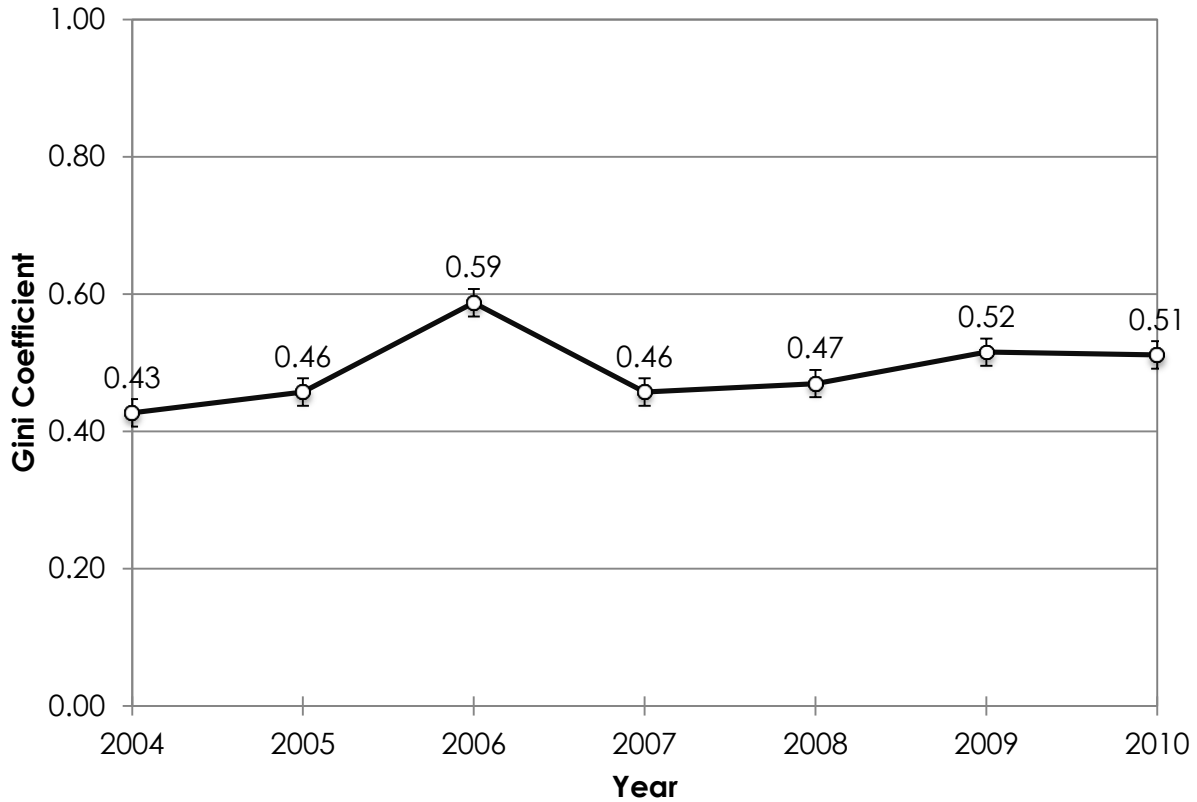


Figure 5 shows that the Gini coefficient for Hepatitis C infections was 0.43 (95% CI: 0.41 to 0.45) in 1994. The Gini coefficient increased significantly between 2004 and 2010 to 0.51 (95% CI: 0.49 to 0.53). A Gini coefficient ranging between 0.59 and 0.43 represents a high degree of inequality for Hepatitis C infections in Saskatoon.

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



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

Hepatitis C	Robust					
Rates	RR	Std. Err.	z	P>z	[95% Conf. Interval]	
<b>Sex</b>						
Male	1.00	-	-	-	-	-
Female	0.89	0.07	-1.41	0.16	0.77	1.04
<b>Age Category</b>						
0 to 14	1.00	-	-	-	-	-
15 to 29	21.76	7.67	8.73	0.00	10.90	43.43
30 to 44	27.01	9.37	9.50	0.00	13.68	53.33
45 to 64	13.61	4.86	7.31	0.00	6.76	27.40
65 +	2.27	1.16	1.60	0.11	0.83	6.20
<b>Deprivation Quintiles</b>						
Q5	1.00	-	-	-	-	-
Q4	0.34	0.08	-4.62	0.00	0.22	0.54
Q3	0.33	0.11	-3.27	0.00	0.17	0.64
Q2	0.16	0.07	-4.39	0.00	0.07	0.36
Q1	0.12	0.05	-4.69	0.00	0.05	0.30
<b>Year</b>						
2004	1.00	-	-	-	-	-
2005	1.11	0.23	0.52	0.60	0.74	1.67
2006	1.58	0.33	2.20	0.03	1.05	2.37
2007	0.94	0.23	-0.25	0.80	0.58	1.52
2008	1.07	0.23	0.32	0.75	0.71	1.62
2009	0.85	0.18	-0.80	0.42	0.56	1.27
2010	0.75	0.17	-1.26	0.21	0.47	1.18

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.