Advancing Health Equity in Health Care

Hospital Discharges for Injuries

Highlights

- Hospital discharges for injuries are unchanging over time for the general population.
- The inequality gap is high and showing signs of increasing over time for the general population.
- The Disparity Rate Ratio is significantly increasing over time.
- The gap between those living in areas of highest and lowest deprivation is widening.
- From 1995 to 2011, 37% of injury hospital discharges occurred for people living in the highest areas of deprivation, compared to 15% 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 24,536 injury hospital discharges for Saskatoon residents. There were 12,758 cases among men and 11,778 cases among women. In the city as a whole injury hospital discharges decreased by 16% from 6.9 to 5.8 per 1000 people between 1995 and 2011 *(Figure 1 and Figure 2)*. *Figure 3* shows the disparity rate ratio and disparity rate difference for age and sex standardized injury rates. The disparity rate ratio increased by 29% from 1.8 in 1995 to 2.4 in 2011. The disparity rate difference increase by 18% from 4.4 in 1995 to 5.1 in 2011.

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

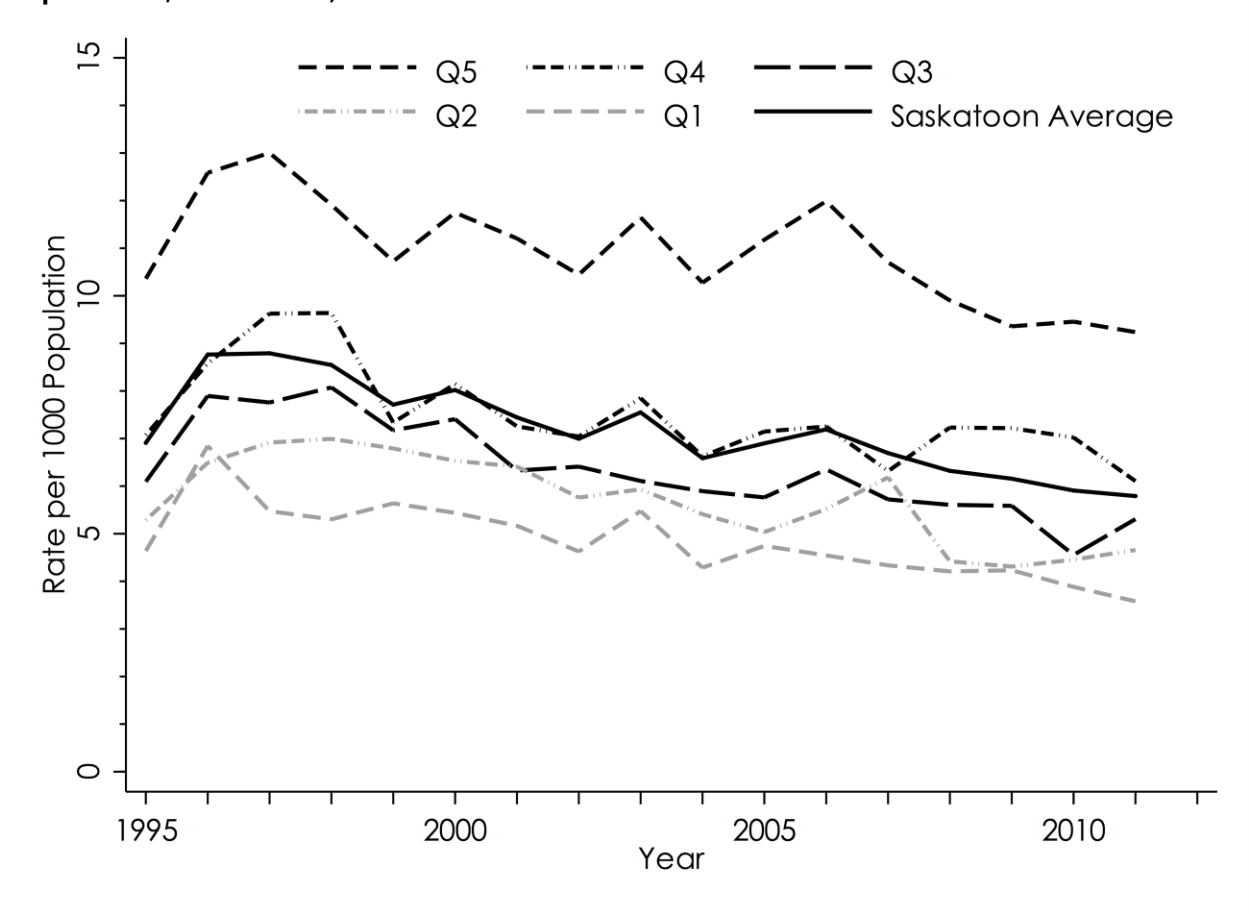
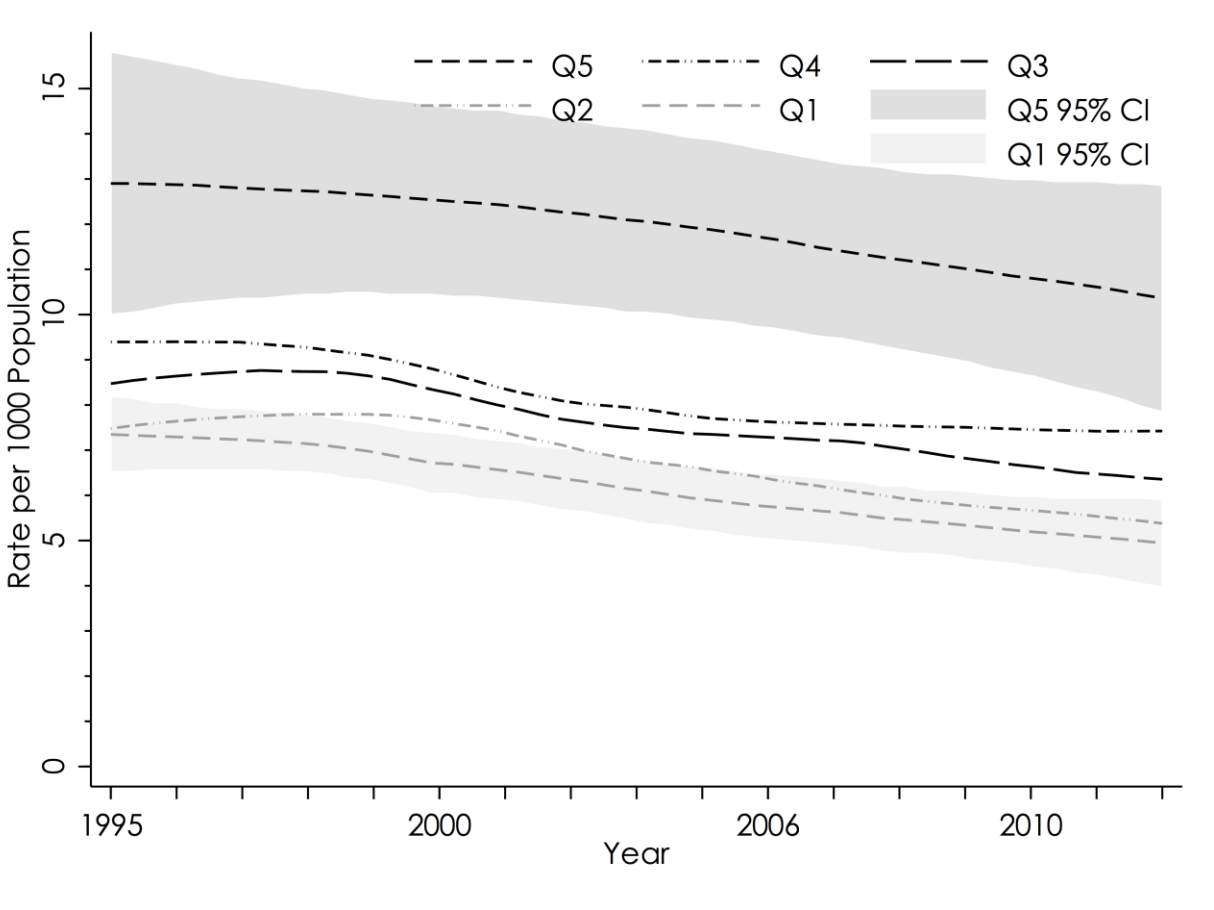
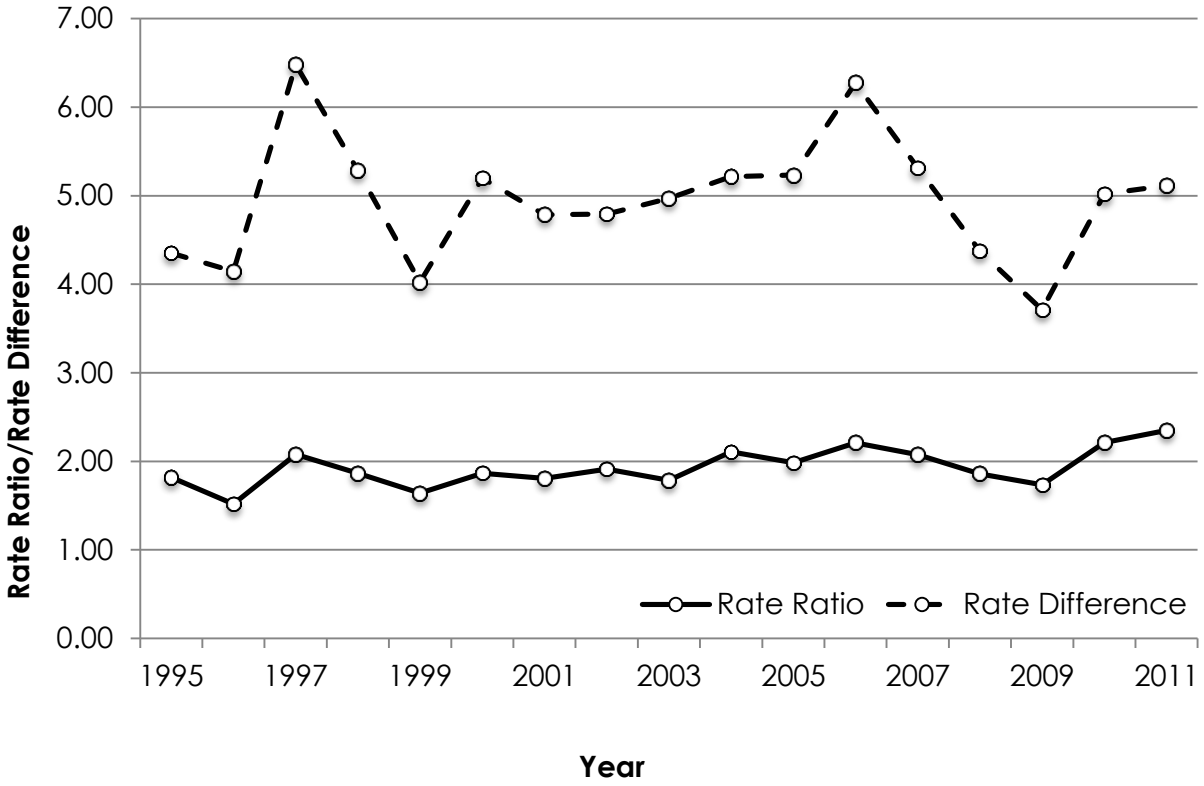


Figure 2: Adjusted Injury Hospital Discharge Rate per 1000 Population by Deprivation Area, Saskatoon, 1995 to 2011.



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 Injury Hospital Discharge Rate Ratio and Rate Differences between the Highest and Lowest Quintiles of Deprivation, Saskatoon, 1995 to 2011.



pho@saskatoonhealthregion.ca | 306.655.4679

The Lorenz curve for all years combined shows that 37% of the injury hospital discharges occurs among residents in areas of highest deprivation, representing 24% of the total population of Saskatoon. In contrast, 15% of injury hospital discharges occurs for those residing in areas of least deprivation, representing 23% of the population.

Figure 4: Age and Sex Adjusted Lorenz Curve for Injury Hospital Discharges, Saskatoon, 1995 to 2011.

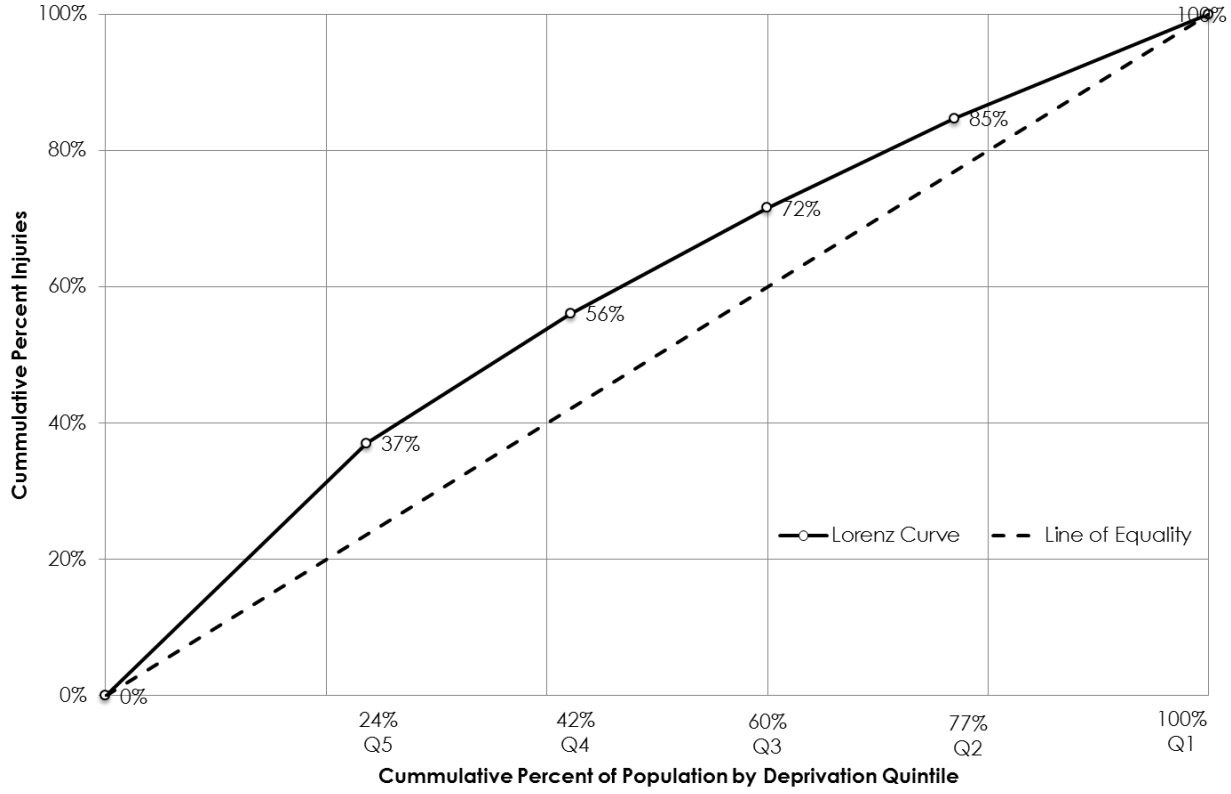


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Figure 5 shows that the Gini coefficient for injury hospital discharges was 0.17 (95% CI: 0.16 to 0.19) in 1995. Between 1995 and 2011 there was a small non statistically significant increase of the Gini coefficient to 0.20 (95% CI: 0.18 to 0.22). The Gini coefficient of ranging from 0.21 to 0.13 between 1995 and 2011 represents a moderate degree of inequality for injury hospital discharges in Saskatoon.

Figure 5: Age and Sex Adjusted Gini Coefficients for Injury Hospital Discharges, Saskatoon, 1995 to 2011.

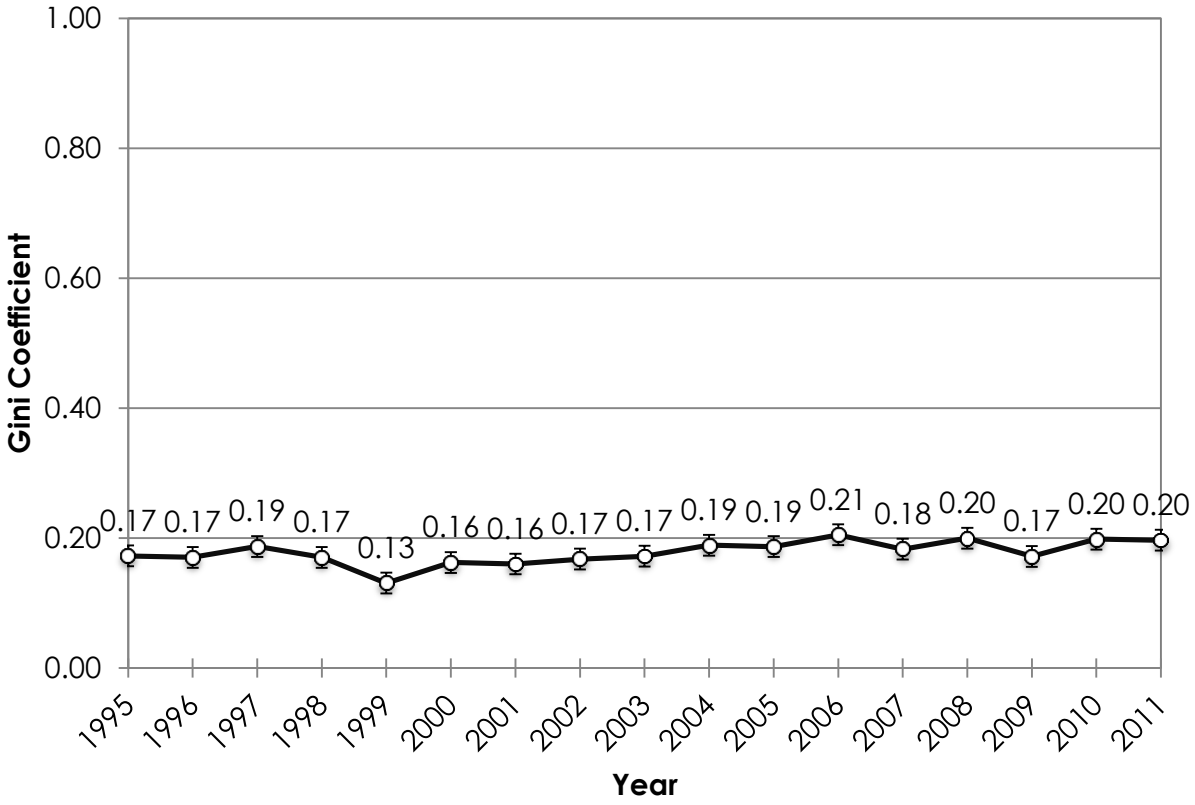

Table 1: Injury Hospital Discharge Rate Ratios for Sex, Age, Quintile of Deprivation, Saskatoon, 1995 and 2011.

Injury Rates	RR	Robust Std. Err.	z	P>z	[95% Conf.	Interval]
Sex						
Male	1.00	-	-	-	-	-
Female	0.74	0.02	-11.34	0.00	0.71	0.78
Age Category						
0 to 14	1.00	-	-	-	-	-
15 to 29	1.21	0.04	5.87	0.00	1.13	1.28
30 to 44	1.08	0.04	2.04	0.04	1.00	1.16
45 to 64	1.43	0.05	10.63	0.00	1.34	1.52
65+	7.68	0.26	59.68	0.00	7.19	8.22
Deprivation Quintiles						
Q5	1.00	-	-	-	-	-
Q4	0.94	0.16	-0.34	0.74	0.67	1.32
Q3	1.04	0.18	0.26	0.80	0.75	1.46
Q2	1.01	0.18	0.05	0.96	0.72	1.42
Q1	0.89	0.21	-0.51	0.61	0.56	1.40
Year						
1995	1.00	-	-	-	-	-
1996	1.19	0.27	0.77	0.44	0.76	1.87
1997	1.25	0.28	1.00	0.32	0.80	1.95
1998	1.13	0.25	0.55	0.58	0.73	1.75
1999	1.01	0.20	0.03	0.98	0.69	1.47
2000	1.14	0.22	0.65	0.52	0.77	1.67
2001	1.06	0.21	0.29	0.77	0.72	1.56
2002	0.99	0.20	-0.03	0.98	0.67	1.47
2003	1.14	0.25	0.62	0.53	0.75	1.75
2004	1.00	0.22	-0.01	0.99	0.65	1.53
2005	1.05	0.19	0.29	0.78	0.74	1.49
2006	1.16	0.24	0.74	0.46	0.78	1.73
2007	1.01	0.20	0.06	0.95	0.69	1.49
2008	0.91	0.17	-0.47	0.64	0.63	1.33
2009	0.86	0.14	-0.91	0.37	0.62	1.19
2010	0.86	0.16	-0.83	0.41	0.60	1.23
2011	0.81	0.15	-1.13	0.26	0.57	1.16

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.