1.6 The Graphs: Order of Regions and Sub-Areas

In this report, the health regions and their sub–areas are shown in a particular order, which is consistent throughout the report and similar to other MCHP reports. This order is based on the overall health status of the population of each area as measured by the **premature mortality rate**. A death before the age of 75 years is considered premature, so the premature mortality rate (PMR) reflects how many residents of that area died before reaching the age of 75 (per 1,000 area residents under 75). Because some districts have small populations, ten years of data (2001–2010) were used to ensure reliable estimates. Like most other indicators in this report, the PMR data were adjusted to account for the age and sex composition of each area's population.

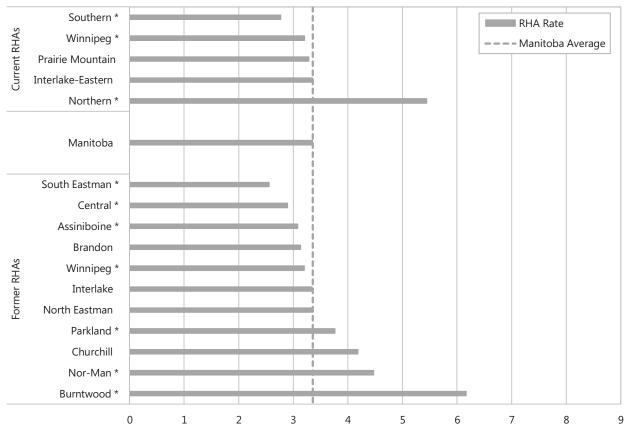
The premature mortality rate is considered the best single indicator of the overall health status of a region's population and need for healthcare (Carstairs & Morris, 1991; Eyles & Birch, 1993; Eyles, Birch, Chambers, Hurley, & Hutchison, 1991). PMR is correlated with morbidity and with self–rated health, as well as with socioeconomic indicators (Martens, Frohlich, Carriere, Derksen, & Brownell, 2002a). Populations having a high PMR are presumed to need more healthcare services than healthier populations.

PMR values for the regions are shown in Figure 1.6.1, the districts in Figure 1.6.2, and the Winnipeg NCs in Figure 1.6.3. In Figure 1.6.1, the region with the lowest PMR (that is, the best overall health status) is shown at the top of the graph (Southern), and the other regions follow in order of increasing PMR ending with Northern, which has the highest PMR (poorest overall health status). Below that is the overall average for Manitoba, and dashed lines are drawn vertically to allow easy comparison of the provincial average to each area's rate for each time period. Results for the 11 former RHAs, also ranked by PMR, are shown below the Manitoba average.

In the district–level graphs, the same order of the new regions is maintained, and the districts within each region are ordered according to PMR. That is, within each region, the district with the lowest PMR (the best overall health status) is listed first, with the others listed below it in order of increasing PMR. Results for the zones within each region are provided in the Excel files available on the MCHP website.

For the Winnipeg sub–areas, a similar process was used: the 25 NCs are ranked by PMR within their CAs, as shown in Figure 1.6.3.

Figure 1.6.1: Premature Mortality Rate by RHA, 2001–2010



- * indicates area's rate was statistically different from Manitoba average
- s indicates data suppressed due to small numbers

Figure 1.6.2: Premature Mortality Rate by District, 2001–2010

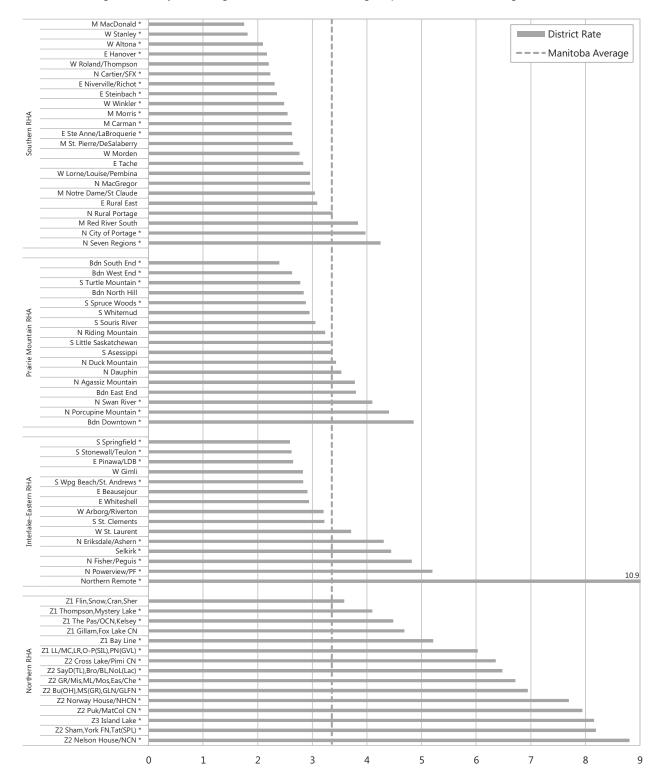
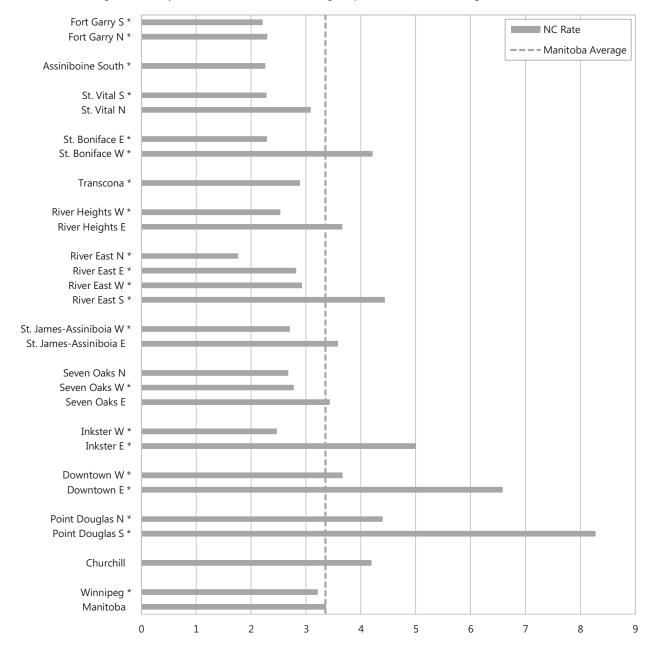


Figure 1.6.3: Premature Mortality Rate by Winnipeg NC, 2001–2010



3.3 Premature Mortality Rates (PMR)

Definition: the number of deaths among residents under 75 years old per 1,000 residents under 75 years old, per year. Average annual rates were calculated for two 5–year periods: 2002–2006 and 2007–2011, and were age– and sex–adjusted to the Manitoba population under 75 years old in the first time period. (See Chapter 1 for a more thorough discussion of the meaning and interpretation of PMR.)

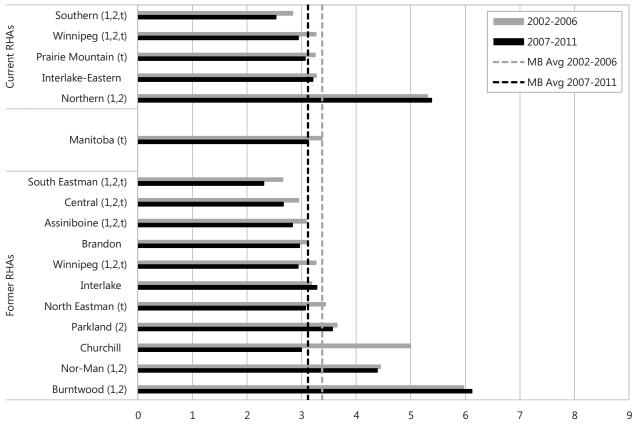
Key Findings

- PMR in Manitoba decreased over time from 3.38 to 3.12 deaths per 1,000 residents aged 0 to 74 per year. This decrease in this sentinel indicator reflects a significant improvement in population health.
- Among regions, the rates for Southern, Winnipeg, and Prairie Mountain decreased significantly, while those for Northern and Interlake–Eastern were stable.
- In both time periods, Southern and Winnipeg had rates below the provincial average, while Northern had higher than average rates.
- As was seen with total mortality rates, these results suggest a widening of the health status gap in Manitoba: PMR decreased in the healthiest regions and did not change in the least healthy regions.
- Among districts, there was more variation in PMR than total morality rates, consistent with the idea that PMR may be a better indicator of population health status than total mortality.
- The Northern Remote district of Interlake–Eastern and several districts in Northern region had particularly high PMR, approximately three times the provincial average. Unlike the provincial average, these rates were not decreasing over time, suggesting that the gap is growing over time.
- There was also large variation across Winnipeg NCs, but a less consistent pattern of change over time. Some of the healthiest areas had further decreases, while others were unchanged. The least healthy NC, Point Douglas South, had a higher rate in the second time period; this increase was not statistically significant. The rate in Churchill decreased; this decrease was not statistically significant because the population and number of deaths involved were small.
- There were strong relationships between income and PMR in urban and rural areas in both time periods: PMR were higher among residents of lower income areas (Appendix 2). There was greater disparity within urban areas than within rural areas, and the gap widened over time for both.

Comparison to Other Findings

• These results are consistent with and extend the trend of decreasing PMR shown in the 2009 and 2003 Atlas reports (Fransoo et al., 2009; Martens et al., 2003), suggesting that the health status of Manitobans overall continues to improve gradually. However, as noted above, there are some areas where rates are not decreasing, so the health gap in Manitoba continues to grow over time.

Figure 3.3.1: Premature Mortality Rate by RHA, 2002–2006 and 2007–2011



- 1 indicates area's rate was statistically different from Manitoba average in first time period
- 2 indicates area's rate was statistically different from Manitoba average in second time period
- $t \quad \ \ indicates \ change \ over \ time \ was \ statistically \ significant \ for \ that \ area$
- s indicates data suppressed due to small numbers

Figure 3.3.2: Premature Mortality Rate by District, 2002–2006 and 2007–2011

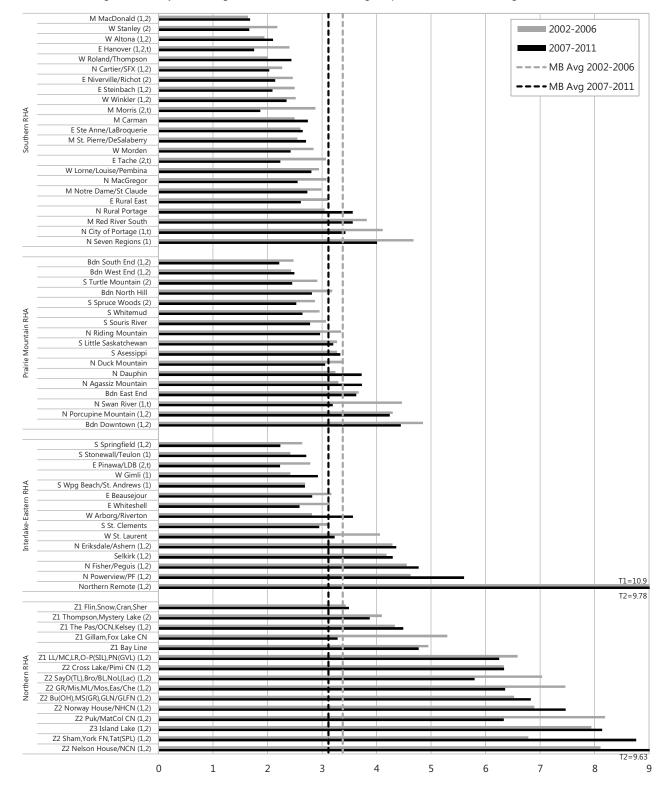
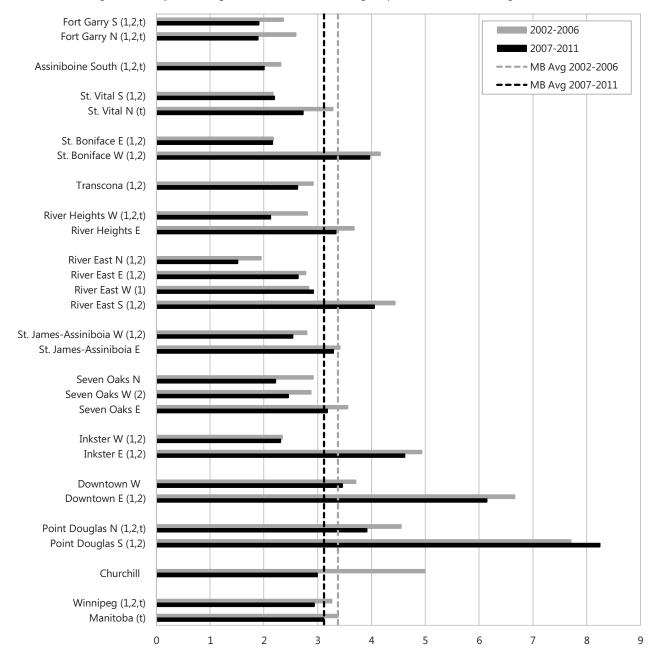


Figure 3.3.3: Premature Mortality Rate by Winnipeg NC, 2002–2006 and 2007–2011



Appendix Table 2.1: Premature Mortality Rate, 2001-2010 Among Residents Younger than 75

	Number			Number	
Regional Health	observed	CRUDE rate	Winnipeg	observed	CRUDE rate
Authority	per year	per 1,000	Neignbournood	per year	per 1,000
	2001	2001-2010	Cluster	2001	2001-2010
Current RHAs			Fort Garry S	74.5	2.14
Southern	394	2.56	Fort Garry N	63.5	2.29
Winnipeg	1,997	3.20	Assiniboine South	85.6	2.52
Prairie Mountain	538	3.70	St. Vital S	72.1	2.14
Interlake-Eastern	418	3.80	St. Vital N	84.4	3.47
Northern	257	3.69	St. Boniface E	80.5	2.34
Manitoba	3,708	3.36	St. Boniface W	9.09	4.44
Former RHAs			Transcona	87.4	2.73
South Eastman	133	2.26	River Heights W	84.8	2.65
Central	262	2.74	River Heights E	70.0	3.75
Assiniboine	230	3.72	River East N	17.6	1.82
Brandon	140	3.05	River East E	7.07	2.62
Winnipeg	1,993	3.20	River East W	121	3.58
Interlake	274	3.82	River East S	62.7	3.71
North Eastman	144	3.77	St. James-Assiniboia W	102	3.44
Parkland	168	4.45	St. James-Assiniboia E	94.1	3.98
Churchill	3.30	3.46	Seven Oaks N	11.9	2.89
Nor-Man	88.7	3.74	Seven Oaks W	26.7	2.57
Burntwood	168	3.66	Seven Oaks E	116	3.74
			Inkster W	34.0	1.95
			Inkster E	57.4	4.24
blank cells = suppressed	pass		Downtown W	112	3.09
			Downtown E	182	5.57
			Point Douglas N	97.8	3.83
			Point Douglas S	94.6	9/.9
			Churchill	3.30	3.46