

Definition/Description:

As noted with mortality rates, age specific rates, PMR and PYLL, geography is an underlying factor that defines differences in populations. Leading causes of death by geography were investigated to see if there were also geographic differences in mortality rates by neighbourhood cluster for leading causes of death.

Based on the five overall leading causes of death, crude and age-adjusted mortality rates were determined by neighbourhood cluster for both sexes, males, and females. The five overall leading causes of death were based on the Disease Classification Codes presented in the Top 10

Causes of Death:

- No. 1 Ischemic Heart Disease
- No. 2 Cerebrovascular Disease
- No. 3 Malignant Neoplasm of Digestive Organ
- No. 4 Malignant Neoplasm of Respiratory Organ
- No. 5 Other Forms of Heart Disease.

Method

International Classification of Diseases: Cause of death categories were based on ICD-9 methodology. A new cause-of-death classification system, International Classification of Diseases 10 (ICD-10), was introduced in the Province of Manitoba in 2000. Leading causes of death categories are yet to be restructured based on the new coding classification system. For this reason, the cause of death data were analysed for only 1990-1999 data. Causes of death have been categorized (or grouped) using the Clinical Diagnostic Grouper, which groups all ICD-9 codes into 119 categories (Manitoba Health, 2000).

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.

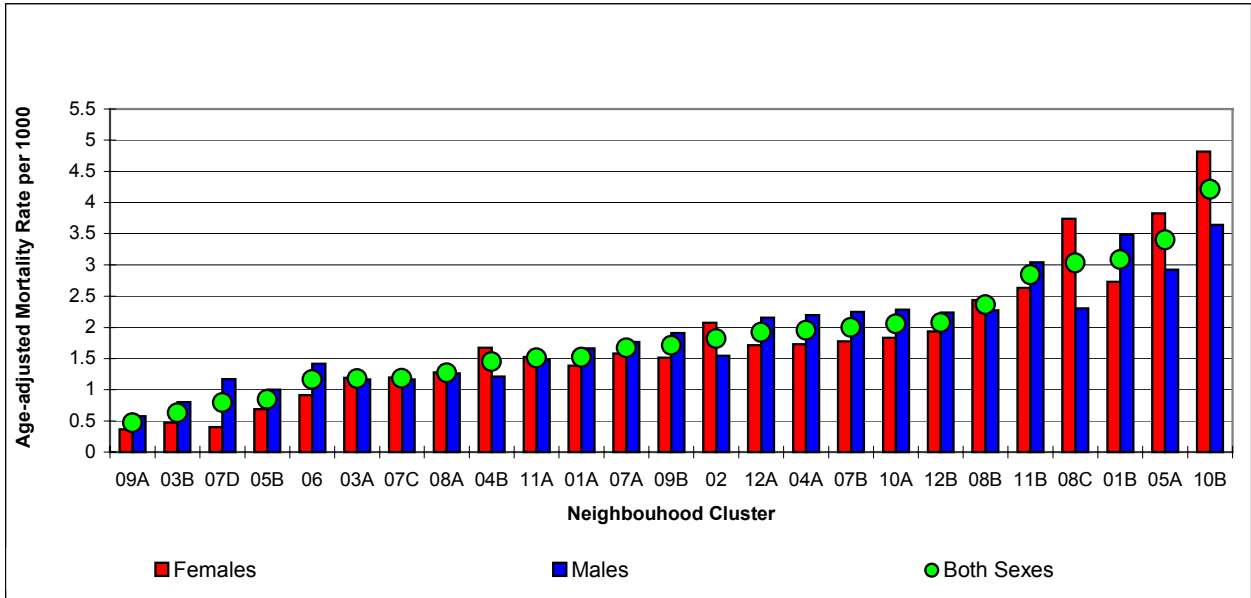
For further information, a comprehensive Mortality Report, Winnipeg Regional Health Authority, 2004, can be found at

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

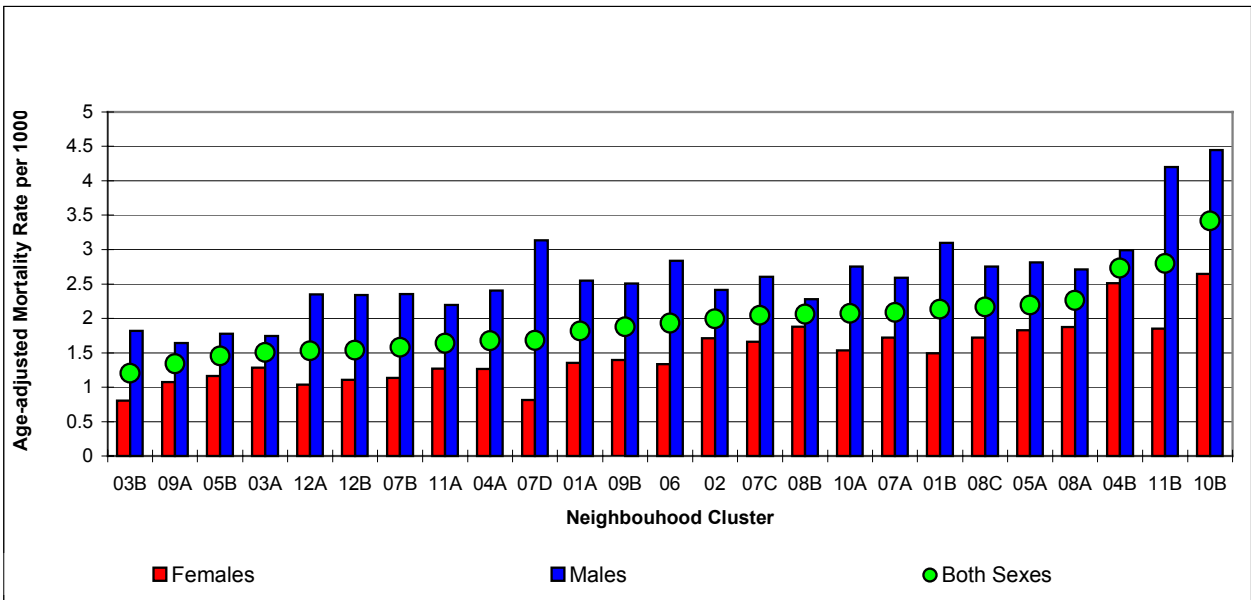
Findings:**No. 1 Cause of Death, for Both Sexes: Ischemic Heart Disease (410-414) in the Winnipeg Health Region by Neighbourhood Cluster and Sex, 1995-1999**

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	251	1.5	1.8	119	1.4	1.4	132	1.7	2.6
	01B	422	3.1	2.1	197	2.7	1.5	225	3.5	3.1
Assiniboine South	002	330	1.8	2.0	196	2.1	1.7	134	1.5	2.4
Fort Garry	03A	149	1.2	1.5	78	1.2	1.3	71	1.2	1.7
	03B	107	0.6	1.2	41	0.5	0.8	66	0.8	1.8
St. Vital	04A	267	2.0	1.7	125	1.7	1.3	142	2.2	2.4
	04B	235	1.4	2.7	140	1.7	2.5	95	1.2	3.0
St. Boniface	05A	267	3.4	2.2	159	3.8	1.8	108	2.9	2.8
	05B	126	0.8	1.5	52	0.7	1.2	74	1.0	1.8
Transcona	006	182	1.2	1.9	72	0.9	1.3	110	1.4	2.8
River East	07A	149	1.7	2.1	71	1.6	1.7	78	1.8	2.6
	07B	387	2.0	1.6	183	1.8	1.1	204	2.2	2.4
	07C	161	1.2	2.0	83	1.2	1.7	78	1.2	2.6
	07D	24	0.8	1.7	6	0.4	0.8	18	1.2	3.1
Seven Oaks	08A	132	1.3	2.3	68	1.3	1.9	64	1.3	2.7
	08B	385	2.4	2.1	209	2.4	1.9	176	2.3	2.3
	08C	59	3.0	2.2	37	3.7	1.7	22	2.3	2.8
Inkster	09A	41	0.5	1.3	16	0.4	1.1	25	0.6	1.6
	09B	116	1.7	1.9	52	1.5	1.4	64	1.9	2.5
Point Douglas	10A	273	2.1	2.1	124	1.8	1.5	149	2.3	2.8
	10B	303	4.2	3.4	168	4.8	2.6	135	3.6	4.4
Downtown	11A	289	1.5	1.6	149	1.5	1.3	140	1.5	2.2
	11B	452	2.8	2.8	200	2.6	1.9	252	3.0	4.2
River Heights	12A	342	1.9	1.5	163	1.7	1.0	179	2.2	2.4
	12B	221	2.1	1.5	111	1.9	1.1	110	2.2	2.3
Winnipeg Health Region		5670	1.8	1.9	2819	1.7	1.5	2851	1.8	2.6

**No. 1 Cause of Death: Ischemic Heart Disease (410-414)
Comparison of Crude Mortality Rates per 1000 Population by Leading Cause of Death,
Neighbourhood Cluster, and by Sex, 1995-1999**



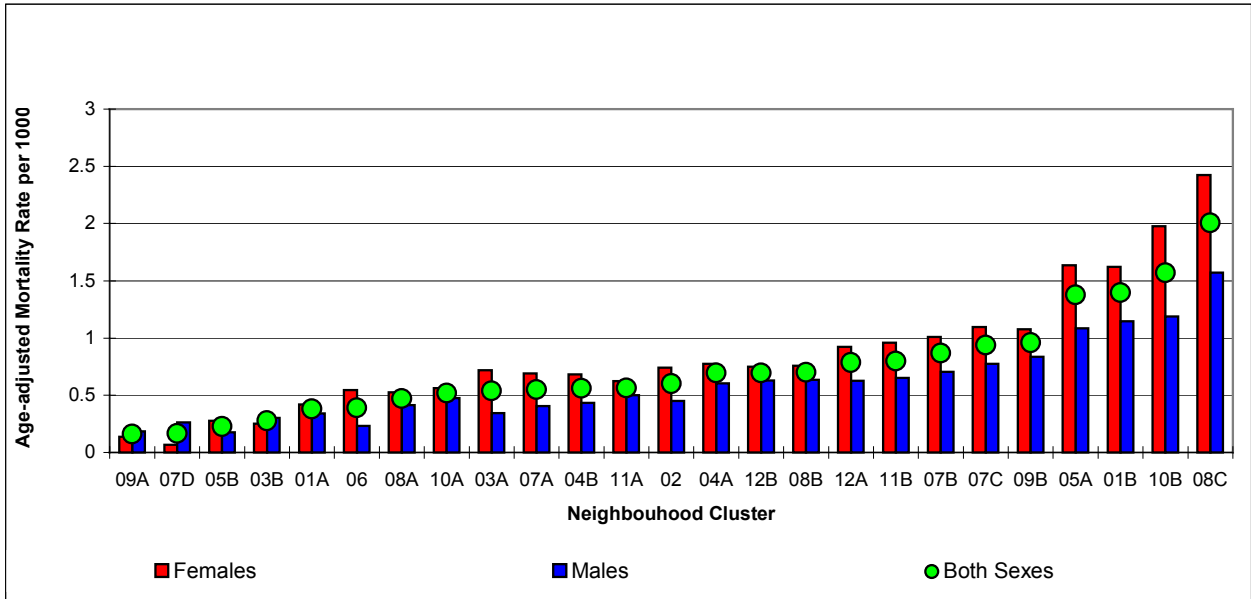
**No. 1 Cause of death: Ischemic Heart Disease (410-414)
Comparison of Age-Adjusted Mortality Rates per 1000 Population by Leading Cause of
Death, Neighbourhood Cluster, and Sex, 1995-1999**



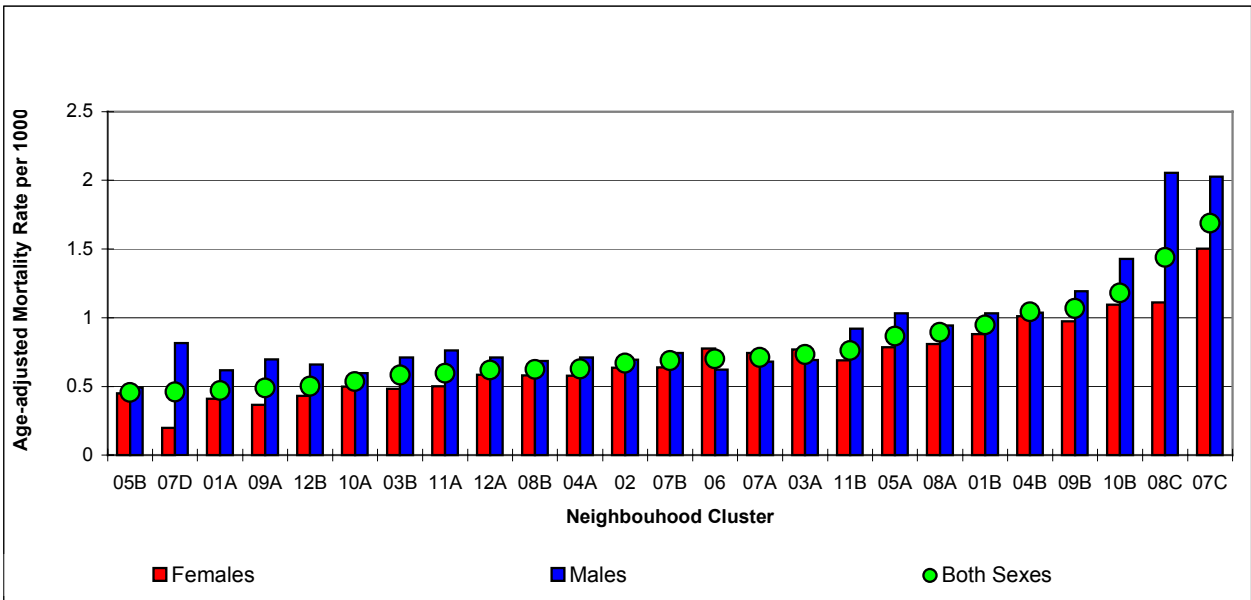
No. 2 Cause of Death, for Both Sexes: Cerebrovascular Disease (430-438) in the Winnipeg Health Region by Neighbourhood Cluster and Sex, 1995-1999

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	63	0.4	0.5	36	0.4	0.4	27	0.3	0.6
	01B	191	1.4	0.9	117	1.6	0.9	74	1.1	1.0
Assiniboine South	002	109	0.6	0.7	70	0.7	0.6	39	0.4	0.7
Fort Garry	03A	68	0.5	0.7	47	0.7	0.8	21	0.3	0.7
	03B	47	0.3	0.6	22	0.3	0.5	25	0.3	0.7
St. Vital	04A	95	0.7	0.6	56	0.8	0.6	39	0.6	0.7
	04B	91	0.6	1.0	57	0.7	1.0	34	0.4	1.0
St. Boniface	05A	108	1.4	0.9	68	1.6	0.8	40	1.1	1.0
	05B	34	0.2	0.5	21	0.3	0.5	13	0.2	0.5
Transcona	006	61	0.4	0.7	43	0.5	0.8	18	0.2	0.6
River East	07A	49	0.5	0.7	31	0.7	0.7	18	0.4	0.7
	07B	168	0.9	0.7	104	1.0	0.6	64	0.7	0.7
	07C	128	0.9	1.7	76	1.1	1.5	52	0.8	2.0
	07D	5	0.2	0.5	1	0.1	0.2	4	0.3	0.8
Seven Oaks	08A	49	0.5	0.9	28	0.5	0.8	21	0.4	0.9
	08B	114	0.7	0.6	65	0.8	0.6	49	0.6	0.7
	08C	39	2.0	1.4	24	2.4	1.1	15	1.6	2.1
Inkster	09A	14	0.2	0.5	6	0.1	0.4	8	0.2	0.7
	09B	65	1.0	1.1	37	1.1	1.0	28	0.8	1.2
Point Douglas	10A	69	0.5	0.5	38	0.6	0.5	31	0.5	0.6
	10B	113	1.6	1.2	69	2.0	1.1	44	1.2	1.4
Downtown	11A	108	0.6	0.6	61	0.6	0.5	47	0.5	0.8
	11B	127	0.8	0.8	73	1.0	0.7	54	0.7	0.9
River Heights	12A	140	0.8	0.6	88	0.9	0.6	52	0.6	0.7
	12B	74	0.7	0.5	43	0.7	0.4	31	0.6	0.7
Winnipeg Health Region		2129	0.7	0.7	1281	0.8	0.7	848	0.5	0.8

**No. 2 Cause of Death: Cerebrovascular Disease (430-438)
Comparison of Crude Mortality Rates per 1000 Population by Leading Cause of Death,
Neighbourhood Cluster, and Sex, 1995-1999**



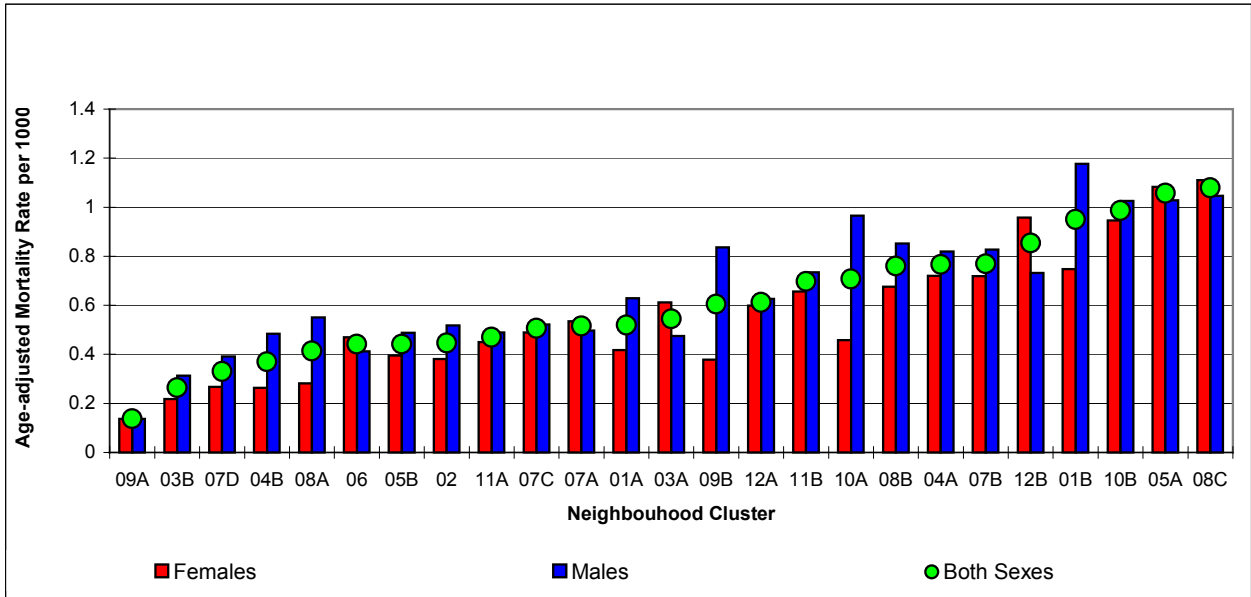
**No. 2 Cause of Death: Cerebrovascular Disease (430-438)
Comparison of Age-Adjusted Mortality Rates per 1000 Population by Leading Cause of
Death, Neighbourhood Cluster, and Sex, 1995-1999**



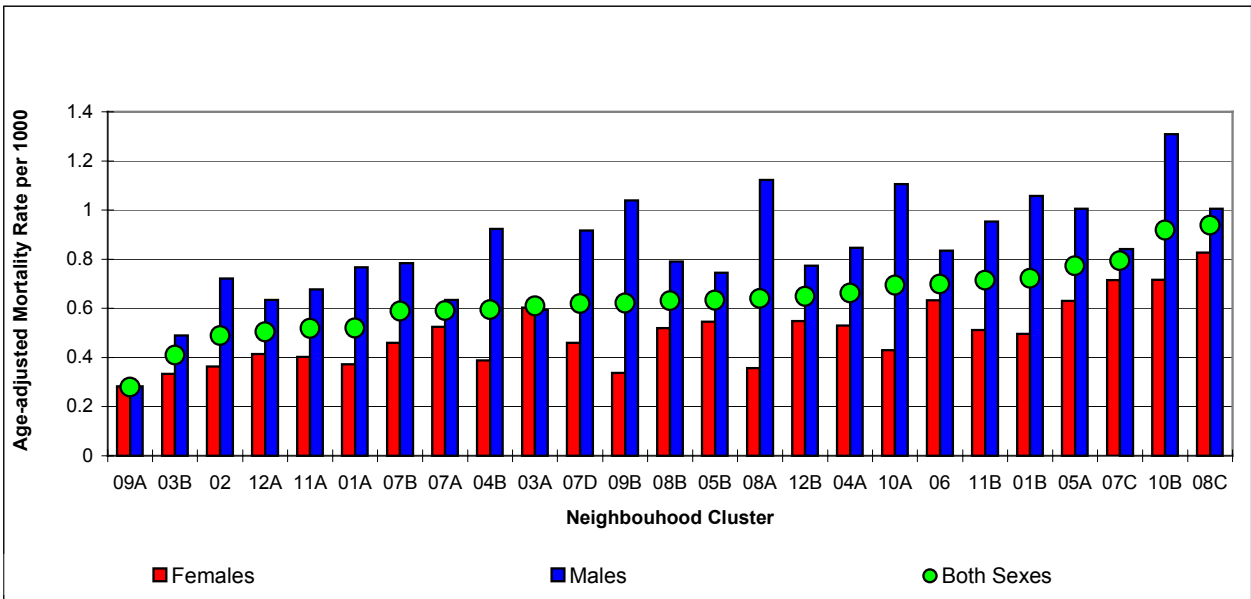
No. 3 Cause of Death, for Both Sexes: Malignant Neoplasm of Digestive Organ (150-159) in the Winnipeg Health Region by Neighbourhood Cluster and Sex, 1995-1999

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	86	0.5	0.5	36	0.4	0.4	50	0.6	0.8
	01B	130	1.0	0.7	54	0.7	0.5	76	1.2	1.1
Assiniboine South	002	81	0.4	0.5	36	0.4	0.4	45	0.5	0.7
Fort Garry	03A	69	0.5	0.6	40	0.6	0.6	29	0.5	0.6
	03B	45	0.3	0.4	19	0.2	0.3	26	0.3	0.5
St. Vital	04A	105	0.8	0.7	52	0.7	0.5	53	0.8	0.8
	04B	60	0.4	0.6	22	0.3	0.4	38	0.5	0.9
St. Boniface	05A	83	1.1	0.8	45	1.1	0.6	38	1.0	1.0
	05B	66	0.4	0.6	30	0.4	0.5	36	0.5	0.7
Transcona	006	69	0.4	0.7	37	0.5	0.6	32	0.4	0.8
River East	07A	46	0.5	0.6	24	0.5	0.5	22	0.5	0.6
	07B	149	0.8	0.6	74	0.7	0.5	75	0.8	0.8
	07C	69	0.5	0.8	34	0.5	0.7	35	0.5	0.8
	07D	10	0.3	0.6	4	0.3	0.5	6	0.4	0.9
Seven Oaks	08A	43	0.4	0.6	15	0.3	0.4	28	0.6	1.1
	08B	124	0.8	0.6	58	0.7	0.5	66	0.9	0.8
	08C	21	1.1	0.9	11	1.1	0.8	10	1.0	1.0
Inkster	09A	12	0.1	0.3	6	0.1	0.3	6	0.1	0.3
	09B	41	0.6	0.6	13	0.4	0.3	28	0.8	1.0
Point Douglas	10A	94	0.7	0.7	31	0.5	0.4	63	1.0	1.1
	10B	71	1.0	0.9	33	0.9	0.7	38	1.0	1.3
Downtown	11A	90	0.5	0.5	44	0.4	0.4	46	0.5	0.7
	11B	111	0.7	0.7	50	0.7	0.5	61	0.7	1.0
River Heights	12A	109	0.6	0.5	57	0.6	0.4	52	0.6	0.6
	12B	91	0.9	0.6	55	1.0	0.5	36	0.7	0.8
Winnipeg Health Region		1875	0.6	0.6	880	0.5	0.5	995	0.6	0.8

**No. 3 Cause of Death: Malignant Neoplasm of Digestive Organ (150-159)
Comparison of Crude Mortality Rates per 1000 Population by Leading Cause of Death,
Neighbourhood Cluster, and Sex, 1995-1999**



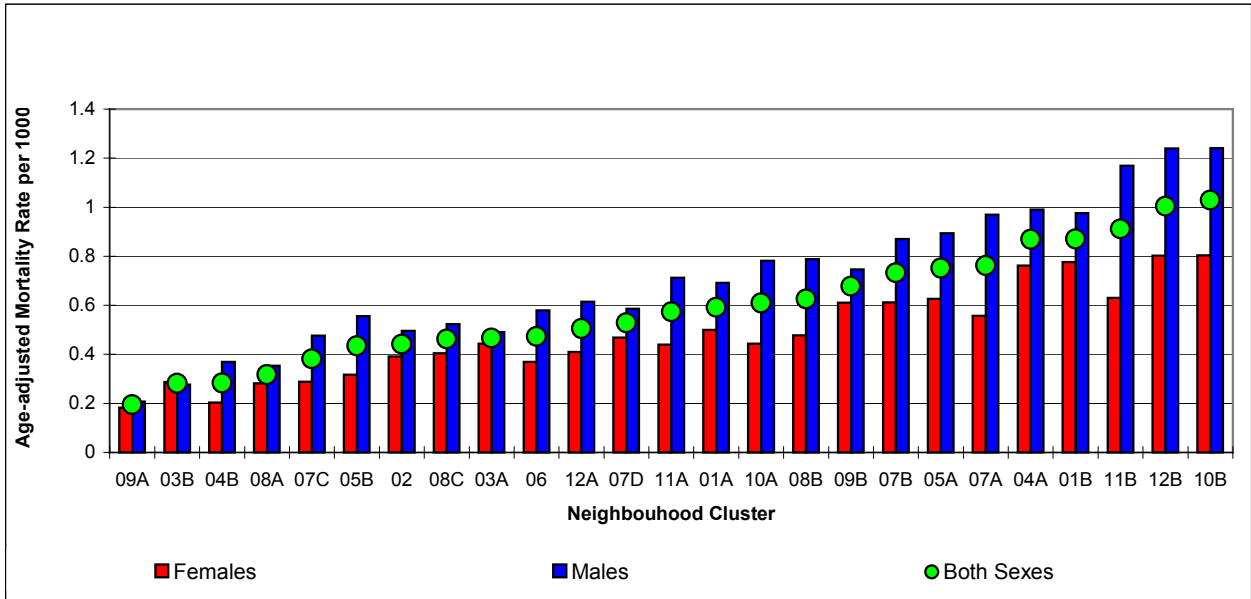
**No. 3 Cause of Death: Malignant Neoplasm of Digestive Organ (150-159)
Comparison of Age-Adjusted Mortality Rates per 1000 Population by Leading Cause of
Death, Neighbourhood Cluster, and Sex, 1995-1999**



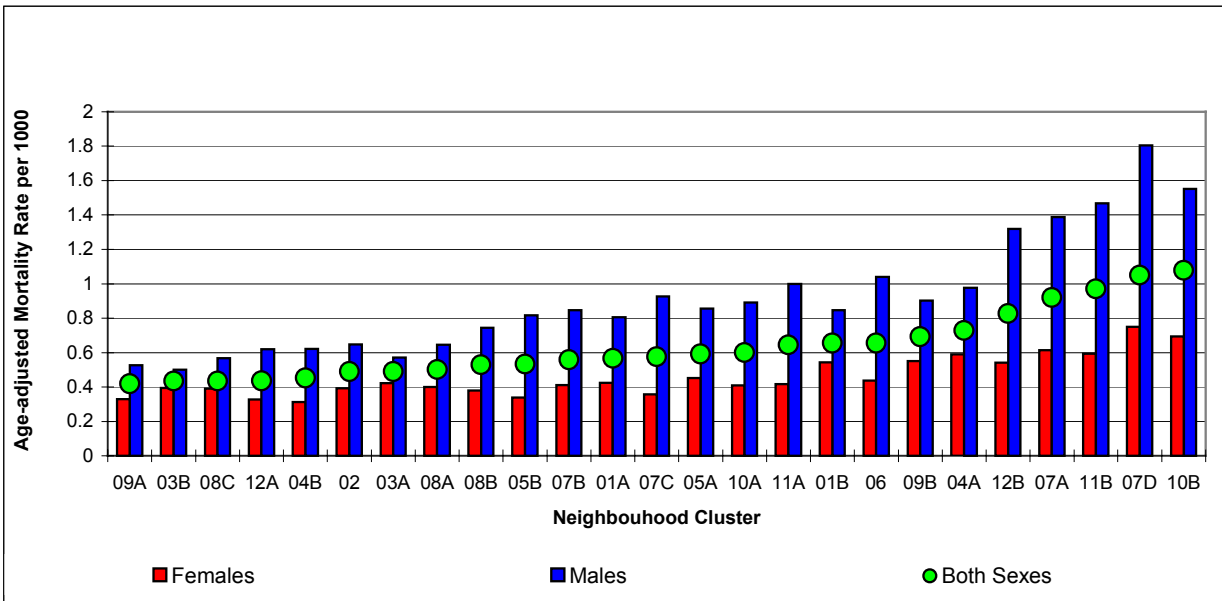
**No. 4 Cause of Death, for Both Sexes: Malignant Neoplasm of Respiratory Organ (160-165)
in the Winnipeg Health Region by Neighbourhood Cluster and Sex, 1995-1999**

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	98	0.6	0.6	43	0.5	0.4	55	0.7	0.8
	01B	119	0.9	0.7	56	0.8	0.5	63	1.0	0.8
Assiniboine South	002	80	0.4	0.5	37	0.4	0.4	43	0.5	0.6
Fort Garry	03A	59	0.5	0.5	29	0.4	0.4	30	0.5	0.6
	03B	48	0.3	0.4	25	0.3	0.4	23	0.3	0.5
St. Vital	04A	119	0.9	0.7	55	0.8	0.6	64	1.0	1.0
	04B	46	0.3	0.5	17	0.2	0.3	29	0.4	0.6
St. Boniface	05A	59	0.8	0.6	26	0.6	0.5	33	0.9	0.9
	05B	65	0.4	0.5	24	0.3	0.3	41	0.6	0.8
Transcona	006	74	0.5	0.7	29	0.4	0.4	45	0.6	1.0
River East	07A	68	0.8	0.9	25	0.6	0.6	43	1.0	1.4
	07B	142	0.7	0.6	63	0.6	0.4	79	0.9	0.8
	07C	52	0.4	0.6	20	0.3	0.4	32	0.5	0.9
	07D	16	0.5	1.1	7	0.5	0.7	9	0.6	1.8
Seven Oaks	08A	33	0.3	0.5	15	0.3	0.4	18	0.4	0.6
	08B	102	0.6	0.5	41	0.5	0.4	61	0.8	0.7
	08C	9	0.5	0.4	4	0.4	0.4	5	0.5	0.6
Inkster	09A	17	0.2	0.4	8	0.2	0.3	9	0.2	0.5
	09B	46	0.7	0.7	21	0.6	0.6	25	0.7	0.9
Point Douglas	10A	81	0.6	0.6	30	0.4	0.4	51	0.8	0.9
	10B	74	1.0	1.1	28	0.8	0.7	46	1.2	1.6
Downtown	11A	110	0.6	0.6	43	0.4	0.4	67	0.7	1.0
	11B	145	0.9	1.0	48	0.6	0.6	97	1.2	1.5
River Heights	12A	90	0.5	0.4	39	0.4	0.3	51	0.6	0.6
	12B	107	1.0	0.8	46	0.8	0.5	61	1.2	1.3
Winnipeg Health Region		1859	0.6	0.6	779	0.5	0.4	1080	0.7	0.9

**No. 4 Cause of Death: Malignant Neoplasm of Respiratory Organ (160-165)
Comparison of Crude Mortality Rates per 1000 Population by Leading Cause of Death,
Neighbourhood Cluster, and Sex, 1995-1999**



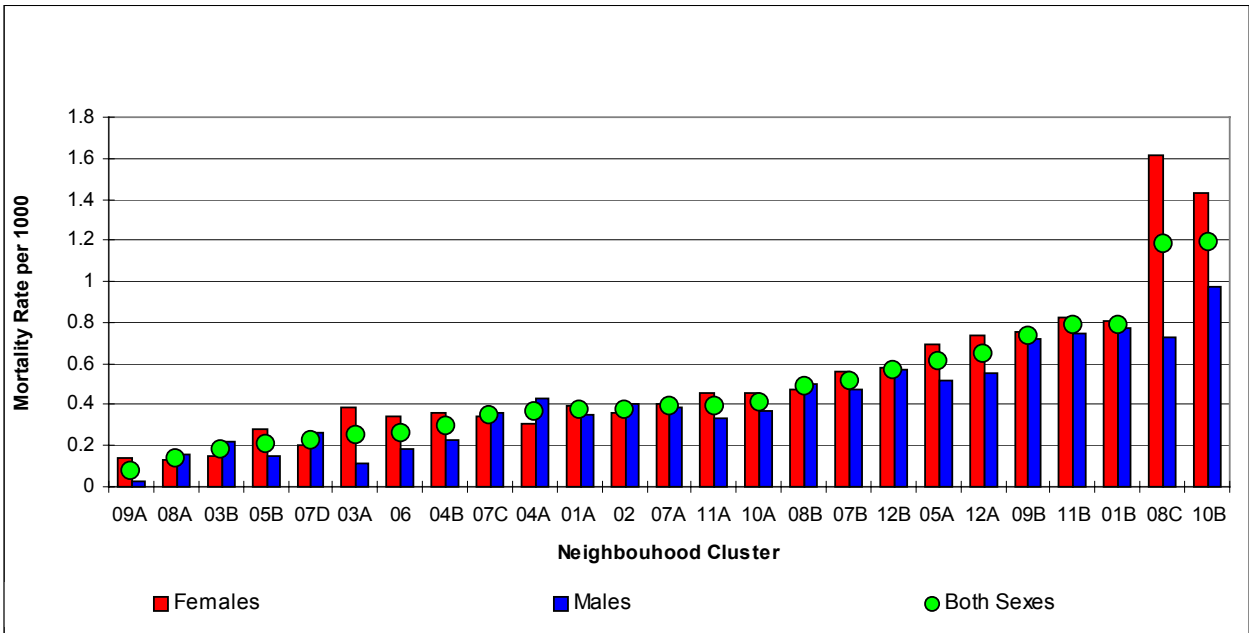
**No. 4 Cause of Death: Malignant Neoplasm of Respiratory Organ (160-165)
Comparison of Age-Adjusted Mortality Rates per 1000 Population by Leading Cause of
Death, Neighbourhood Cluster, and Sex, 1995-1999**



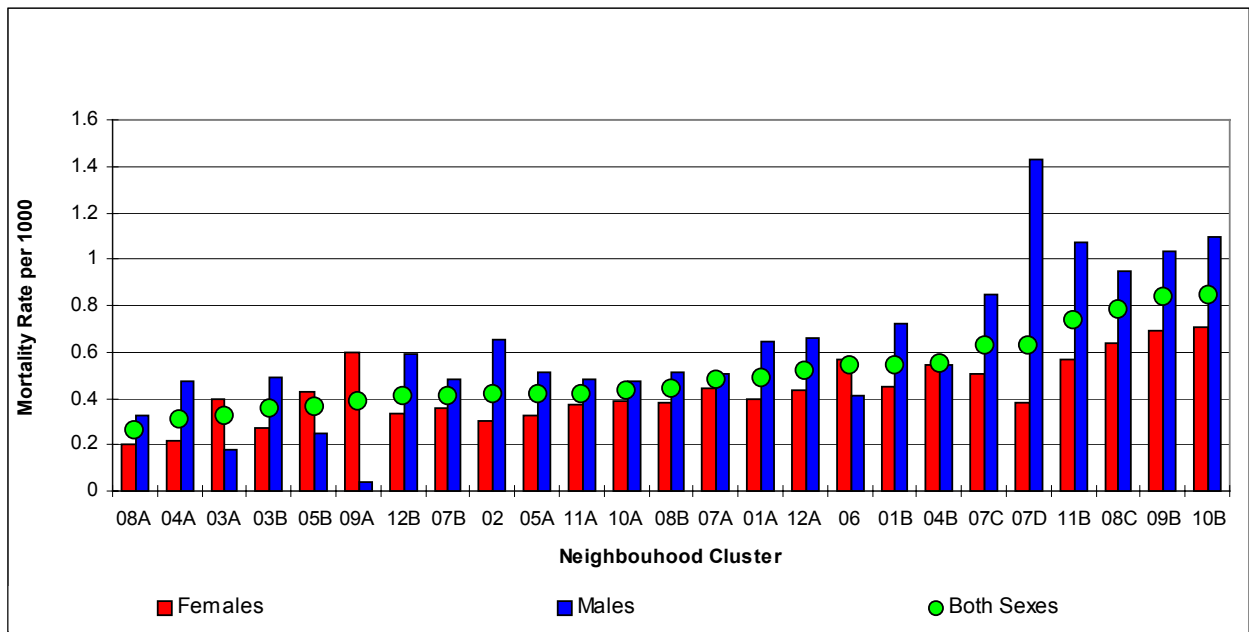
No. 5 Cause of Death, for Both Sexes: Other Forms of Heart Disease (420-429) in the Winnipeg Health Region by Neighbourhood Cluster and Sex, 1995-1999

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	62	0.4	0.5	34	0.4	0.4	28	0.4	0.6
	01B	108	0.8	0.5	58	0.8	0.5	50	0.8	0.7
Assiniboine South	002	69	0.4	0.4	34	0.4	0.3	35	0.4	0.6
Fort Garry	03A	32	0.3	0.3	25	0.4	0.4	7	0.1	0.2
	03B	31	0.2	0.4	13	0.1	0.3	18	0.2	0.5
St. Vital	04A	50	0.4	0.3	22	0.3	0.2	28	0.4	0.5
	04B	48	0.3	0.6	30	0.4	0.5	18	0.2	0.5
St. Boniface	05A	48	0.6	0.4	29	0.7	0.3	19	0.5	0.5
	05B	32	0.2	0.4	21	0.3	0.4	11	0.1	0.2
Transcona	006	41	0.3	0.5	27	0.3	0.6	14	0.2	0.4
River East	07A	35	0.4	0.5	18	0.4	0.4	17	0.4	0.5
	07B	101	0.5	0.4	58	0.6	0.4	43	0.5	0.5
	07C	48	0.4	0.6	24	0.3	0.5	24	0.4	0.8
	07D	7	0.2	0.6	3	0.2	0.4	4	0.3	1.4
Seven Oaks	08A	15	0.1	0.3	7	0.1	0.2	8	0.2	0.3
	08B	80	0.5	0.4	41	0.5	0.4	39	0.5	0.5
	08C	23	1.2	0.8	16	1.6	0.6	7	0.7	0.9
Inkster	09A	7	0.1	0.4	6	0.1	0.6	1	0.0	0.0
	09B	50	0.7	0.8	26	0.8	0.7	24	0.7	1.0
Point Douglas	10A	55	0.4	0.4	31	0.5	0.4	24	0.4	0.5
	10B	86	1.2	0.8	50	1.4	0.7	36	1.0	1.1
Downtown	11A	76	0.4	0.4	45	0.5	0.4	31	0.3	0.5
	11B	125	0.8	0.7	63	0.8	0.6	62	0.7	1.1
River Heights	12A	116	0.7	0.5	70	0.7	0.4	46	0.6	0.7
	12B	61	0.6	0.4	33	0.6	0.3	28	0.6	0.6
Winnipeg Health Region		1406	0.4	0.5	784	0.5	0.4	622	0.4	0.6

No. 5 Cause of Death: Other Forms of Heart Disease (420-429)
Comparison of Crude Mortality Rates per 1000 Population by Leading Cause of Death, Neighbourhood Cluster, and Sex, 1995-1999



No. 5 Cause of Death: Other Forms of Heart Disease (420-429)
Comparison of Age-Adjusted Mortality Rates per 1000 Population by Leading Cause of Death, Neighbourhood Cluster, and Sex, 1995-1999



Highlights:

- For Ischemic Heart Disease, age-adjusted rates ranged from 1.2 to 3.4 per 1000 population. Males had a consistently higher age-adjusted rate compared to females across all the NCs.
- For Cerebrovascular Disease, age-adjusted rates ranged from 0.5 to 1.7 per 1000 population. Males had a slightly higher age-adjusted rate compared to females across all the NCs.
- For Malignant Neoplasm of Digestive Organ, age-adjusted rates ranged from 0.3 to 0.9 per 1000 population. There is a substantial amount of variability among the NCs for males and females.
- For Malignant Neoplasm of Respiratory Organ, age-adjusted rates ranged from 0.4 to 1.1 per 1000 population. Males had a consistently higher age-adjusted rate compared to females across all the NCs. For some geographies, the rate for males has doubled compared to the rate for females.
- Other Forms of Heart Disease has age-adjusted rates ranging from 0.3 to 0.8 per 1000 population. Males had a slightly higher age-adjusted rate compared to females across the NCs, except for Fort Garry 03A, St. Boniface 05B and Inkster 09A where the females had a higher rate.
- The NCs rates have been ordered in the figures from lowest to highest for each of the top five causes of death. The resulting rank order of NCs changes among the top five leading causes of death. This suggests that a different burden of illness exists across the NCs in the WHR. One NC that continues to have one of the highest rates was Point Douglas 10B. As evident from other geographic comparisons in this report, it is clear that the burden of illness in this NC is very different from the rest of the WHR. Of importance, however, is that this section has also shown that there are different types of burden of illness among our NCs as the rank order of the NCs changes dependent upon the cause of death.