

Definition/Description:

The literature suggests that Premature Mortality Rate (PMR) is the best single indicator of health status. Higher rates of premature mortality have been associated with higher need for health-care resources and other measures of health status (e.g., self-reported measures of health status and rates of self-reported acute illness). However, one limitation of PMR is that it is difficult to interpret. It might be helpful to remember that a higher PMR value is associated with a lower level of health status.

PMR is a ratio based on the annual number of deaths per population of individuals who are less than 75 years of age. For health regions in Manitoba, the expected length of life has been arbitrarily defined as 75 years of age for both sexes. Therefore, PMR is calculated by the number of deaths occurring before the age of 75, divided by the number of individuals in the population who are younger than 75 years of age, over a specified period of time. The PMR is generated to focus on potentially-preventable deaths.

Source:

The death data used in this report was obtained from Vital Statistics Agency, Consumer and Corporate Affairs, Manitoba Finance and Manitoba Bureau of Statistics, Government of Manitoba. All numerical values, tables, and figures (including spatial analyses) were generated by the Population Health and Health System Analysis Unit, Winnipeg Regional Health Authority.

For further information, a comprehensive Mortality Report, Winnipeg Regional Health Authority, 2004, can be found at

<http://www.wrha.mb.ca/howcare/decsup/files/population/WRHAMortalityReport2004.pdf>

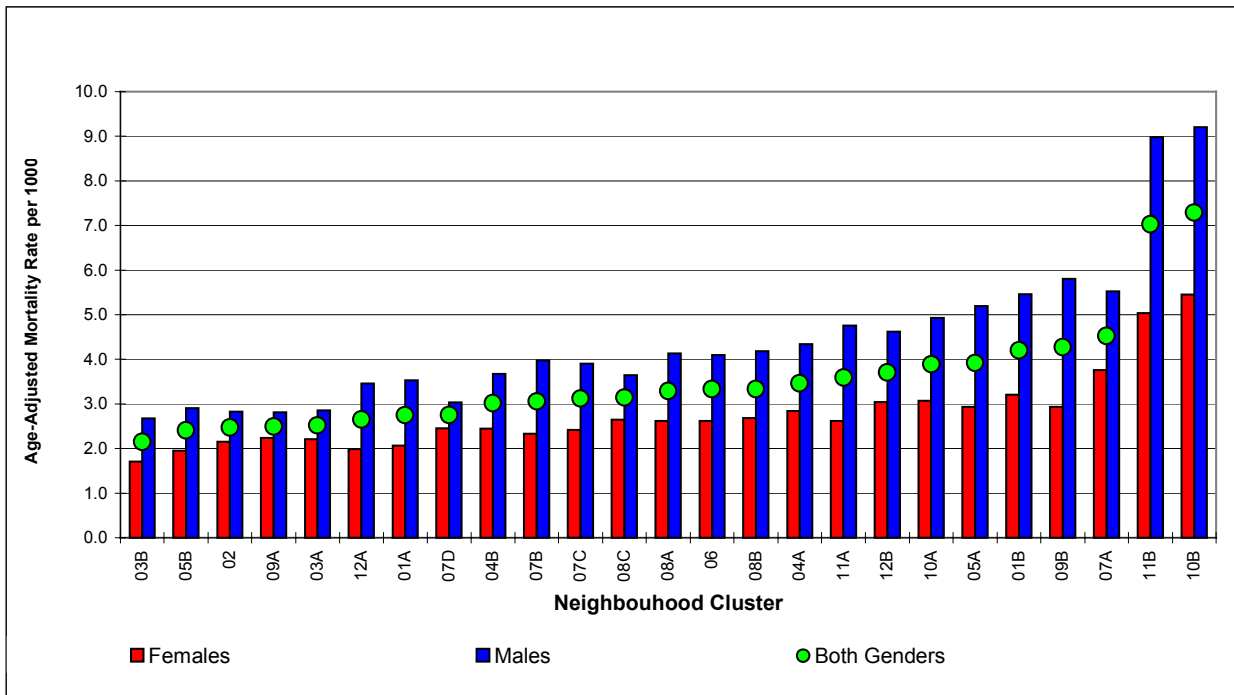
Findings:**Premature Mortality Rates in the Winnipeg Health Region by Neighbourhood Cluster and Sex, 1995-1999**

Community Area	Neighbourhood Cluster	Both Sexes			Females			Males		
		Deaths	Crude Rate per 1000	Age-Adjusted Rate per 1000	Deaths	Crude Rate per 1000	Age-Adjusted Rate per 1000	Deaths	Crude Rate per 1000	Age-Adjusted Rate per 1000
St. James-Assiniboia	01A	503	3.2	2.7	201	2.5	2.1	302	3.9	3.5
	01B	653	5.4	4.2	269	4.3	3.2	384	6.5	5.5
Assiniboine South	002	399	2.3	2.5	182	2.1	2.2	217	2.6	2.8
Fort Garry	03A	303	2.5	2.5	143	2.3	2.2	160	2.7	2.9
	03B	297	1.8	2.1	125	1.5	1.7	172	2.1	2.7
St. Vital	04A	509	4.1	3.5	222	3.4	2.8	287	4.7	4.3
	04B	361	2.3	3.0	154	1.9	2.4	207	2.7	3.7
St. Boniface	05A	310	4.5	3.9	134	3.8	2.9	176	5.2	5.2
	05B	342	2.4	2.4	143	2.0	2.0	199	2.8	2.9
Transcona	006	433	2.9	3.3	177	2.4	2.6	256	3.4	4.1
River East	07A	348	4.1	4.5	152	3.6	3.8	196	4.6	5.5
	07B	699	4.0	3.1	304	3.3	2.3	395	4.7	4.0
	07C	327	2.5	3.1	134	2.0	2.4	193	2.9	3.9
	07D	70	2.4	2.8	28	1.9	2.5	42	2.8	3.0
Seven Oaks	08A	239	2.4	3.3	103	2.0	2.6	136	2.7	4.1
	08B	602	4.0	3.3	264	3.4	2.7	338	4.7	4.2
	08C	60	3.4	3.1	25	2.8	2.6	35	3.9	3.6
Inkster	09A	140	1.6	2.5	66	1.5	2.2	74	1.7	2.8
	09B	268	4.2	4.3	101	3.2	2.9	167	5.3	5.8
Point Douglas	10A	489	4.0	3.9	212	3.4	3.1	277	4.5	4.9
	10B	432	6.6	7.3	162	5.3	5.5	270	7.7	9.2
Downtown	11A	583	3.2	3.6	228	2.5	2.6	355	3.9	4.8
	11B	975	6.6	7.0	332	4.9	5.0	643	8.1	9.0
River Heights	12A	480	3.0	2.6	204	2.4	2.0	276	3.6	3.5
	12B	377	3.9	3.7	175	3.5	3.0	202	4.4	4.6
Winnipeg Health Region		10199	3.4	3.4	4240	2.8	2.6	5959	4.0	4.3

Premature Mortality Rates in the Winnipeg Health Region by Neighbourhood Cluster and Sex, 1990-1994

Community Area	Neighbourhood Cluster	Both Sexes			Females			Males		
		Deaths	Crude Rate per 1000	Age-Adjusted Rate per 1000	Deaths	Crude Rate per 1000	Age-Adjusted Rate per 1000	Deaths	Crude Rate per 1000	Age-Adjusted Rate per 1000
St. James-Assiniboia	01A	486	2.9	2.9	179	2.1	2.0	307	3.8	3.9
	01B	615	4.8	3.7	251	3.8	2.7	364	5.9	4.9
Assiniboine South	002	396	2.3	2.7	156	1.8	2.0	240	2.8	3.4
Fort Garry	03A	300	2.8	2.7	127	2.3	2.2	173	3.3	3.5
	03B	308	1.9	2.6	124	1.5	2.0	184	2.3	3.3
St. Vital	04A	445	3.4	3.0	199	3.0	2.4	246	3.9	3.8
	04B	327	2.2	3.3	134	1.8	2.6	193	2.7	4.1
St. Boniface	05A	364	5.0	4.3	147	3.9	2.9	217	6.1	6.0
	05B	348	2.5	2.8	135	1.9	2.1	213	3.1	3.6
Transcona	006	427	2.8	3.6	174	2.3	2.8	253	3.4	4.7
River East	07A	334	3.9	3.7	125	2.9	2.5	209	4.9	5.2
	07B	660	3.6	2.9	279	3.0	2.1	381	4.3	3.9
	07C	269	2.1	2.9	105	1.6	2.2	164	2.5	3.7
	07D	19	1.1	1.7	4	0.5	1.1	15	1.7	2.4
Seven Oaks	08A	196	2.0	3.0	98	2.0	2.9	98	2.0	3.3
	08B	551	3.7	3.0	213	2.7	2.2	338	4.6	4.1
	08C	46	2.8	3.1	25	3.0	3.3	21	2.5	2.9
Inkster	09A	101	1.2	2.3	39	0.9	1.6	62	1.5	3.2
	09B	305	4.6	4.4	130	3.9	3.3	175	5.3	5.6
Point Douglas	10A	549	4.2	3.9	223	3.4	2.9	326	5.1	5.0
	10B	466	6.4	6.9	142	4.1	4.0	324	8.4	9.7
Downtown	11A	607	3.3	3.5	247	2.7	2.6	360	3.9	4.6
	11B	881	5.4	5.9	302	3.9	4.0	579	6.7	7.8
River Heights	12A	554	3.3	2.8	273	3.1	2.4	281	3.5	3.2
	12B	424	4.3	3.8	176	3.4	2.7	248	5.3	5.4
Winnipeg Health Region*		9978	3.3	3.4	4007	2.6	2.5	5971	4.0	4.4

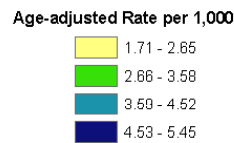
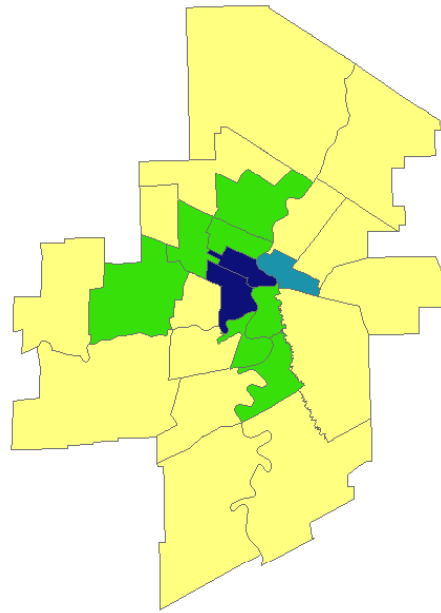
Comparison of Age-adjusted Premature Mortality Rates per 1000 population by Neighbourhood Cluster 1995-1990



Age-Adjusted Premature Mortality Rate for Females in the Winnipeg Health Region by Neighbourhood Cluster, 1995-1999

A spatial representation of the age-adjusted PMR for females is shown to the right. The highest age-adjusted premature mortality rates were found in:

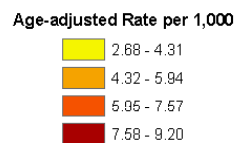
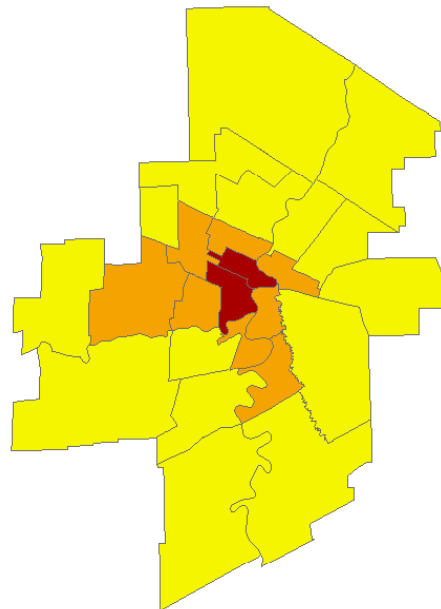
- Point Douglas - 10B
- Downtown - 11B



Age-Adjusted Premature Mortality Rate for Males in the Winnipeg Health Region by Neighbourhood Cluster, 1995-1999

A spatial representation of the age-adjusted PMR for males is shown to the right. The highest age-adjusted premature mortality rates were found in:

- Point Douglas - 10B
- Downtown - 11B



Highlights:

Regional Rates:

- For the period 1995-1999, 10199 of the 25887 total deaths in the WHR were premature based on the definition above. This represents 39.4% of all deaths.
- The crude PMR is 3.4 per 1000 population for both sexes, 2.8 per 1000 population for females, and 4.0 per 1000 population for males. The age-adjusted rates remain similar to the crude rates, at 3.4 per 1000 population for both sexes, 2.6 per 1000 population for females, and 4.3 per 1000 population for males. In other words, between 3 and 4 persons per 1000 population will die annually before the age of 75.
- There is a slight increase when comparing either crude or age-adjusted PMR values between the two time periods from 1990-1994 to 1995-1999. The WHR has a PMR that is mid-range compared to those of the other Health Regions whose PMRs for both sexes range from 2.5 per 1000 deaths in South Eastman Health Region to 4.3 per 1000 deaths in Marquette Health Region. The PMR of the WHR is approximately equal to that of Manitoba, which is 3.3 per 1000 deaths in 1996-2000¹.

Neighbourhood Cluster Rates:

- Even though the WHR has a PMR that is mid-range when compared to other health regions in the province, great variation exists among the sub-geographies within the WHR.
- Age-adjusted PMRs continue to show Downtown 11B and Point Douglas 10B as the neighbourhood clusters with the highest PMRs for both sexes, females and males in 1995-1999. The remaining NCs show a gradual decline from 4.5 in River East 07A to 2.1 in Fort Garry 03B. The variation provides further evidence of the range of health needs that exists in the region, if one uses PMR as a proxy measure for health status. Of importance are the NCs Downtown 11B and Point Douglas 10B, which have a notably greater PMR value for both sexes, suggesting a lower level of health status in these areas.

¹ Martens, PJ et al. 2003. The Manitoba RHA Indicators Atlas: Population-Based Comparisons of Health and Health Care Use. Winnipeg, Manitoba, Manitoba Centre for Health Policy.