Section A

HEALTH STATUS

Winnipeg Regional Health Authority
Caring for Health
Office régional de la santé de Winnipeg
À l'écoute de notre santé

1. General Health Status, Life Expectancy & Mortality

Winnipeg Regional Health Authority AT A GLANCE

		Current Estimates	Previous Estimates	Range of Current Estimates*** (low CA-high CA)
Life Expectancy	Female Male	81.8 yrs 76.9 yrs (2001-2005)	81.3 yrs 76.2 yrs (1996-2000)	76.7 – 84.1 yrs 71.5 – 79.8 yrs
Premature Mortality Rate*		3.19/1000 (2001-2005)	3.36/1000 (1996-2000)	2.33/1000 – 5.52/1000
Potential Years of Life Lost (PYLL)*		45.2/1000 (2001-2005)	48.8/1000 (1996-2000)	28.4 – 97.0 yrs
Infant Mortality (per 1000 live births)		5.0/1000 (2001-2005)	5.2/1000 (1996-2000)	2.6/1000 – 9.5/1000
Top 5 Causes of Mortality	Circulatory Diseases Cancer Respiratory Diseases Injury Endocrine/Metabolic Diseases Digestive Diseases	33.8% 28.0% 8.0% 6.0% 5.2% -- (2001-2005)	38.9% 28.0% 8.8% 5.4% -- 3.8% (1996-2000)	N/A
Health Status** (Self-rated)	Excellent Very Good Good Fair/Poor	23.3% 38.5% 26.5% 11.7% (2001, 2003 & 2005)	N/A	18.2% – 29.7% 30.6% – 43.0% 22.8% – 29.2% 7.0% – 16.3%
Physical Functioning** (Self-rated)	Perfect (score=100) Less than Perfect (score < 100)	56% 44% (2001, 2003 & 2005)	N/A	52.1% - 64.1% 35.9 – 47.9%
Mental Health Status** (Self-rated)	Low (score 0-79) Medium (80-91) High (92-100)	26.7% 34.8% 38.5% 2003 & 2005	N/A	18.8% – 40.5% 25.5% – 42.3% 28.0% – 46.8%

Detailed definitions including data sources and ICD-9-CM diagnostic codes are available in Appendix A
*Rates are age- and sex-adjusted to the Manitoba population in the 1st time period of the rate/event calculation
***CA=Community Areas
N/A=data not available
**These data are from the Canadian Community Health Survey (CCHS) and are based on questions asked to a random sample of Manitobans. Refer to the "How to Read this Report" section for more information on the CCHS source of data.

This section presents several indicators of the **overall health status** of Winnipeg residents. Understanding the health status of an entire population requires examining a number of measures as there is no one single measure of the "health of the population." Consequently, both objective measures (e.g., life expectancy and infant mortality rates) and subjective measures of health status (e.g., reports of individuals' physical functioning and mental well-being) are presented here to facilitate the assessment of the overall general health status of the WHR population.

We report first on the most common measures of health status: ***life expectancy, premature mortality rate (PMR), potential years of life lost (PYLL)*** and ***infant mortality***. The ***top 5 causes of mortality*** are next followed by three measures of health status from survey data: s***elf-rated health, physical functioning*** and ***mental health status***. Definitions of each indicator can be found with each indicator's data table.

GENERAL HEALTH STATUS INDICATORS

Life expectancy for females born in the WHR in 2001-05 was 81.8 compared to 81.3 during 1996-2000. Life expectancy for males was 76.9 years during 2001-05 and 76.2 during 1996-2000. These figures indicate a small increase in life expectancy, but are below the Canadian average. Canadians males born in 2005-07 are expected to live for 78 years whereas Canadian females are expected to live for 83 years.[3]

Within the WHR, there is significant variation between CAs. For example, a female born in 2001-05 is expected to live for 84.1 years if she was born in Fort Garry and only 76.7 years if she was born in Point Douglas or 79.6 if born in Downtown. The widest gap between CAs in female life expectancy is 7.4 years. For males the widest gap between CAs is just over 8 years (79.8 in Fort Garry compared to 71.5 in Point Douglas).

Premature Mortality Rate (PMR) is a measure of deaths in area residents before the age of 75 years which is considered to be premature. The PMRs reported here indicate the average annual rate at which an area's residents die before reaching age 75. In the 5-year period, 2001-2005, the PMR for the WHR was 3.19 per 1000 residents under 75. This is not appreciably different than the estimate for the previous 5-year period, 1996-2000 of 3.36/1000. There was a two-fold difference between the CAs with the lowest PMRs: Assiniboine South (2.33), Fort Garry (2.38), St. Vital (2.66) and the CA with the highest PMR: Point Douglas (5.52).

Potential years of life lost (PYLL) is also based on the concept of premature death, but it takes into account the age at which a person died. As an alternate measure of premature mortality, PYLL gives greater weight to death occurring at a younger age than to those at older ages. The rate of potential years of life lost decreased slightly in the WHR between the two time periods (1996-2000 & 2001-2005) from 48.81 years/1000 residents to 45.18 years/1000 residents age 1-74, but the difference was not statistically significant. PYLL values in both time periods were related to the PMRs at the CA level; areas with higher PMRs had higher PYLL values. And there was about a three-fold spread between the CA with the lowest PYLL (Assiniboine South, 28.39/1000 in 2001-2005) and the two CAs with the highest PYLLs (Downtown, 78.95/1000 and Point Douglas, 97.01/1000 in 2001-2005).

Infant Mortality Rate (IMR) is the number of infant deaths (under 1-year old) per 1000 live births. It is considered a useful indicator of the level of health within a community. Declining infant morality rates over the last century are seen to have been mainly due to improvements in living conditions and basic health care. The infant mortality rates in this report exclude very low birth weight (babies born weighing less than 500 grams) and very low gestational age infants (less than 22 weeks). The IMR has not changed appreciably between the two, 5-year periods (5.2 in 1996-2000 and 5.0 in 2001-2005).

The IMR in Point Douglas CA (9.5 deaths/1000 live births) for 2001-2005 is almost double that of the Manitoba (5.3) and Winnipeg (5.0) rates. However, caution is warranted in comparing CA rates for infant mortality between the two periods. The actual number of infant deaths in the WHR is small. This means that the number of deaths in some CAs can be very small (5 or less) and that one or two more deaths between time periods will result in a large percentage change. As a result comparisons across CAs are not very reliable and should be interpreted with caution.

The ***Top 5 Causes of Mortality*** indicator is based on Vital Statistics data. Circulatory diseases (including heart disease and stroke) and cancer were the leading causes of death (33.8% and 28.0%, respectively), followed by respiratory diseases (8.0%) in both years of analysis. Together, these three causes accounted for almost 70% of deaths (68.9% in 2001-2005). The proportion of deaths attributed to circulatory diseases has decreased since the previous period of measure (1996-2000) from 38.9% to 33.8%. By contrast, the proportion of deaths attributed to cancer and respiratory diseases have remained fairly stable between the two time periods. The fourth leading cause of death was injury in both time periods which increased. The fifth leading cause was endocrine and metabolic diseases in the more recent time period and digestive diseases previously.

[3] http://www40.statcan.ca/l01/cst01/health26-eng.htm

SELF-REPORTED HEALTH STATUS INDICATORS

Over 60% of Winnipeg residents report being in "excellent" or "very good" health (***Self-rated Health***). Most Winnipeg residents report excellent physical functioning (***Physical Health***, 56%). General mental health status scores were in the high ranges for over one-third of the WHR residents (***Mental Health Status***, 38.5%). Conversely, less than one-third of WHR residents reported scores in the low range for mental health status (26.7%). There is some variation in these numbers by CA, although these data too must be interpreted cautiously because of the small number of respondents in each CA.

ADDITIONAL INFORMATION[4]

The self-reported health status indicators were derived from Canadian Community Health Survey (CCHS) data, and more information on the survey's sampling methodology, biases and limitations can be found on the Statistics Canada website: www.statcan.gc.ca/imdb-bmdi/3226-eng.htm

"Health Indicators" are produced jointly by Statistics Canada and the Canadian Institute for Health Information (CIHI). The initiative is a compilation of over 80 indicators measuring health status, non-medical determinants of health, health–system performance and community and health-system characteristics: http://secure.cihi.ca/indicators/2010/ind2010_e.html (CIHI) or www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=82-221-X&lang=eng (Statistics Canada).

[4] Listing of these resources does not constitute endorsement or approval of the information contained herein by the WRHA.

Female Life Expectancy (LE) in Years by Community Area

The expected length of life for a female from birth, based on the patterns of mortality in the population for the preceding five years. Data were analyzed for two 5–year periods: 1996–2000 and 2001–2005. Values are not age–adjusted.

Table 1.1

Community Area	1996-2000	2001-2005	% Change
	LE in Years	LE in Years	
Fort Garry (1,2)	83.4	84.1	0.9%
Assiniboine South	81.1	82.3	1.5%
St. Boniface (1,2)	83.1	83.5	0.5%
St. Vital (1,2,t)	82.0	83.3	1.6%
Transcona	81.1	82.4	1.5%
River Heights (1,2)	82.4	82.8	0.4%
River East (1)	81.8	82.2	0.5%
Seven Oaks	80.6	81.5	1.0%
St. James - Assiniboia	81.2	81.4	0.2%
Inkster (t)	79.7	81.8	2.6%
Downtown (1,2)	79.2	79.6	0.5%
Point Douglas (1,2,t)	79.0	76.7	-2.9%
Winnipeg (2,t)	81.3	81.8	0.6%
Manitoba (t)	81.0	81.5	0.6%

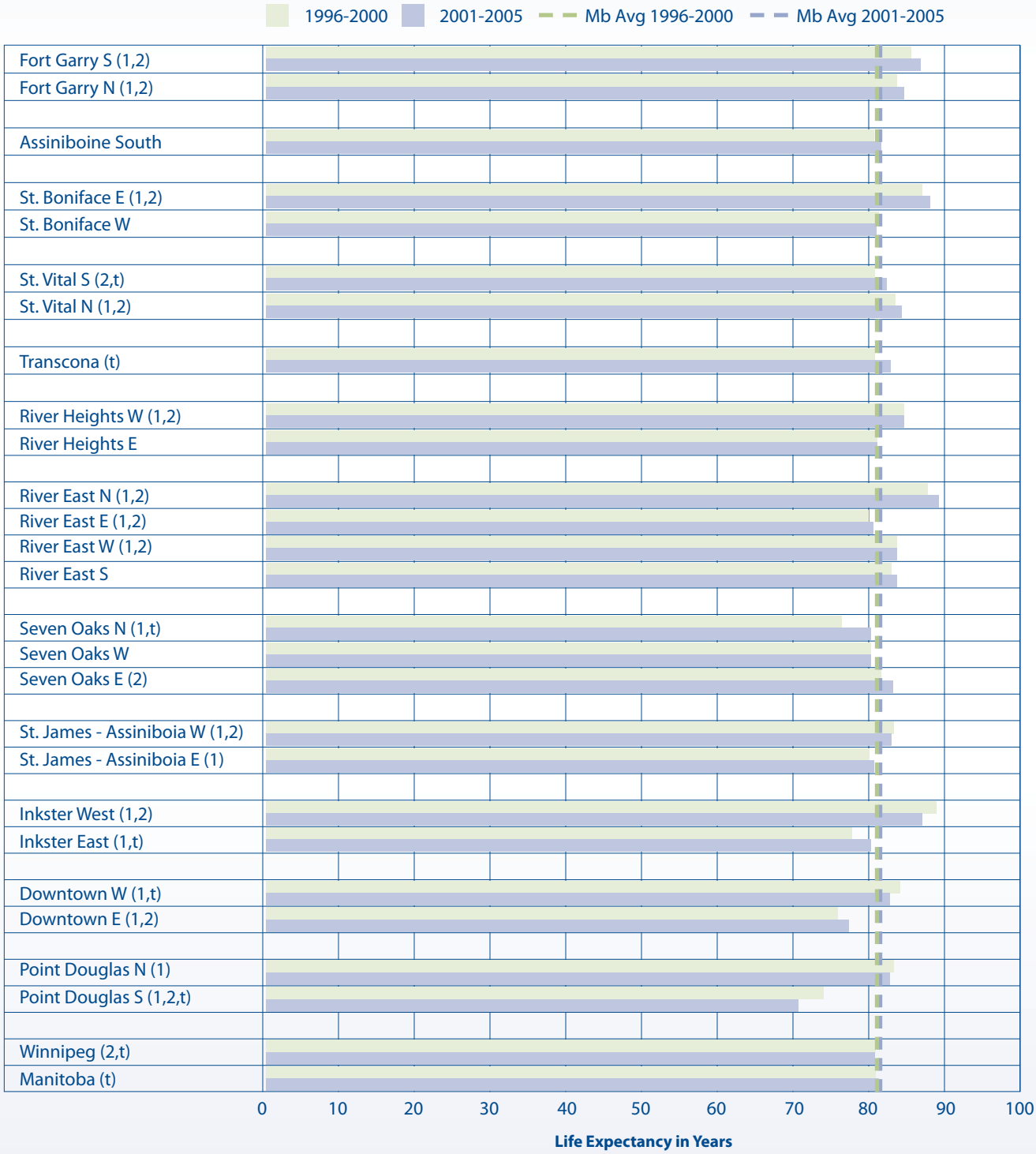
Source: Manitoba Centre for Health Policy, 2009

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Female Life Expectancy by Winnipeg Neighborhood Cluster

Life expectancy (at birth) in years, 1996-2000 & 2001-2005

Figure 1.1



Source: Manitoba Centre for Health Policy, 2009

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Male Life Expectancy (LE) in Years by Community Area

The expected length of life of males from birth, based on the patterns of mortality in the population for the preceding five years. Data were analyzed for two 5–year periods: 1996–2000 and 2001–2005. Values are not age–adjusted.

Table 1.2

Community Area	1996-2000	2001-2005	% Change
	LE in Years	LE in Years	
Fort Garry (1,2)	79.8	79.8	-0.0%
Assiniboine South (1,2,t)	77.5	79.4	2.5%
St. Boniface (1,2)	77.8	78.8	1.2%
St. Vital (1,2,t)	76.9	78.7	2.3%
Transcona (1)	77.0	77.5	0.6%
River Heights (1,2)	76.9	77.6	0.9%
River East (1,2,t)	76.6	77.7	1.5%
Seven Oaks	76.5	77.0	0.7%
St. James - Assiniboia (2,t)	76.2	77.4	1.5%
Inkster	75.4	76.4	1.3%
Downtown (1,2)	72.6	72.1	-0.6%
Point Douglas (1,2)	71.7	71.5	-0.3%
Winnipeg (1,2,t)	76.2	76.9	1.0%
Manitoba (t)	75.6	76.3	1.0%

Source: Manitoba Centre for Health Policy, 2009

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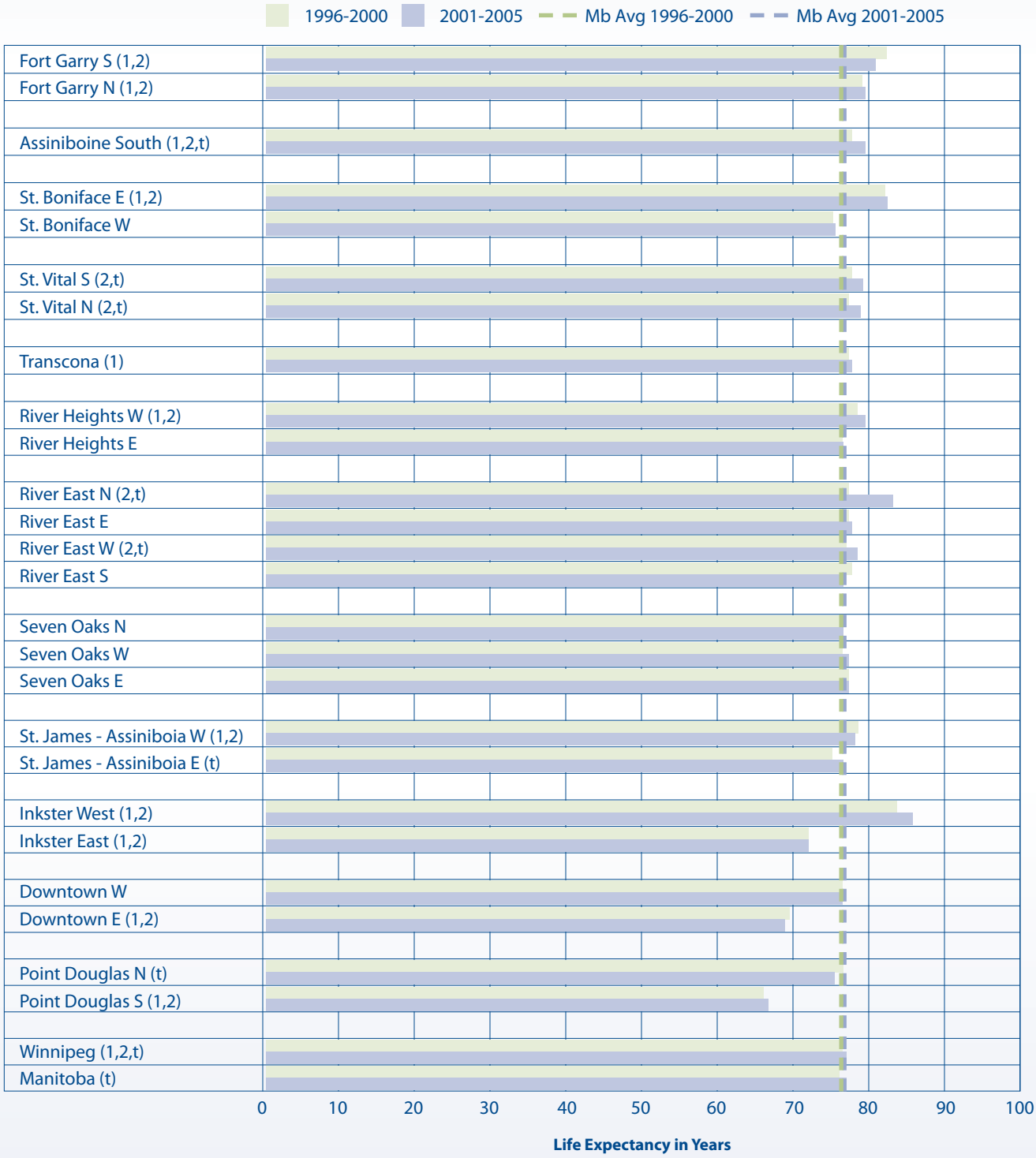
Male Life Expectancy by Winnipeg Neighborhood Cluster

Life expectancy (at birth) in years, 1996-2000 & 2001-2005

Figure 1.2



Source: Manitoba Centre for Health Policy, 2009

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Premature Mortality by Community Area

The number of deaths among an area's residents under 75 years old, per 1000 residents aged 0-74 per year. Rates are reported for two 5-year periods, 1996-2000 and 2001-2005 and were age- and sex-adjusted to the Manitoba population (aged 0-74) in the first time period

Table 1.3

Community Area	1996-2000		2001-2005		% Change
	Number of Deaths among < 75 year olds	Adjusted Rate per 1000	Number of Deaths among < 75 year olds	Adjusted Rate per 1000	
Fort Garry (1,2)	623	2.28	714	2.38	10.3%
Assiniboine South (1,2)	444	2.61	442	2.33	-1.2%
St. Boniface (1,2)	661	2.91	658	2.71	-6.3%
St. Vital (2,t)	884	3.24	773	2.66	-12.2%
Transcona (2)	465	3.20	427	2.82	-6.9%
River Heights (1)	856	3.09	814	3.01	-3.9%
River East (1,2,t)	1433	3.23	1344	2.94	-7.7%
Seven Oaks	888	3.19	911	3.17	1.0%
St. James - Assiniboia	1102	3.31	1030	3.10	-4.0%
Inkster	463	3.83	414	3.35	-10.7%
Downtown (1,2)	1473	4.88	1463	4.92	-2.7%
Point Douglas (1,2,t)	886	4.86	946	5.52	4.0%
Winnipeg (1,t)	10178	3.36	9936	3.19	-3.5%
Manitoba (t)	18607	3.48	18182	3.29	-3.4%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 1000 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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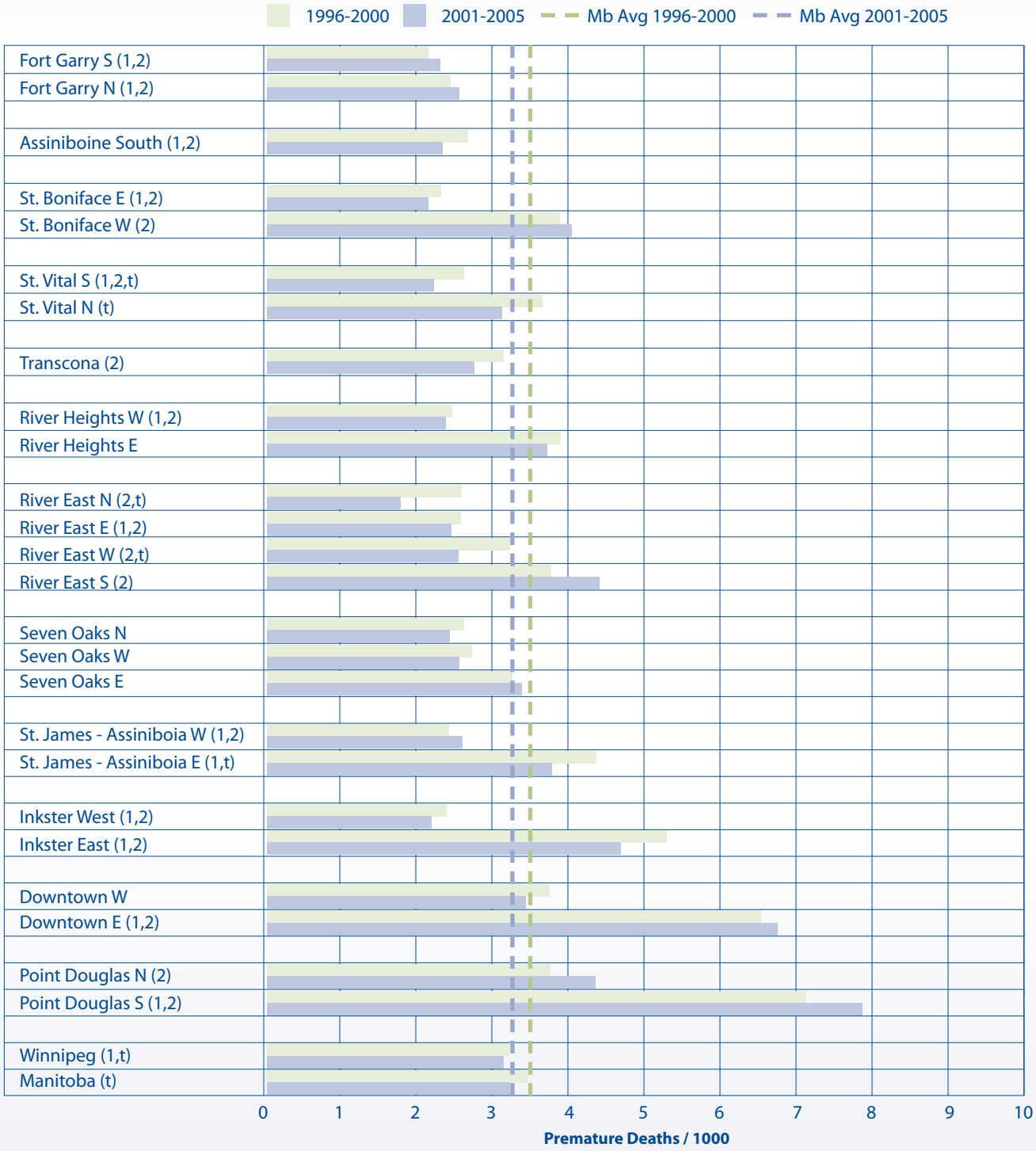
Premature Mortality Rates by Winnipeg Neighborhood Cluster

Age- and sex-adjusted annual rate of deaths before age 75, per 1000 residents aged 0-74, 1996-2000 & 2001-2005

Figure 1.3



Source: Manitoba Centre for Health Policy, 2009

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Potential Years of Life Lost (PYLL) by Community Area

The number of potential years of life lost among area residents dying between the ages of 1 and 74, per 1000 residents aged 1–74.
Rates were calculated for two 5–year periods, 1996–2000 and 2001–2005, and were age– and sex–adjusted to the Manitoba population in the first time period.

Table 1.4

Community Area	1996-2000	2001-2005	% Change
	Years of Life Lost (adj) / 1000	Years of Life Lost (adj) / 1000	
Fort Garry (1,2)	33.80	33.17	12.4%
Assiniboine South (1,2)	29.81	28.39	1.9%
St. Boniface (2,t)	41.66	28.91	-14.8%
St. Vital (2)	44.36	33.18	-15.4%
Transcona	37.75	36.46	-7.8%
River Heights	39.54	40.86	2.6%
River East	41.00	39.09	-2.6%
Seven Oaks	44.94	36.76	-3.5%
St. James - Assiniboia	43.57	33.96	-4.1%
Inkster (t)	56.41	39.90	-13.6%
Downtown (2)	81.82	78.95	2.9%
Point Douglas (2)	81.09	97.01	19.5%
Winnipeg	48.81	45.18	-0.9%
Manitoba	54.79	50.91	-0.9%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 1000 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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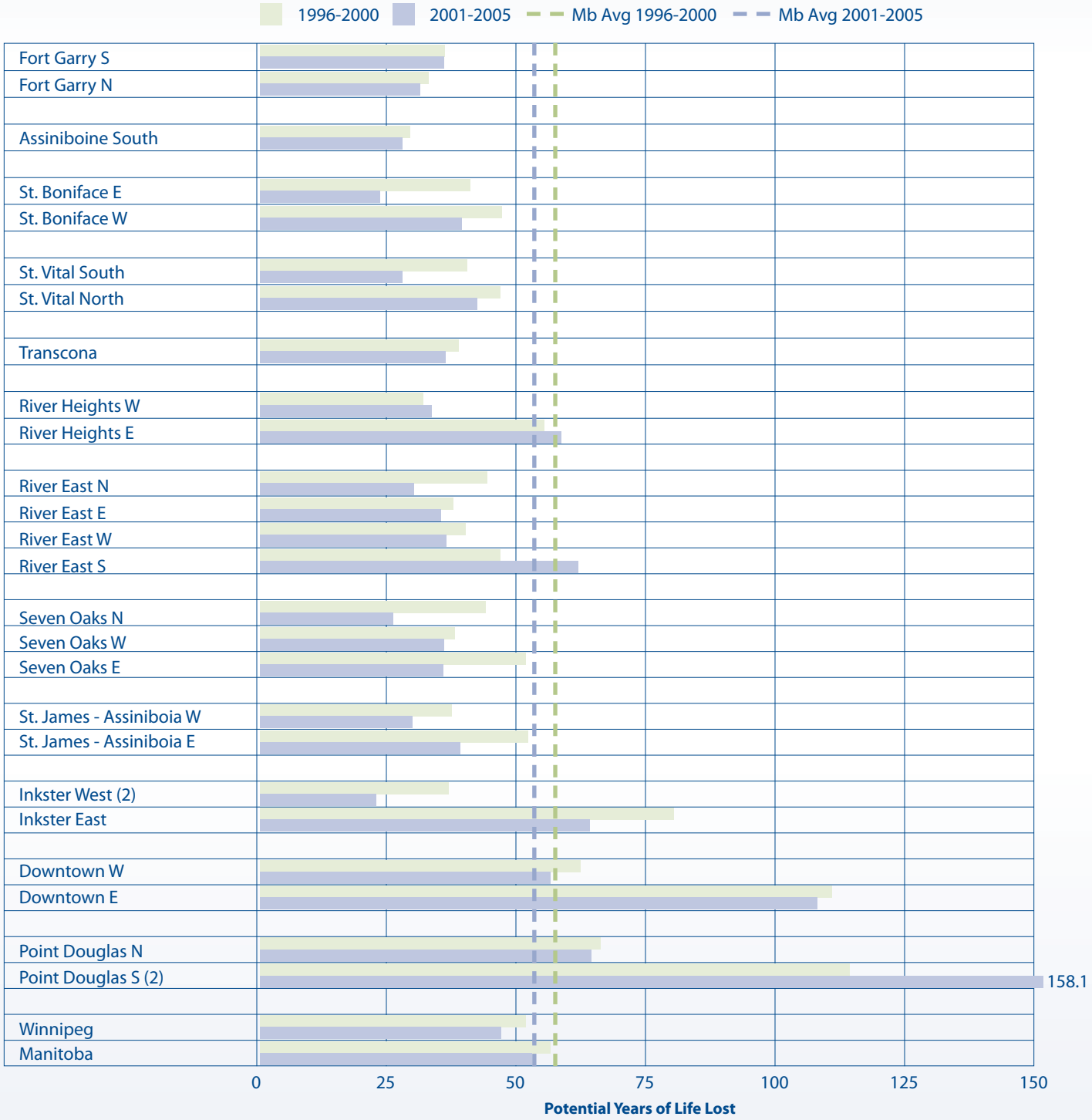
Potential Years of Life Lost (PYLL) by Winnipeg Neighborhood Cluster

Age- and sex-adjusted annual rate of PYLL per 1,000 residents aged 1-74, 1996-2000 & 2001-2005

Figure 1.4



Source: Manitoba Centre for Health Policy, 2009

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Infant Mortality

The rate of death among infants under 1 year old (excludes stillbirths and infants less than 500 grams or with a gestational age less than 22 weeks) to the number of live births in calendar years.

Crude infant mortality rates per 1,000 live births were calculated for two five–year time periods: calendar years 1996–2000 and 2001–2005.

Table 1.5

Community Area	Born 1996-2000	Born 2001-2005	% Change*
	Crude Rate per 1000	Crude Rate per 1000	
Fort Garry	4.1	3.4	-17.4%
Assiniboine South (s)	-	4.9	
St. Boniface	2.4	5.5	131.6%
St. Vital	3.7	2.6	-31.1%
Transcona (s)	-	4.0	
River Heights	5.5	3.9	-28.9%
River East	4.9	4.2	-13.1%
Seven Oaks	7.0	4.2	-39.7%
St. James - Assiniboia	5.0	3.0	-39.9%
Inkster	8.2	6.6	-19.4%
Downtown	6.6	7.2	9.5%
Point Douglas (2)	7.9	9.5	21.4%
Winnipeg	5.2	5.0	-3.3%
Manitoba	5.8	5.3	-8.4%

Source: Manitoba Centre for Health Policy, 2008

*Caution is warranted in comparing Community Area (CA) rates for infant mortality between 5-year time periods.
The actual number of deaths in infants is low in the Winnipeg Health Region. This means that the number of deaths in some CAs can be very small (5 or less) over five years and that one or two more deaths between time periods will indicate a large percentage change.
As a result, comparisons across CAs are not very reliable.

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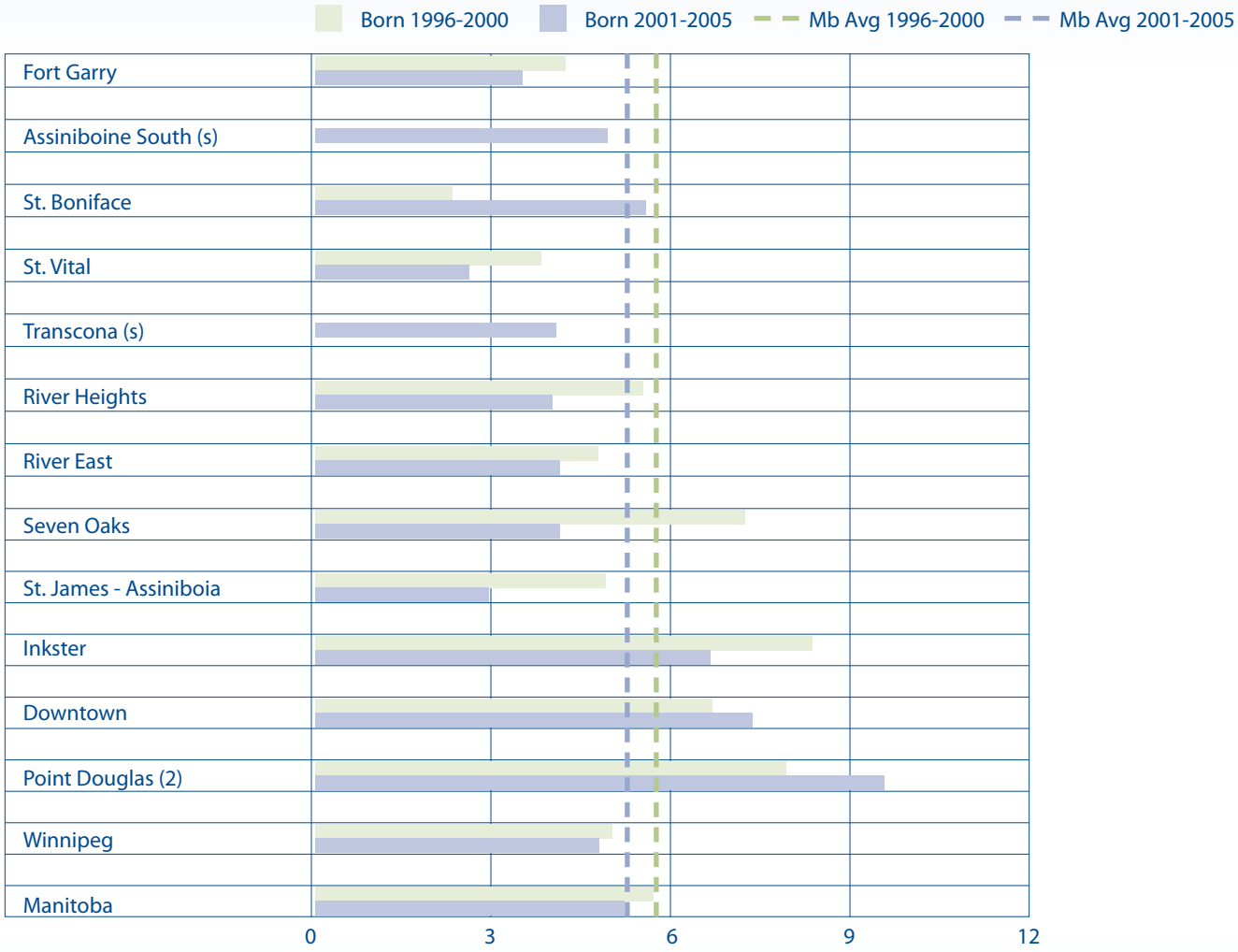
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant
's' indicates that the results were suppressed to ensure confidentiality

Infant Mortality Rates by Winnipeg Community Area

Crude rates per 1,000 infants, infants less than 500g or 22 weeks gestation were excluded

Figure 1.5



Source: Manitoba Centre for Health Policy, 2008

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Top 5 Causes of Mortality

The proportion (%) of deaths represented by the five most prevalent causes.
Data were analyzed for two 5–year periods: 1996–2000 and 2001–2005.

Table 1.6

Top 5 Causes of Death, 1996-2000 and 2001-2005							
Area	Causes	1996-2000 Deaths	Percentage of All Deaths	Area	Causes	2001-2005 Deaths	Percentage of All Deaths
			N=25794				N=26707
Winnipeg	Circulatory	10022	38.9%	Winnipeg	Circulatory	9038	33.8%
	Cancer	7230	28.0%		Cancer	7478	28.0%
	Respiratory	2275	8.8%		Respiratory	2125	8.0%
	Injury	1392	5.4%		Injury	1592	6.0%
	Digestive	984	3.8%		Endocrine & Metabolic	1386	5.2%
			N=47959				N=48593
Manitoba	Circulatory	18321	38.2%	Manitoba	Circulatory	16318	33.6%
	Cancer	12739	26.6%		Cancer	13217	27.2%
	Respiratory	4600	9.6%		Respiratory	3913	8.1%
	Injury	2946	6.1%		Injury	3126	6.4%
	Digestive	1775	3.7%		Endocrine & Metabolic	2653	5.5%

Source: Manitoba Centre for Health Policy, 2009

*Total number of deaths is approximate as some cells in the analysis (death by cause) are too small to report and, therefore, are suppressed and not available to be included in the total.

Health Status (Self-rated)

The age– and sex–adjusted percentage of participants who responded to each response category to the question in the CCHS: "In general, would you say your health is: *excellent, very good, good, fair, or poor*?". [A clarification is offered to participants in the survey: *"By health, we mean not only the absence of disease or injury but also physical, mental and social wellbeing."*] Responses of 'Fair' and 'Poor' were combined to avoid suppressing results. Those responding 'Don't Know' were excluded.

The age–and sex–adjusted proportion (%) of respondents in each group is shown. Results from CCHS cycles 1.1 (2001), 2.1 (2003) and 3.1 (2005) were combined, so changes over time are not available.

Table 1.7

Community Area	Percentage			
	Excellent	Very Good	Good	Fair/ Poor
Fort Garry	25.1%	43.0%	22.8%	9.1%
Assiniboine South	29.7%	40.4%	22.8%	*7.0%*
St. Boniface	23.6%	38.0%	28.2%	10.3%
St. Vital	20.1%	42.4%	25.6%	11.9%
Transcona	25.5%	34.2%	27.4%	*12.9%*
River Heights	**29.2%**	37.5%	25.2%	***8.0%***
River East	20.6%	39.0%	27.1%	13.3%
Seven Oaks	22.8%	37.3%	28.1%	11.7%
St. James - Assiniboia	21.6%	40.1%	28.3%	10.1%
Inkster	29.3%	**30.6%**	29.2%	*10.8%*
Downtown	22.7%	35.4%	25.6%	**16.3%**
Point Douglas	*18.2%*	37.3%	29.0%	*15.5%*
Winnipeg	23.3%	38.5%	**26.5%**	11.7%
Manitoba	21.9%	38.8%	27.7%	11.6%

Source: Manitoba Centre for Health Policy, 2009

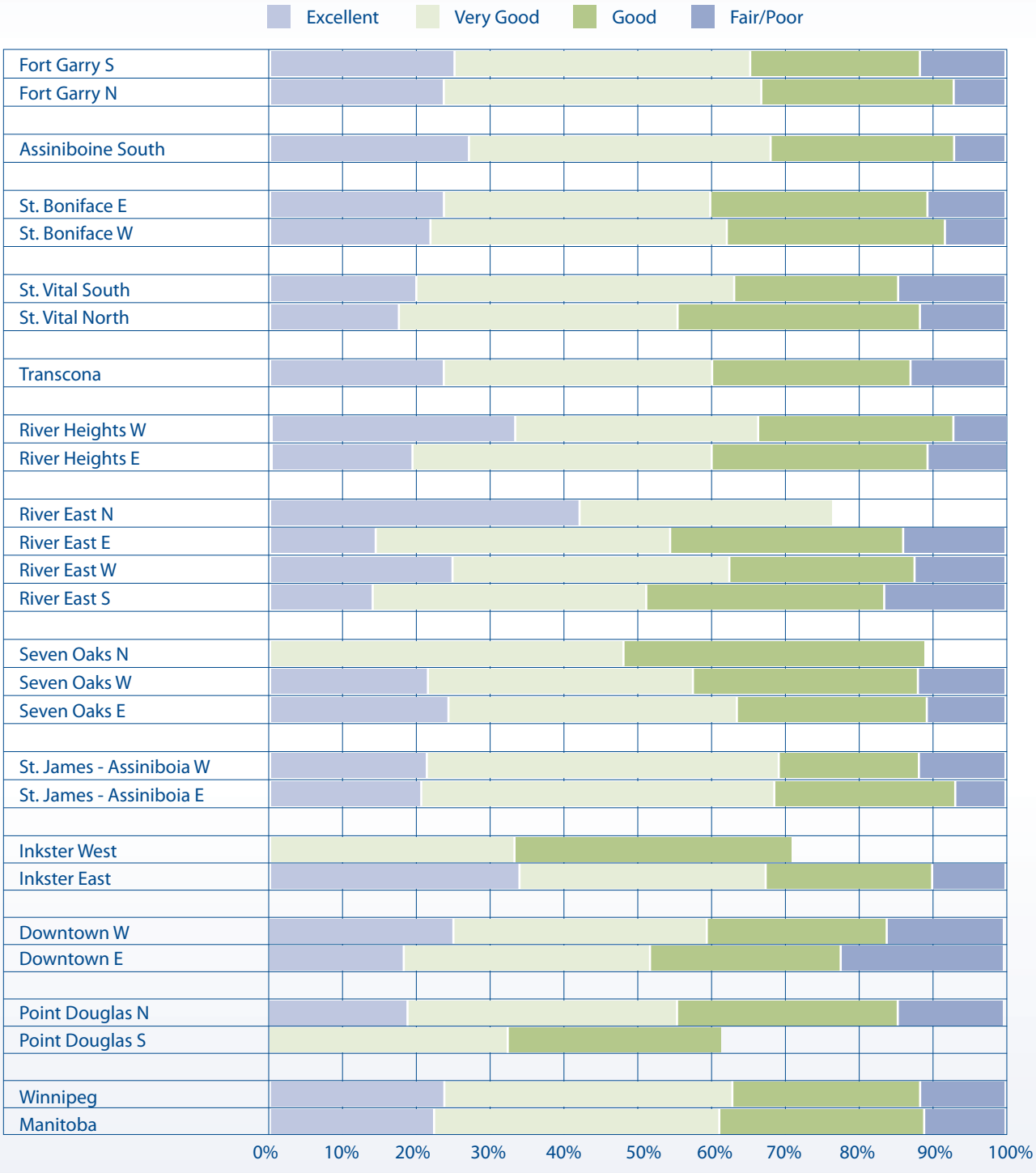
Age - and sex-adjusted percentage of self-rated health responses in a weighted population sample of residents of Manitoba, aged 12+ years
bold - indicates area's rate was statistically different from Manitoba average
italics - indicates a warning - the area's rate is highly variable and should be interpreted with caution

*These data are drawn from the responses of those Manitobans randomly chosen to participate in the Canadian Community Health Survey (CCHS). The limitations to these data are included under the section, "How to read this report". The SF-36 is the 36-item Short Form survey developed for the Medical Outcomes Study. It contains 36 questions about health status and physical and mental functioning.

Self-rated Health by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percentage of self-rated health in a weighted population sample of residents of Manitoba, aged 12+ years
CCHS 1.1 (2001), 2.1 (2003), and 3.1 (2005) Combined

Figure 1.6



Source: Manitoba Centre for Health Policy, 2009

Physical Functioning (Physical Health)

Age- and sex-adjusted percentage of persons at perfect physical functioning (score=100) vs. others (score < 100) in a weighted population sample of residents of Winnipeg and Manitoba, aged 12+ years

The physical functioning scores are derived from the SF–36 questionnaire. Basic physical functioning is assessed on a scale from 0 to 100 ("0" meaning unable to bathe or dress or walk one block; "100" meaning capable of vigorous activity). Results from CCHS cycles 2.1 (2003) and 3.1 (2005) were combined and included.

Table 1.8

Community Area	Percentage	
	Less than perfect physical functioning	Perfect physical functioning
	Score < 100	Score =100
Fort Garry	35.9%	64.1%
Assiniboine South	42.0%	58.0%
St. Boniface	43.1%	56.9%
St. Vital	43.9%	56.1%
Transcona	47.9%	52.1%
River Heights	39.5%	60.5%
River East	46.3%	53.7%
Seven Oaks	43.1%	56.9%
St. James - Assiniboia	46.8%	53.2%
Inkster	44.7%	55.3%
Downtown	46.0%	54.0%
Point Douglas	45.8%	54.2%
Winnipeg	44.0%	56.0%
Manitoba	44.4%	55.6%

Source: Manitoba Centre for Health Policy, 2009

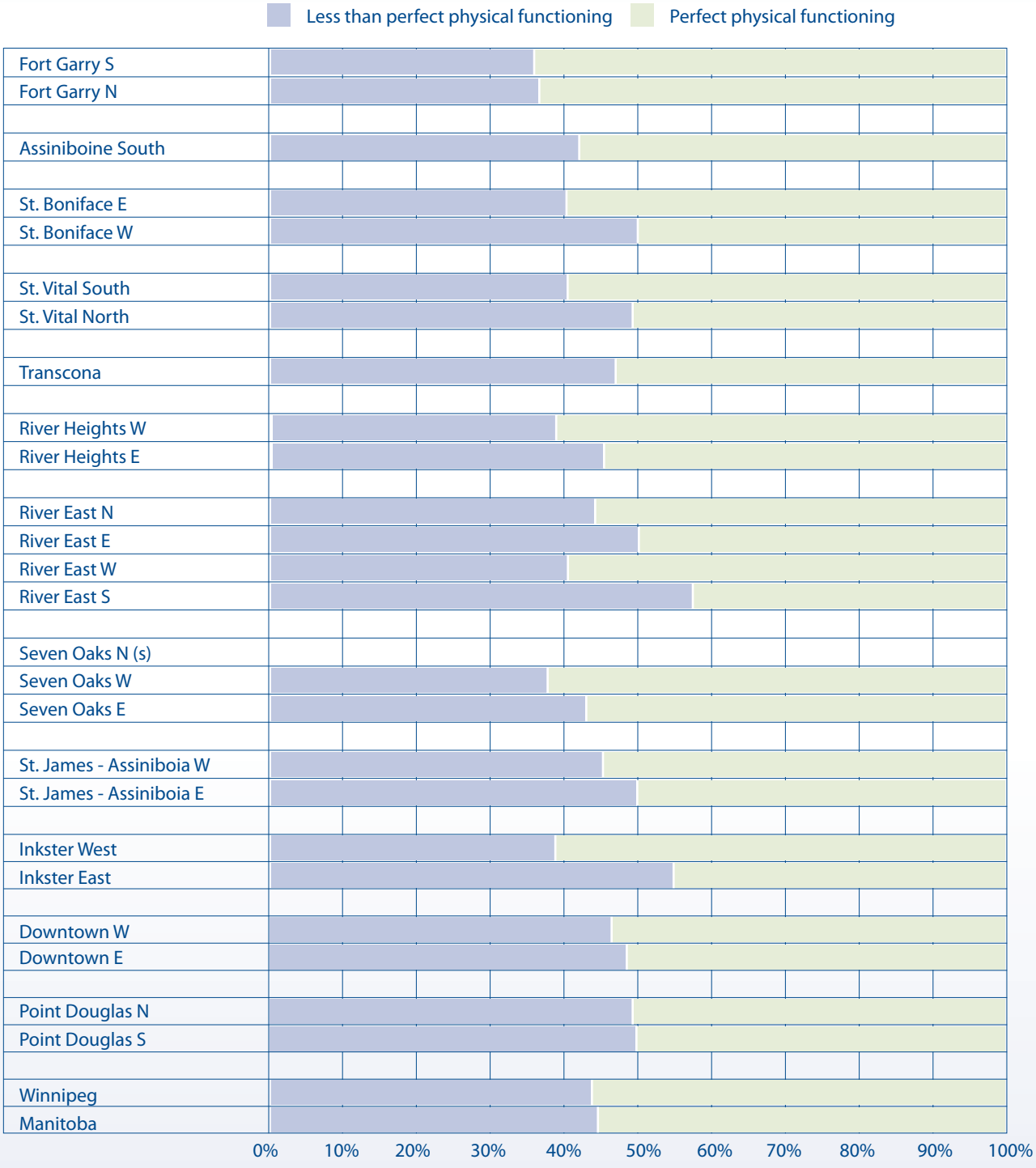
[1] These data are drawn from the responses of those Manitobans randomly chosen to participate in the Canadian Community Health Survey (CCHS). The limitations to these data are included under the section, "How to read this report". The SF-36 is the 36-item Short Form survey developed for the Medical Outcomes Study. It contains 36 questions about health status and physical and mental functioning. The physical and mental components are derived from the 36-items and are used as generic indicators of health status.

Physical Functioning (Physical Health) by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percentage of persons at perfect physical functioning (score=100) vs. others (score < 100) in a weighted population sample of residents of Winnipeg and Manitoba, aged 12+ years

CCHS 2.1 (2003) and 3.1 (2005) Combined

Figure 1.7



Source: Manitoba Centre for Health Policy, 2009

Mental Health Status

Age- and sex-adjusted percentage of persons at different levels of self-reported mental health in a weighted population sample of residents of Winnipeg and Manitoba, aged 12+ years

The general mental health scores are derived from the SF–36 questionnaire. The scale measures overall mental health on a scale of 0 to 100 (a higher score is better).

Based on the distribution of scores, three groups were created with approximately one–third of respondents in each group: Low (score 0–79), Medium (score 80–91), and High (score 92–100).

The age– and sex–adjusted percentage of survey respondents in each group is shown. Results from CCHS cycles 2.1 (2003) and 3.1 (2005) were combined and are included.

Table 1.9

Community Area	Percentage		
	Low (0-79)	Medium (80-91)	High (92-100)
Fort Garry	26.5%	37.4%	36.1%
Assiniboine South	*18.8%*	42.1%	39.1%
St. Boniface	23.4%	42.3%	34.3%
St. Vital	24.7%	37.1%	38.3%
Transcona	29.1%	27.3%	43.6%
River Heights	25.9%	34.1%	40.1%
River East	27.6%	**25.5%**	46.8%
Seven Oaks	*19.4%*	39.0%	41.5%
St. James - Assiniboia	23.7%	39.4%	36.9%
Inkster	30.6%	33.9%	35.5%
Downtown	31.0%	34.4%	34.5%
Point Douglas	**40.5%**	31.6%	*28.0%*
Winnipeg	**26.7%**	34.8%	**38.5%**
Manitoba	25.4%	34.5%	40.1%

Source: Manitoba Centre for Health Policy, 2009

bold - indicates area's rate was statistically different from Manitoba average
italics - indicates a warning - the area's rate is highly variable and should be interpreted with caution

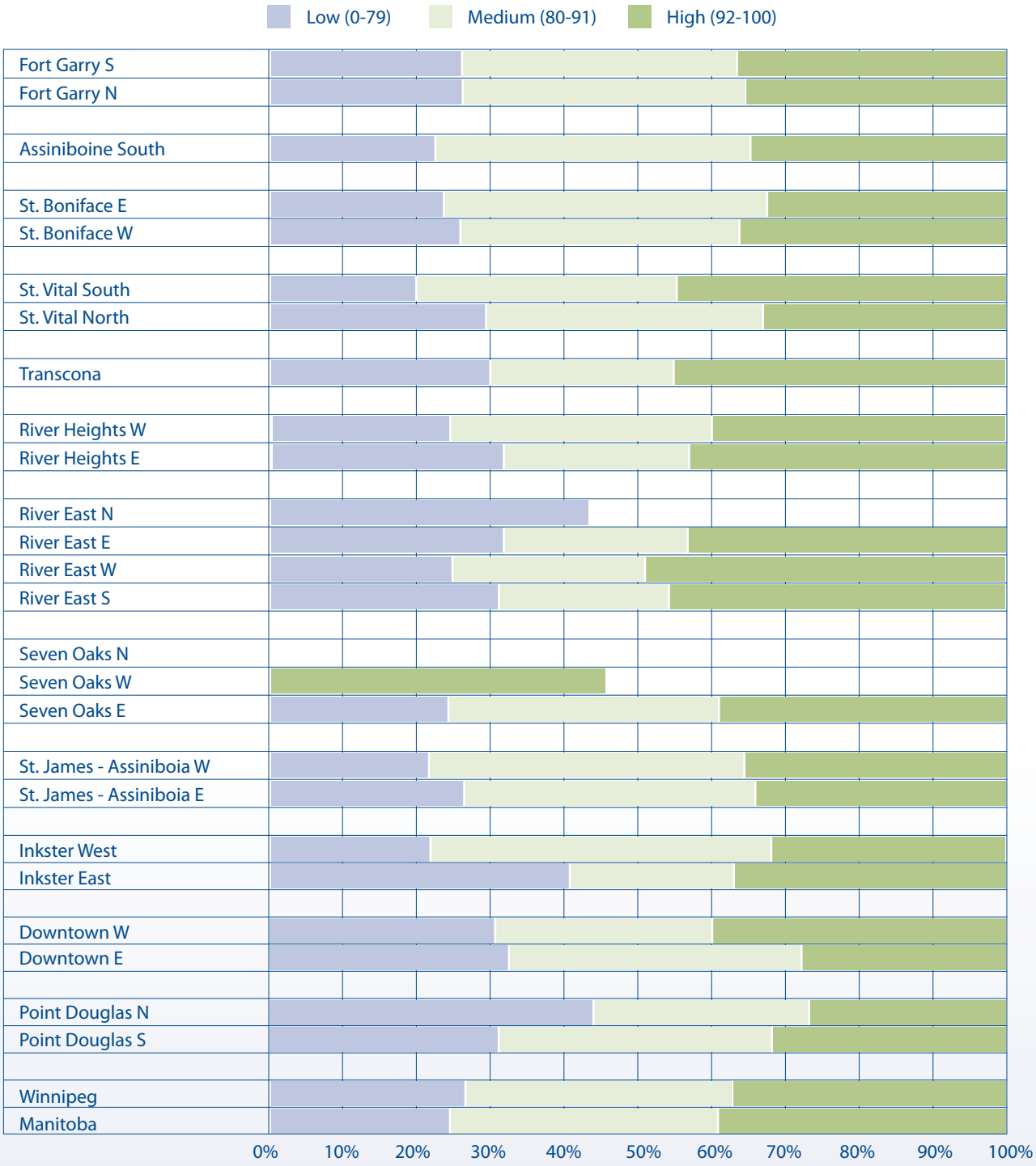
[1] These data are drawn from the responses of those Manitobans randomly chosen to participate in the Canadian Community Health Survey (CCHS). The limitations to these data are included under the section, "How to read this report". The SF-36 is the 36-item Short Form survey developed for the Medical Outcomes Study. It contains 36 questions about health status and physical and mental functioning. The physical and mental components are derived from the 36-items and are used as generic indicators of health status.

Mental Health Status by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percentage of persons at different levels of self-reported mental health in a weighted population sample of residents of Winnipeg and Manitoba, aged 12+ years

CCHS cycles 2.1 (2003) and 3.1 (2005) combined

Figure 1.8



Source: Manitoba Centre for Health Policy, 2009

2. Early Childhood & Maternal Health

Winnipeg Regional Health Authority AT A GLANCE

	Current Rate	Previous Rate	Range of Current Estimates*** (low CA-high CA)
Teen Births* (Per 1000 females age 15-19 years)	**24.0/1000** 2001/02-2005/06	**30.0/1000** 1996/97-2000/01	**6.7 - 79.8/1000**
Pre-term Births* (Of live births born in under 37 weeks)	**8.0%** 1996/97-2000/01	**7.6%** 2001/02-2005/06	**6.7 – 10.0%**
Maternal Alcohol Use**	**12.1%** 2006	**11.8 %** 2003	**2.6 - 24.8%**
Maternal Smoking**	**20.5%** 2006	**20.8%** 2003	**6.6 – 42.8%**
Maternal depression & anxiety disorders (Combined)**	**15.8%** 2006	**13.4%** 2003	**12.2 – 19.5%**
Newborns born to families with Financial Difficulties**	**19.2%** 2006	**19.7%** 2003	**6.6 – 47.4%**
Newborns born to mothers with Less than Grade 12 Education**	**18.4** 2006	**18.5** 2003	**4.1 – 45.0%**
Positive Families First Screen**	**24.8%** 2006	**23.4%** 2003	**11.6 – 53.9%**
Enrollment in the Families First Program** (percentage of positive screens)	**20.1%** 2006	**21.9%** 2005	**N/A**

*Rates for Teen births are age-adjusted to the Manitoba population and rates for Pre-term births are adjusted according to the sex of the baby in the 1st time period of the rate/event calculation; all remaining rates are percentages of respondents from the Families First data.

** These data are from the Families First Screening form. The Families First program provides a continuum of services including home visiting for selected families from the prenatal period through to school entry. Eligibility is determined through a screening and assessment process which collects data for key prenatal and family factors.

***CA=Community Areas
Detailed definitions including data sources and ICD-9-CM diagnostic codes are available in Appendix A

N/A = data not available

This section presents several indicators of both the determinants and outcomes of **early childhood and maternal health** in Winnipeg. The indicators draw part of a picture of the behaviours, physical and social environments, which are known to affect the health outcomes of newborns and their mothers.

We report first on the rate of live births to teenage mothers (***Teen Births*** to women aged 15-19 years) and the ***Pre-term Birth*** rate. Data for both of these indicators are obtained from administrative data. The remaining indicator values: rates of ***maternal alcohol use, maternal smoking, maternal depression & anxiety (combined), low maternal education*** (less than grade 12) and newborns being born into a ***family with financial difficulties*** are based on data gathered on the Families First screening form. As part of the ***Families First*** program, public health nurses screen almost all families with newborns to identify which families would benefit from additional family and home visiting supports.

Teen Births are counted as age-adjusted rates of live births in females aged 15-19 years of age. Being a teenaged mother is an important public health issue due to its association with various adverse maternal and infant health outcomes. Teenage mothers have a two-fold higher risk of having a low birth weight baby or a pre-term birth compared with adult mothers. In addition, infant and maternal mortality rates for teenage mothers are almost three-fold and two-fold higher, respectively. Also, teenage mothers are more likely to end their formal education.[5]

In Winnipeg, the proportion of live births to teenage mothers decreased between the two 5-year periods from 30.03/1000 (1996/97-2000/01) to 24.03/1000 (2001/02-2005/06). There was more than a 10-fold difference between CAs with the lowest rates: Assiniboine South (6.66) and Fort Garry (7.55) and the CA with the highest rate: Point Douglas (79.80)

Pre-term Births are defined as birth before 37 weeks gestational age. Pre-term birth is a major cause of neonatal mortality in developed countries. Premature infants are at greater risk for death and complications, including disabilities and impediments in growth and mental development.

The rate of pre-term births increased slightly in the Winnipeg Health Region (WHR) between the two time periods: 1996-2000, 7.6% and 2001-2005, 8.0%. There is a slight difference in proportion of pre-term birth rates between the CAs: St. Vital (6.7%) and Fort Garry (7.0%) versus Point Douglas (9.4%) and Downtown (10.0%). Transcona had the highest increase in rates from 6.8% in 1996-2000 to 9.2% in 2001-2005.

Families First data: The following indicators are derived from the Families First screening form. The Families First program provides a continuum of services including home visiting for selected families from the prenatal period through to school entry. Public health nurses in Winnipeg screen an estimated 6700 births annually for risk factors affecting the well-being of children using the Families First screening form. The Families First screen includes 38 biological, social and demographic risk factors related to childhood development. Families who have three or more risk factors using this screen are then assessed using a parent survey and are offered a home visiting program if the assessment indicates the family may benefit from additional supports. The data collected through the Families First screening form is sometimes incomplete with proportion of missing values (in 2006) ranging from a low of 2.8% for indicating 3 or more risk factors to 13.2% for indicating of less than a grade 12 education.

Maternal alcohol use by pregnant women is defined as the number of women who reported consuming alcoholic beverages during pregnancy, expressed as a proportion of all pregnant women who answered this question during the Families First screening process. Maternal alcohol consumption can have health consequences for both the mother and fetus, including fetal alcohol spectrum disorder (FASD).[6]

Alcohol use rates among pregnant women have stayed relatively stable in Winnipeg over time (11.8% in 2003 and 12.1% in 2006). These rates reflect the overall Canadian rate reported in Public Health Agency of Canada's 2008 Canadian Perinatal Health Report: 10.5% based on 2005 CCHS survey data.[2] In Winnipeg, a difference between the CAs is found; the rate in Point Douglas (2006: 24.8%) is six times that found in Fort Garry (2006: 4.4%). Use of alcohol in pregnancy appears to be significantly decreasing in Assiniboine South but increasing in St. Boniface. Caution is warranted when interpreting these rates as the data are based on self-reported data.

Maternal smoking in pregnancy is defined as the number of pregnant women who report smoking during pregnancy, expressed as a proportion of all pregnant women who answered this question during the Families First screening. Maternal cigarette smoking increases the risk of intrauterine growth restriction, pre-term birth, spontaneous abortion, placental complications, stillbirth, sudden infant death syndrome (SIDS) and overall infant mortality.[7]

[5] Rotermann M. Second or subsequent births to teenagers. Health Rep. 2007;18(1):39–42. Klein JD; American Academy of Pediatrics Committee on Adolescence. Adolescent pregnancy: current trends and issues. Pediatrics. 2005;116(1):281–6. Department of Child and Adolescent Health and Development; Department of Reproductive Health and Research (World Health Organization). Adolescent Pregnancy: Issues in Adolescent Health and Development. Geneva: WHO; 2004.

[6] Canadian Perinatal Health Report (PHAC 2008): http://www.phac-aspc.gc.ca/publicat/2008/cphr-rspc/index-eng.php.

[7] Office of the Surgeon General. Health consequences of tobacco use among women, reproductive outcomes. In: Women and Smoking. Rockville, MD: U.S. Department of Health and Human Services; 2001. p. 272–307.

Although the overall proportion of mothers of newborns who reported smoking during pregnancy has remained stable since 2003, a nearly six-fold difference is apparent in 2006 between the CA having the lowest values (Fort Garry, 6.6% in 2006) and those having the highest values: Downtown (31.9%) and Point Douglas (42.8%). There are no significant changes in trend over the years 2003-2006. Maternal smoking in Winnipeg (20.5%, 2006) is well over the rates reported nationally, 13.4% in 2005 (PHAC, 2008).

Maternal depression & anxiety disorders (combined) is the rate of newborns with mothers who reported depression, anxiety or both and is defined as the number of pregnant women who report these conditions, expressed as a proportion of all pregnant women who answered this question during the Families First screening. Maternal depression, whether in the prenatal or postnatal period, is related to behavioural difficulties and cognitive deficits in infants and children.[8]

The proportion of newborns with mothers who report that they had depression and anxiety disorders during or post pregnancy has increased in Winnipeg (2003: 13.4% to 2006: 15.8%). This proportion is similar to that found in a US (Michigan) study of 3472 women from a screening survey administered in 10 obstetrics clinics.[9] There are no obvious differences amongst the CAs. Maternal depression and anxiety rates do not follow the geographic patterns observed with mortality and chronic diseases.

Newborns born to Families receiving Income Assistance/having Financial Difficulties is an indicator defined as a family having insufficient financial resources available to meet basic needs. Overall, the proportion of newborns born to families self-reporting financial difficulties was 19.2% (2006) although it varied substantially by CA. River Heights had the lowest proportion of newborns born to families reporting financial difficulty (6.6% in 2006) and Point Douglas had the highest (47.4%). This is a 7-fold difference. However, the proportion of newborns to families reporting financial difficulties has significantly decreased over time in the Downtown CA (2003: 42.5% and 2006: 38.4%).

Newborns born to Mothers with less than a Grade 12 education is a rate of low maternal education and is defined as the number of women with less than a Grade 12 high school education who delivered a live born child, expressed as a proportion of all pregnant women who answered this question during the Families First screening. A low maternal educational level has been consistently related to poor perinatal health outcomes (for example, pre-term birth, small-for-gestational-age, stillbirth and infant deaths).[10]

The proportion of Winnipeg newborns born to mothers with less than a grade 12 education has been stable over time (18.5% in 2003 and 18.4% in 2006). A wide difference in this indicator is observed; the proportion in Point Douglas (2006: 45.0%) is almost 11 times greater than that found in River Heights (2006: 4.1%). Two CAs have seen a significant decrease in proportion of newborns born to mothers with less than a grade 12 education over time: St. Vital (2003: 9.3% and 2006: 6.0%) and River Heights (2003: 7.7% and 2006: 4.1%). Two CAs have seen a significant increase in proportion of newborns born to mothers report having less than a Grade 12 education: St. Boniface (2003: 5.8% and 2006: 8.9%) and Seven Oaks (2003: 11.1% and 2006: 17.4%).

Positive Families First Screen Families of newborns having three or more risk factors (see above) as designated on the Families First screening form are then further assessed using a parent survey. On the basis of the parent survey results, eligible families are then offered home visiting supports. The proportion of families in Winnipeg reporting three or more risk factors has stayed constant since 2003 (23.4%, 2003 and 24.8%, 2006). However, there is an almost six-fold difference between the CAs with the lowest rates of a positive screen (Fort Garry, 9.0 % and Assiniboine South 12.2%) and the one with the highest positive screen rates (Point Douglas, 55.5%) 2003-2006.

Screening For and Use of Families First Program Families that test positive for three or more risk factors on the screening form (see above) are further assessed using a parent survey. Families scoring 25+ on the parent survey are then eligible to enroll in the Families First Program which delivers home visiting supports. Of those with positive screens about 20% enroll in the Families First Program.

[8] Essex MJ, Klein MH, Miech R, Smider NA. Timing of initial exposure to maternal major depression and children's mental health symptoms in kindergarten. Br J Psych 2001;179(2): 151-156.
Hammen C, Brennan PA. Severity, chronicity, and timing of maternal depression and risk for adolescent offspring diagnoses in a community sample. Arch Gen Psych 2003;60(3): 253-258.
Bonari L, Pinto N, Ahn E, Einarson A, Steiner, M, Koren, G. Perinatal risks of untreated depression during pregnancy. Can J Psych 2004; 49(11): 726-735.

[9] Marcus, S. M., Flynn, H. A., Blow, F. C., & Barry, K. L. Depressive symptoms among pregnant women screened in obstetrics settings. J Women Hlth, 2003;12: 373–380.

[10] Canadian Perinatal Health Report (PHAC 2008): http://www.phac-aspc.gc.ca/publicat/2008/cphr-rspc/index-eng.php.

ADDITIONAL INFORMATION[11]

For a full annotated report of many of these indicators, the reader is referred to the Canadian Perinatal Health Report (2008): http://www.phac-aspc.gc.ca/publicat/2008 /cphr-rspc/index-eng.php. The report is a collaboration between the Public Health Agency of Canada and the Canadian Perinatal Surveillance System (CPSS). They use pan-Canadian data from provincial vital statistics, hospitalization data and the Canadian Community Health Survey to report on 29 indicators of maternal and infant health.

A Families First Program Evaluation has been completed and can be found at the link below: "Evaluating the effectiveness of the Families First home visiting program in improving the well-being of at-risk families with preschool children."
February 2010 http://www.gov.mb.ca/healthychild/familiesfirst/ff_eval2010.pdf
(Manitoba Government Department: Family Services and Consumer Affairs)

[11] Listing of these resources does not constitute endorsement or approval of the information contained herein by the WRHA.

Teen Births

The proportion of females aged 15 to 19 years who gave birth over two, five-year periods. The teen birth rate was calculated using hospital data by taking the ratio of live births to females aged 15 to 19 years to the total female population of the same age. The rates are adjusted per age per 1000 females aged 15-19 years.

Table 2.1

	1996/97-2000/01		2001/02-2005/06		
Community Area	Live Births in 5 years	Adjusted Rate per 1000 females	Live Births in 5 years	Adjusted Rate per 1000 females	% Change
Fort Garry (1,2,t)	128	12.3	86	7.6	-39.5%
Assiniboine South (1,2)	52	7.9	51	6.7	-10.6%
St. Boniface (1,2,t)	135	18.4	101	12.6	-28.8%
St. Vital (1,2,t)	198	19.9	125	12.3	-39.7%
Transcona (1,2,t)	125	20.9	75	12.2	-42.3%
River Heights (1,2,t)	152	22.0	109	15.3	-31.3%
River East (1,2,t)	411	27.1	310	19.5	-27.8%
Seven Oaks (1,2,t)	207	21.0	147	14.6	-28.5%
St. James - Assiniboia (1,2)	163	19.3	136	16.0	-17.6%
Inkster	231	39.3	217	35.6	-7.7%
Downtown (1,2,t)	705	71.3	642	58.2	-18.9%
Point Douglas (1,2)	526	85.5	568	79.8	-7.3%
Winnipeg (1,2,t)	3033	30.0	2567	24.0	-20.2%
Manitoba (t)	7046	36.2	6130	30.1	-16.7%

Source: Manitoba Centre for Health Policy, 2008

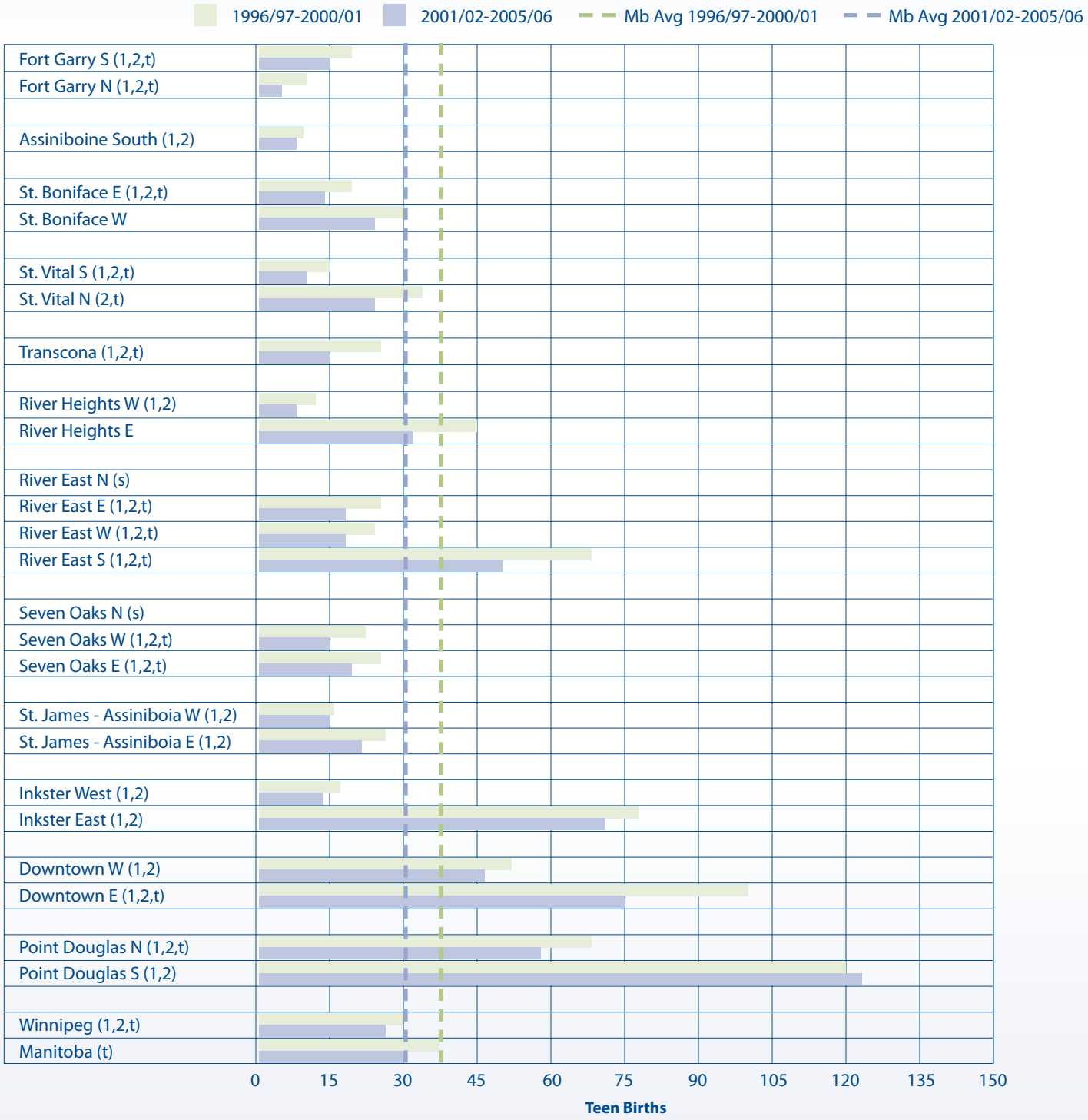
Adjusted rates per 1000 females estimate what an area's rate might have been, if that area's age distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Teen Births by Winnipeg Neighborhood Cluster

Age-adjusted rates per 1,000 females, 1996/97-2000/01 & 2001/02-2005/06

Figure 2.1



Source: Manitoba Centre for Health Policy, 2008

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Pre-term Births

The proportion (%) of any live births where the gestational age was less than 37 weeks (number of pre-term births expressed as a percentage), divided by the total number of live births. Values were calculated for two 5–year time periods, 1996/97–2000/01 and 2001/02–2005/06, and were adjusted according to the sex of the baby to the Manitoba population in the first time period.

Table 2.2

Pre-term Births					
	1996/97 - 2000/01		2001/02 - 2005/06		
Community Area	Births <37 weeks in 5 years	Adjusted Rate	Births <37 weeks in 5 years	Adjusted Rate	% Change
Fort Garry	271	7.9%	226	7.0%	-12.0%
Assiniboine South	112	7.5%	119	8.3%	10.0%
St. Boniface	179	7.0%	209	8.2%	17.6%
St. Vital	230	6.6%	210	6.7%	1.2%
Transcona (t)	136	6.8%	161	9.2%	35.5%
River Heights	214	6.9%	205	7.4%	5.9%
River East	395	7.6%	335	7.1%	-5.9%
Seven Oaks	237	7.8%	211	7.3%	-5.9%
St. James - Assiniboia	230	7.7%	194	7.2%	-5.9%
Inkster	188	8.5%	166	8.3%	-2.2%
Downtown (1,2,t)	441	8.3%	499	10.0%	20.3%
Point Douglas (2)	264	8.4%	295	9.4%	12.1%
Winnipeg (1)	2897	7.6%	2830	8.0%	5.1%
Manitoba (t)	5099	7.2%	5224	7.7%	7.9%

Source: Manitoba Centre for Health Policy, 2008

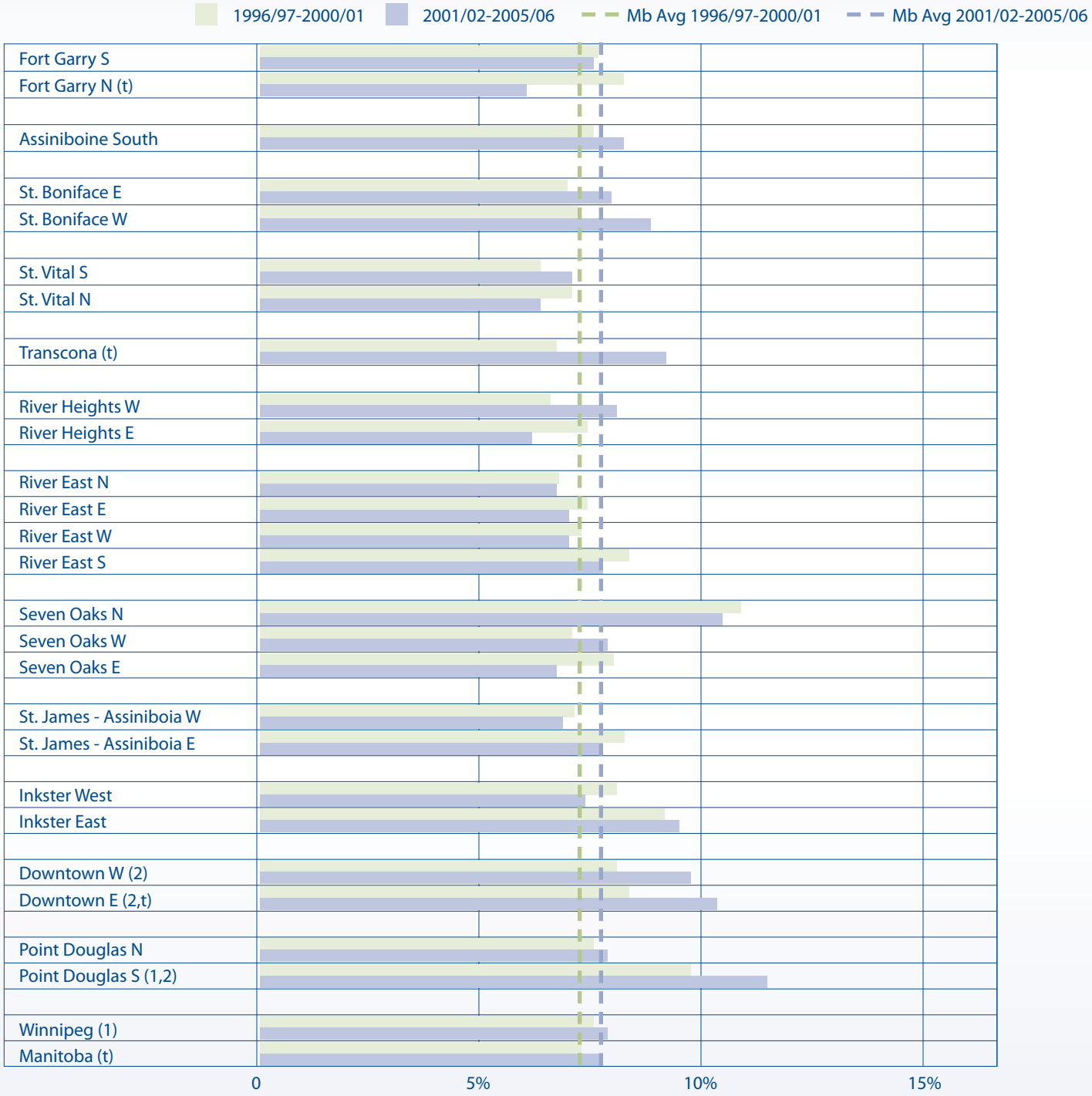
Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Pre-term Births by Winnipeg Neighborhood Cluster

Sex-adjusted percent of live born infants, less than 37 weeks gestation, 1996/97-2000/01 & 2001/02-2005/06

Figure 2.2



Source: Manitoba Centre for Health Policy, 2008

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Maternal Alcohol Use

The proportion (%) of mothers of newborns who used alcohol during pregnancy as indicated on the Families First program screening form. Counts and crude percentages are reported for four 1-year periods, 2003-2006.

Table 2.3

Maternal Alcohol Use									
	2003		2004		2005		2006		
Community Area	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Trend* (sig)
Fort Garry	388	20 (5.2%)	487	14 (2.9%)	495	18 (3.6%)	541	24 (4.4%)	
Assiniboine South	312	45 (14.4%)	235	21 (8.9%)	265	17 (6.4%)	253	18 (7.1%)	Dcr
St. Boniface	432	50 (11.6%)	464	69 (14.9%)	501	103 (20.6%)	554	104 (18.8%)	Incr
St. Vital	555	63 (11.4%)	578	50 (8.7%)	561	61 (10.9%)	537	47 (8.8%)	
Transcona	290	22 (7.6%)	318	37 (11.6%)	307	40 (13.3%)	321	67 (20.9%)	
River Heights	516	22 (4.3%)	496	17 (3.4%)	482	s	501	13 (2.6%)	Dcr
River East	826	91 (11.0%)	806	72 (8.9%)	824	101 (12.3%)	844	79 (9.4%)	
Seven Oaks	439	26 (5.9%)	495	47 (9.5%)	473	46 (9.7%)	507	48 (9.5%)	
St. James-Assiniboia	466	19 (4.1%)	425	24 (5.6%)	487	34 (7.0%)	447	23 (5.1%)	
Inkster	319	82 (25.7%)	336	69 (20.5%)	334	69 (20.7%)	330	54 (16.4%)	Dcr
Downtown	801	130 (16.2%)	848	111 (13.1%)	862	155 (18.0%)	813	136 (16.7%)	Incr
Point Douglas	542	124 (22.9%)	541	115 (21.3%)	549	112 (20.4%)	544	135 (24.8%)	
Winnipeg	5908	696 (11.8%)	6056	649 (10.7%)	6177	770 (12.5%)	6239	754 (12.1%)	

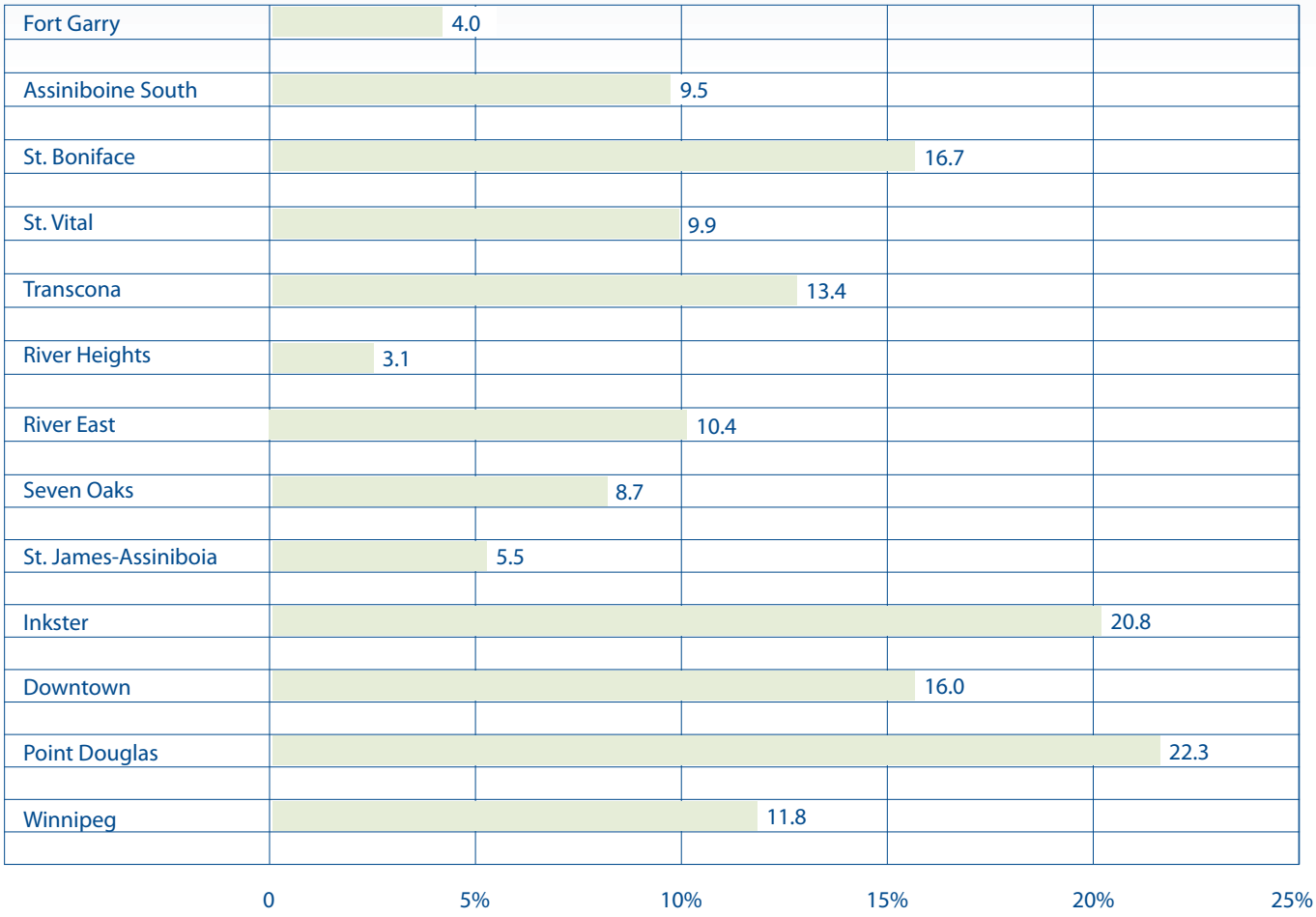
Source: Healthy Child Manitoba, 2008

"s''counts and percent means that there were 10 or less children, consequently results were suppressed.
* p-value comparisons of linear trend for results from 2003 to 2006. If a p-value is ≤0.05, then the comparison is statistically significant
# Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "maternal alcohol use".
Dcr=decreasing; Incr=increasing

Maternal Alcohol Use Rates by Winnipeg Community Area

Percentage of mothers of newborns screened by the Family First Program, 2003-2006

Figure 2.3



Source: Healthy Child Manitoba, 2008

Maternal Smoking

The proportion (%) of mothers of newborns who smoked during pregnancy as indicated on the Families First program screening form. Counts and crude percentages are reported for four 1-year periods, 2003-2006.

Table 2.4

Maternal Smoking								
	2003		2004		2005		2006	
Community Area	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)
Fort Garry	416	34 (8.2%)	513	42 (8.2%)	527	37 (7.0%)	577	38 (6.6%)
Assiniboine South	318	38 (12.0%)	244	25 (10.3%)	263	19 (7.2%)	261	34 (13.0%)
St. Boniface	438	48 (11.0%)	435	62 (14.3%)	490	61 (12.5%)	548	79 (14.4%)
St. Vital	580	78 (13.5%)	585	83 (14.2%)	573	75 (13.1%)	554	71 (12.8%)
Transcona	287	48 (16.7%)	312	70 (22.4%)	306	58 (19.0%)	332	60 (18.1%)
River Heights	523	57 (10.9%)	499	49 (9.8%)	493	54 (11.0%)	496	53 (10.7%)
River East	853	180 (21.1%)	807	174 (21.6%)	837	187 (22.3%)	852	195 (22.9%)
Seven Oaks	475	80 (16.8%)	506	65 (12.8%)	478	75 (15.7%)	517	93 (18.0%)
St. James-Assiniboia	476	57 (12.0%)	437	64 (14.7%)	496	70 (14.1%)	454	59 (13.0%)
Inkster	336	105 (31.3%)	356	95 (26.7%)	376	119 (31.7%)	351	97 (27.6%)
Downtown	834	264 (31.7%)	861	265 (30.8%)	893	278 (31.1%)	836	267 (31.9%)
Point Douglas	580	278 (47.9%)	565	256 (45.3%)	565	280 (49.6%)	561	240 (42.8%)
Winnipeg	6140	1276 (20.8%)	6150	1259 (20.5%)	6338	1325 (20.9%)	6392	1309 (20.5%)

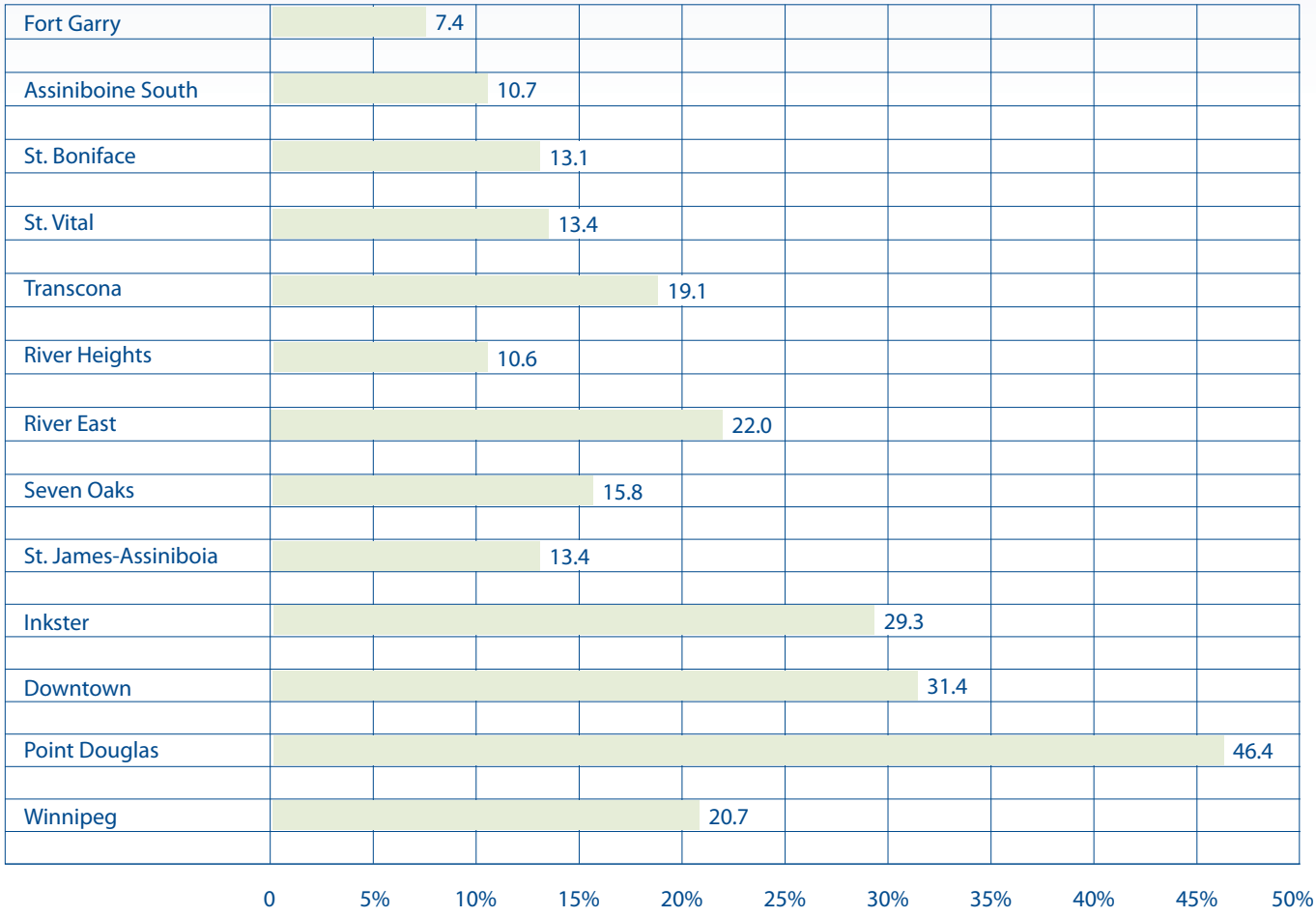
Source: Healthy Child Manitoba, 2008

Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "maternal smoking".

Maternal Smoking Rates by Winnipeg Community Area

Percentage of mothers of newborns screened by the Family First Program, 2003-2006

Figure 2.4



Source: Healthy Child Manitoba, 2008

Maternal Depression & Anxiety Disorders (Combined)

The proportion (%) of mothers of newborns with a diagnosis of depression and anxiety disorder (combined) as indicated on the Family First program screening form. Counts and crude percentages are reported for four 1-year periods, 2003-2006.

Table 2.5

Maternal Depression & Anxiety Disorders (Combined)									
	2003		2004		2005		2006		
Community Area	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Trend* (sig)
Fort Garry	335	34 (10.2%)	376	46 (12.2%)	467	48 (10.3%)	536	75 (14.0%)	
Assiniboine South	319	45 (14.1%)	230	29 (12.6%)	264	33 (12.5%)	229	28 (12.2%)	
St. Boniface	403	47 (11.7%)	460	58 (12.6%)	515	94 (18.3%)	558	97 (17.4%)	Incr
St. Vital	549	60 (10.9%)	542	79 (14.6%)	538	73 (13.6%)	526	70 (13.3%)	
Transcona	279	35 (12.5%)	315	48 (15.2%)	311	39 (12.5%)	327	59 (18.0%)	
River Heights	491	62 (12.6%)	456	58 (12.7%)	473	53 (11.2%)	440	68 (15.5%)	
River East	827	117 (14.2%)	790	129 (16.3%)	807	126 (15.6%)	843	140 (16.6%)	
Seven Oaks	409	50 (12.2%)	474	57 (12.0%)	461	52 (11.3%)	506	73 (14.4%)	
St. James-Assiniboia	465	44 (9.5%)	415	50 (12.1%)	473	57 (12.1%)	443	60 (13.5%)	
Inkster	323	45 (13.9%)	336	43 (12.8%)	347	55 (15.9%)	338	46 (13.6%)	
Downtown	712	111 (15.6%)	745	124 (16.6%)	806	127 (15.8%)	747	132 (17.7%)	
Point Douglas	514	100 (19.5%)	544	95 (17.5%)	538	111 (20.6%)	544	106 (19.5%)	
Winnipeg	5640	754 (13.4%)	5705	819 (14.4%)	6026	872 (14.5%)	6080	963 (15.8%)	

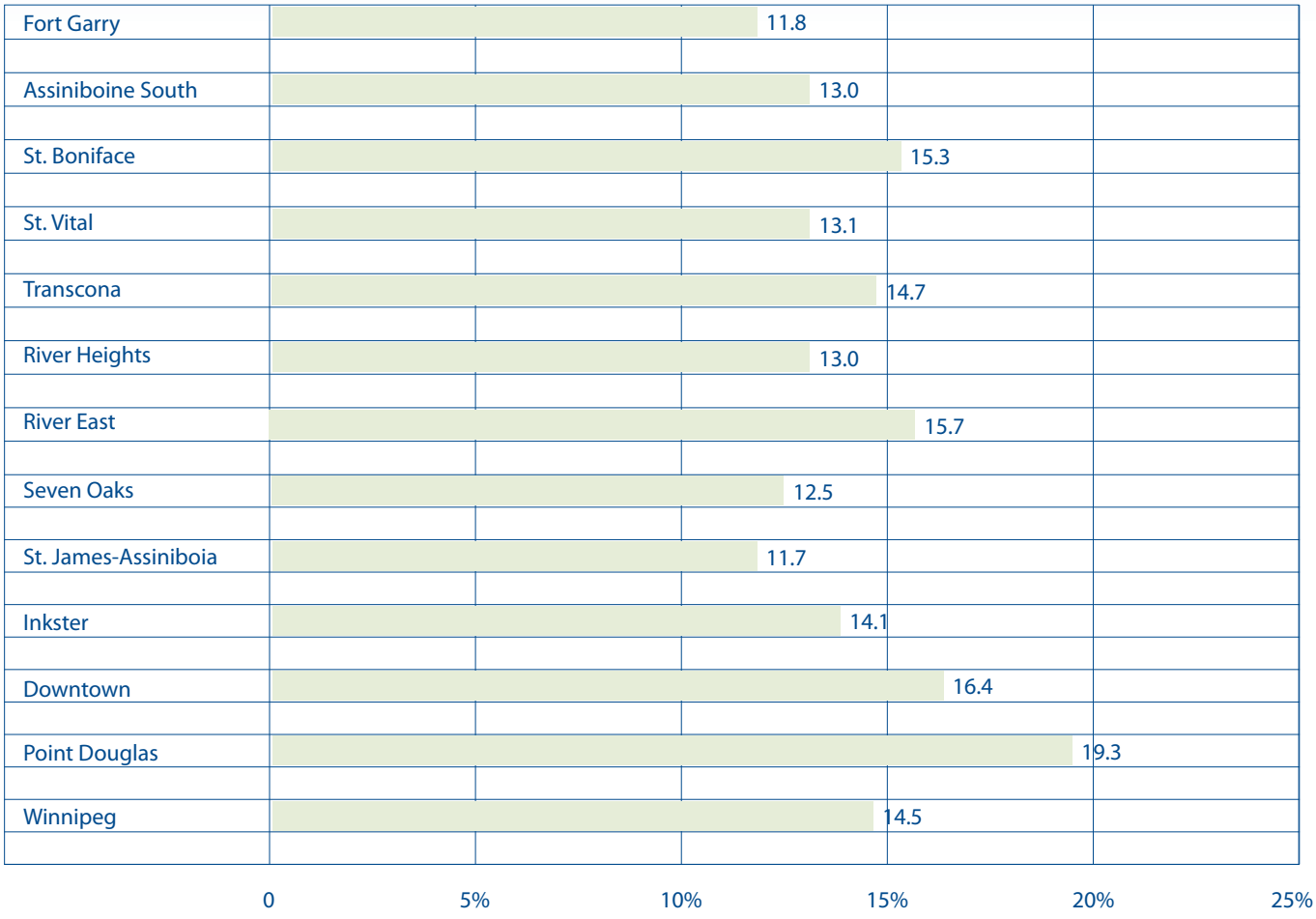
Source: Healthy Child Manitoba, 2008

* p-value comparisons of linear trend for results from 2003 to 2006. If a p-value is ≤0.05, then the comparison is statistically significant
# Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "maternal depression & anxiety disorders combined".
Incr = increasing

Maternal Depression and Maternal Anxiety Disorders (Combined) by Winnipeg Community Area

Percentage of mothers of newborns screened by the Family First program, 2003-2006

Figure 2.5



Source: Healthy Child Manitoba, 2008

Newborns Born to Families with Financial Difficulties

Proportion (%) of newborns to families experiencing financial difficulties as indicated on the Family First program screening form. This risk factor includes mothers who are either on social assistance or income support, or who report financial difficulties. Financial difficulties are defined as having insufficient financial resources available to meet basic needs. Counts and crude percentages are reported for four 1-year periods, 2003-2006.

Table 2.6

Families of Newborns with Financial Difficulties									
	2003		2004		2005		2006		
Community Area	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Trend* (sig)
Fort Garry	391	32 (8.2%)	466	28 (6.0%)	493	48 (9.7%)	546	49 (9.0%)	
Assiniboine South	318	19 (6.0%)	232	20 (8.6%)	272	19 (7.0%)	257	27 (10.5%)	
St. Boniface	385	32 (8.3%)	407	37 (9.1%)	460	57 (12.4%)	506	46 (9.1%)	
St. Vital	551	56 (10.2%)	566	62 (11.0%)	566	61 (10.8%)	545	55 (10.1%)	
Transcona	274	22 (8.0%)	301	26 (8.6%)	304	29 (9.5%)	322	38 (11.8%)	
River Heights	513	50 (9.8%)	476	30 (6.3%)	483	46 (9.5%)	470	31 (6.6%)	
River East	818	163 (19.9%)	786	137 (17.4%)	818	128 (15.7%)	829	141 (17.0%)	
Seven Oaks	475	57 (12.0%)	496	55 (11.1%)	472	60 (12.7%)	501	62 (12.4%)	
St. James-Assiniboia	465	38 (8.2%)	413	54 (13.1%)	468	41 (8.8%)	441	42 (9.5%)	
Inkster	326	86 (26.4%)	347	86 (24.8%)	364	100 (27.5%)	343	100 (29.2%)	
Downtown	808	343 (42.5%)	827	342 (41.4%)	844	319 (37.8%)	797	306 (38.4%)	Dcr
Point Douglas	518	252 (48.7%)	546	264 (48.4%)	546	286 (52.4%)	540	256 (47.4%)	
Winnipeg	5855	1153 (19.7%)	5885	1149 (19.5%)	6113	1195 (19.6%)	6138	1176 (19.2%)	

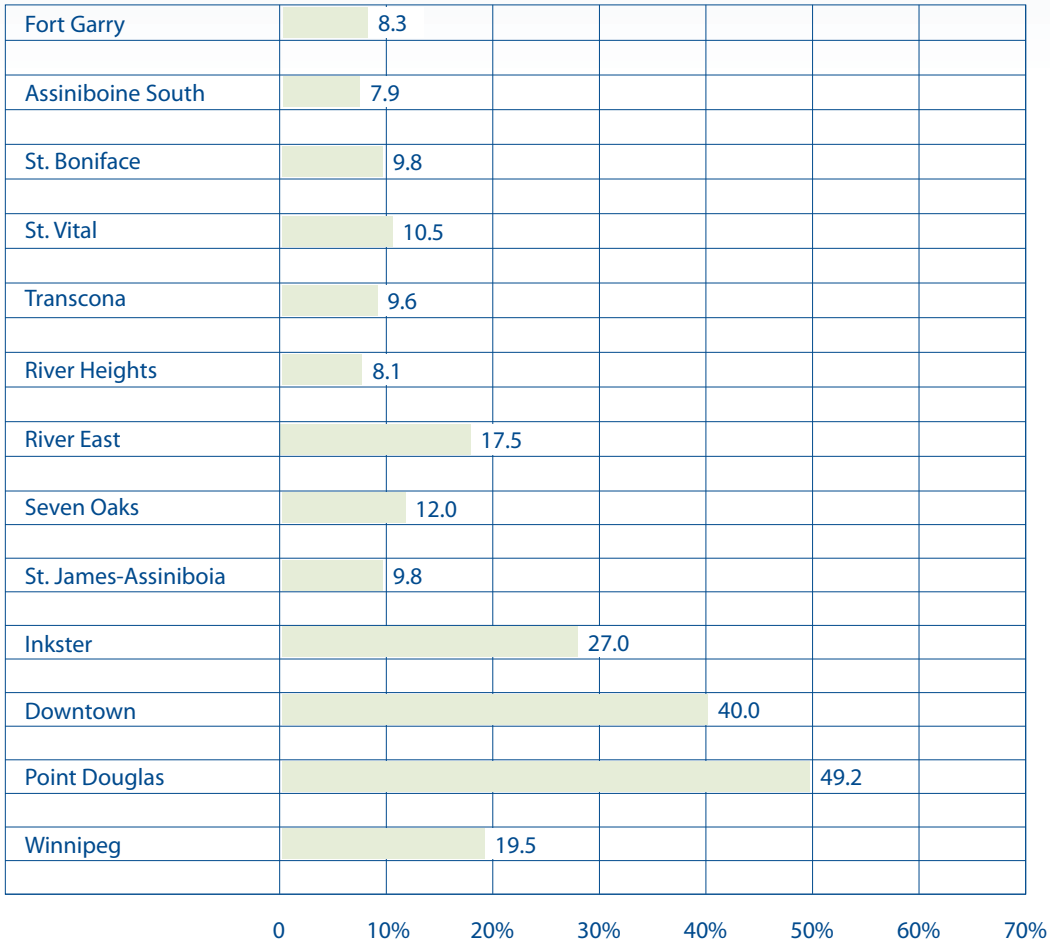
Source: Healthy Child Manitoba, 2008

p-value comparisons of linear trend for results from 2003 to 2006. If a p-value is ≤0.05, then the comparison is statistically significant
# Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "newborns to families with financial difficulties".
Dcr = decreasing

Newborns Born to Families with Financial Difficulties by Winnipeg Community Area

Percentage of families/mothers of newborns screened by the Family First program, 2003-2006

Figure 2.6



Source: Healthy Child Manitoba, 2008

Newborns Born to Mothers with Less than Grade 12 of Education

The proportion (%) of mothers of newborns with less than Grade 12 education as indicated on the Families First program screening form. Counts and crude percentages are reported for four 1-year periods, 2003-2006.

Table 2.7

Mothers of Newborns with less than Grade 12 of Education									
	2003		2004		2005		2006		
Community Area	Valid Resp. #	Count	Valid Resp. #	Count	Valid Resp. #	Count	Valid Resp. #	Count	Trend* (sig)
Fort Garry	376	19 (5.1%)	439	13 (3.0%)	465	25 (5.4%)	515	24 (4.7%)	
Assiniboine South	306	15 (4.9%)	221	17 (7.7%)	260	15 (5.8%)	228	22 (9.7%)	
St. Boniface	363	21 (5.8%)	376	22 (5.9%)	463	43 (9.3%)	515	46 (8.9%)	Incr
St. Vital	549	51 (9.3%)	542	44 (8.1%)	550	44 (8.0%)	519	31 (6.0%)	
Transcona	247	22 (8.9%)	262	28 (10.7%)	279	28 (10.0%)	290	30 (10.3%)	
River Heights	510	39 (7.7%)	476	26 (5.5%)	470	25 (5.3%)	461	19 (4.1%)	
River East	791	156 (19.7%)	759	124 (16.3%)	788	120 (15.2%)	799	145 (18.2%)	
Seven Oaks	423	47 (11.1%)	480	50 (10.4%)	447	46 (10.3%)	493	86 (17.4%)	Incr
St. James-Assiniboia	483	51 (10.6%)	402	39 (9.7%)	435	38 (8.7%)	427	45 (10.5%)	
Inkster	317	88 (27.8%)	317	88 (27.8%)	328	92 (28.1%)	320	93 (29.1%)	
Downtown	747	281 (37.6%)	752	295 (39.2%)	804	265 (33.0%)	731	277 (37.9%)	
Point Douglas	514	250 (48.6%)	521	270 (51.8%)	519	259 (49.9%)	533	240 (45.0%)	
Winnipeg	5639	1043 (18.5%)	5570	1024 (18.4%)	5837	1010 (17.3%)	5874	1082 (18.4%)	

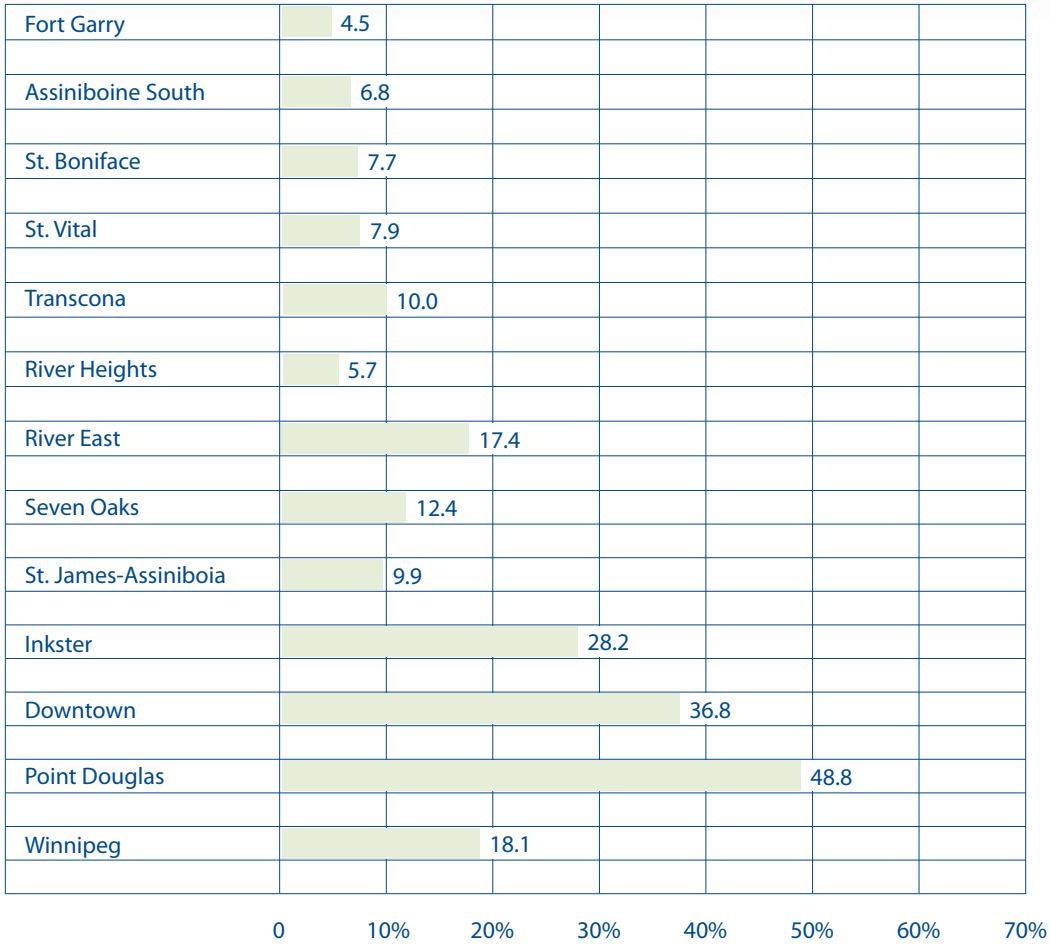
Source: Healthy Child Manitoba, 2008

p-value comparisons of linear trend for results from 2003 to 2006. If a p-value is ≤0.05, then the comparison is statistically significant
# Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "Newborns to Mothers with less than Grade 12 of Education".
Dcr = decreasing; Incr = increasing

Newborns Born to Mothers with Less than Grade 12 of Education by Winnipeg Community Area

Percentage of mothers of newborns screened by the Family First program, 2003-2006

Figure 2.7



Source: Healthy Child Manitoba, 2008

Positive Families First Screen

The proportion (%) of newborns born to families experiencing three or more risk factors as indicated on the Families First program screening form. Counts and crude percentages are reported for four 1-year periods, 2003-2006.

Table 2.8

Families with Three or More Risk Factors on the Families First Screening Form									
	2003		2004		2005		2006		
Community Area	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Trend* (sig)
Fort Garry	507	41 (8.1%)	548	40 (7.3%)	543	48 (8.8%)	595	69 (11.6%)	Incr
Assiniboine South	327	43 (13.2%)	245	34 (13.9%)	275	26 (9.5%)	268	33 (12.3%)	
St. Boniface	470	67 (14.3%)	488	77 (15.8%)	535	105 (19.6%)	569	105 (18.5%)	Incr
St. Vital	586	98 (16.7%)	584	87 (14.9%)	590	87 (14.8%)	565	86 (15.2%)	
Transcona	301	47 (15.6%)	321	53 (16.5%)	311	44 (14.2%)	335	69 (20.6%)	
River Heights	531	67 (12.6%)	506	61 (12.1%)	492	70 (14.2%)	503	60 (11.9%)	
River East	869	192 (22.1%)	806	168 (20.8%)	830	179 (21.6%)	872	204 (23.4%)	
Seven Oaks	507	72 (14.2%)	522	84 (16.1%)	489	82 (16.8%)	535	99 (18.5%)	
St. James-Assiniboia	487	63 (12.9%)	432	84 (19.4%)	509	83 (16.3%)	468	73 (15.6%)	
Inkster	340	123 (36.2%)	362	107 (29.6%)	388	151 (38.9%)	345	128 (37.1%)	Incr
Downtown	909	367 (40.4%)	898	363 (40.4%)	929	366 (39.4%)	886	362 (40.9%)	
Point Douglas	585	320 (54.7%)	584	322 (55.1%)	576	335 (58.2%)	577	311 (53.9%)	
Winnipeg	6444	1505 (23.4%)	6327	1492 (23.6%)	6512	1591 (24.4%)	6575	1628 (24.8%)	

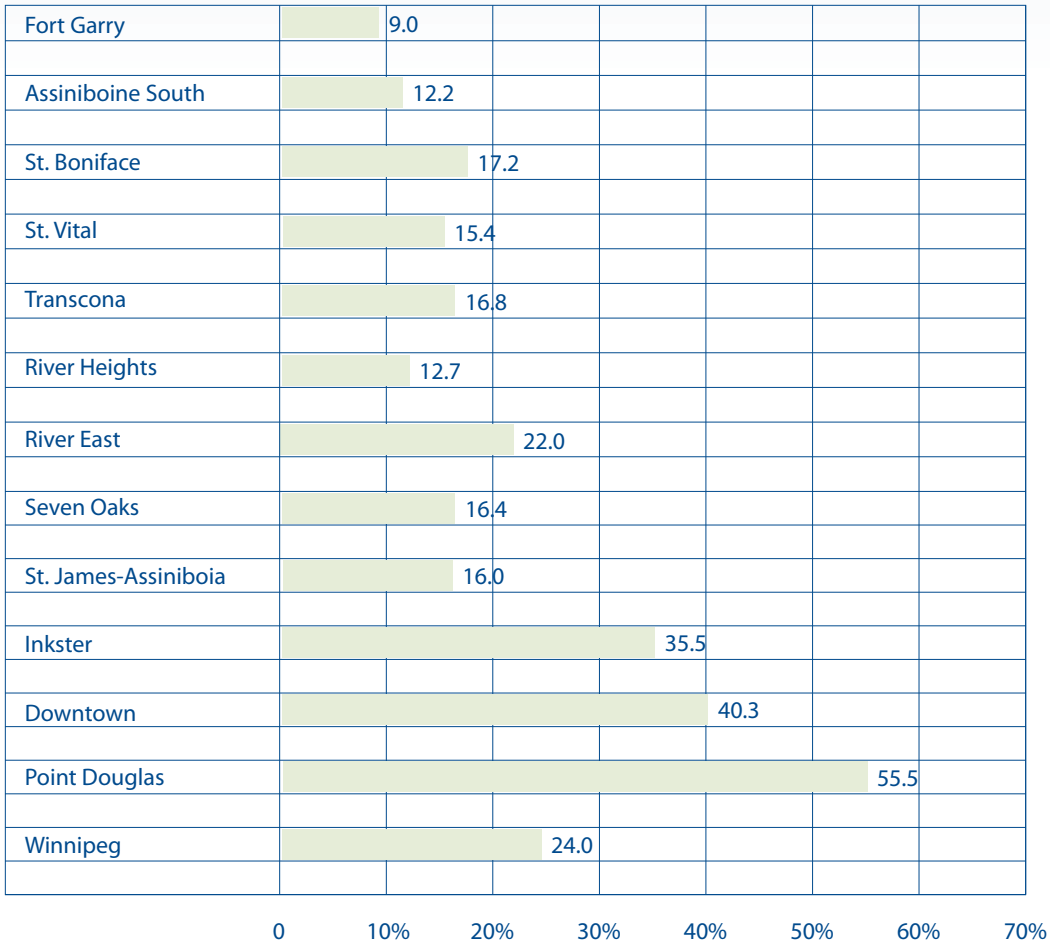
Source: Healthy Child Manitoba, 2008

*p-value comparisons of linear trend for results from 2003 to 2006. If a p-value is ≤0.05, then the comparison is statistically significant
# Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "families first eligibility".
Incr = increasing

Positive Families First Screen by Winnipeg Community Area

Percentage of mothers of newborns screened by the Family First program, 2003-2006

Figure 2.8



Source: Healthy Child Manitoba, 2008

Screening For and Enrollment in the Families First Program

The percentage of Winnipeg's regional post partum population screened for enrollment in the Families First Program, and the percentage (5) of those who screened positive who actually enrolled. Counts and crude percentages are reported for four 1-year periods, 2003-2006.

Table 2.9

Screening For and Enrollment in the Families First Program				
	2003	2004	2005	2006
Number of Families First* Screens Completed (%) (as a percentage of live births)	6563 (92.8%)	5036 (94.1%)	6654 (92.1%)	6632 (90.9%)
Number of Positive Screens for Families First Program (%)	1464 (22.3%)	1149 (22.8%)	1519 (22.8%)	1604 (24.2%)
Number of Families Enrolled in Families First (as a percentage of positive Families First screens)	N/A	N/A	332 (21.9%)	322 (20.1%)

Source: Healthy Child Manitoba, 2008

N/A = not available
* Prior to 2005, the Families First program was known as Babies First.

3. Chronic Diseases

Winnipeg Regional Health Authority AT A GLANCE

NOTE: Except for cancer incidence and survival, all estimates are based on who gets treatment for the disease not those who have the disease. Refer to specific indicators for the ages used in the analysis.

		Current Rate*	Previous Rate	Range of Current Estimates** (low CA-high CA)
Diabetes		8.2% 2003/04-2005/06	6.2% 1998/99-2000/01	5.9 -11.3%
Hypertension		22.9% 2005/06	20.3% 2000/01	21.3 – 26.1%
Ischemic heart disease (IHD)		8.6% 2001/02-2005/06	9.3 % 1996/97-2000/01	7.8 – 10.0%
Stroke		2.79/1000 2001/02-2005/06	3.76/1000 1996/97-2000/01	2.08 – 3.16/1000 residents
Arthritis		19.9% 2004/05-2005/06	21.0% 1999/00-2000/01	18.0 – 24.9%
Osteoporosis		12.9% 2003/04-2005/06	10.6% 1998/99-2000/01	10.0 – 14.3%
Total Respiratory Morbidity		12.5% 2005/06	13.4 % 2000/01	10.8 – 17.5%
Asthma (All Ages)	Male Female	7.5% 8.1% 2006/07	7.2% 7.8% 2002/03	6.4% - 9.0% 7.2% -10.6%
Asthma (CHILD)		16.4% 2004/05-2005/06	16.0% 1999/00-2000/01	14.6 – 19.0%
Cancer Incidence		per 100,000 residents		
		2005-2007	2000-2002	
	All cancers	456.6	482.4	N/A
	Lung cancer	69.1	74.5	
	Colorectal cancer	62.9	63.8	
	Breast Cancer	125.3	123.6	
	Prostate cancer	121.8	149.2	
Cancer Survival		% survived for 5 years following diagnosis		
		2005-2007	2000-2002	
	All cancers	56.4%	53.0%	N/A
	Lung cancer	19.4%	12.7%	
	Colorectal cancer	57.1%	51.7%	
	Breast Cancer (female)	83.0%	83.2%	
	Prostate cancer (male)	93.3%	85.1%	

*All rates are age- and sex-adjusted to the Manitoba population in the 1st time period of the rate/event calculation, where possible.
Detailed definitions including data sources and ICD-9-CM diagnostic codes are available in Appendix A
**CA=Community Areas
N/A = data not available by CA

Chronic diseases are the leading causes of death and disability among Canadians. This section presents several indicators of **chronic disease** in the Winnipeg Health Region. We do this by examining the ***treatment prevalence of chronic diseases***. For many chronic conditions there is no easy way to find out how many people have been diagnosed with the condition, so we use administrative databases to look at how many people are treated for the conditions as an approximation. In this report we use treatment prevalence to approximate the prevalence of diabetes, hypertension, ischemic heart disease, arthritis, osteoporosis, respiratory diseases, and asthma. Since treated strokes are discrete events, their treatment prevalence approximates the incidence of treated strokes. We also present cancer incidence and survival rates which were derived from the Manitoba Cancer Registry.

What do we mean by "treatment prevalence"? Persons who have received health services or treatment for the disease (by visiting a doctor, being admitted to a hospital and/or having a prescription dispensed) are counted in our rates. But those who may have undetected disease, disease that does not require frequent medical care, and those not receiving the care they may need for their condition are not counted. This must be kept in mind when treatment prevalence rates are interpreted—rates that change may mean that the disease is actually getting more or less common, or it may mean that more or less people are getting diagnosed or receiving care. For example, an increase in the treatment prevalence for hypertension could mean that more people are getting high blood pressure or that more people are having their high blood pressure diagnosed and treated appropriately. We just do not know based on these rates.

The comparison of these chronic illness prevalence indicators to results of other studies are challenging because of differences in the data sources and definitions used.

DIABETES AND CARDIOVASCULAR DISEASES

The diseases discussed in this section are inextricably linked. Ischemic heart disease (IHD) and stroke are common causes of disability and death. Diabetes mellitus and hypertension have been found to increase the risk of IHD and stroke events. Given these associations, reducing the burden of chronic disease will require coordinated prevention strategies that address common risk factors and more effective approaches to the management of chronic conditions especially in persons with two or more of these conditions.

Diabetes treatment prevalence is the proportion of Winnipeg residents age 19 or older who received treatment for diabetes within a 3-year period as identified by at least two physician visits or one hospitalization with a diagnosis of diabetes, or one or more prescriptions for medications used to treat diabetes during that time. Diabetes is a metabolic disorder characterized by the presence of hyperglycemia (high blood sugar) due to defective insulin secretion, defective insulin action or both.[12]

Treatment prevalence for both Manitoba and Winnipeg significantly increased over the two time periods (1998-2001 and 2003-2006): Manitoba (6.7% and 8.7%) and Winnipeg (6.2% to 8.2%). About four percentage points separate the community areas (CAs) with the highest and lowest prevalence for the most recent 3-year period: Point Douglas (11.3%) and Assiniboine South (5.9%). All CAs showed a significant increase between the two, 3-year time periods reported on. Looking at the actual number of cases, this means over 10,000 more Winnipeg residents received diabetes treatment between the two time periods. The increased treatment prevalence has significant implications for service needs, and if reflective of a true increase in the incidence of the disease it could also have a significant impact on the trends of cardiovascular disease.

Hypertension (high blood pressure) ***treatment prevalence*** is the proportion of WHR residents age 19 or older who received treatment for hypertension in a 1-year period as identified by either at least one physician visit or one hospitalization with a diagnosis of hypertension or two or more prescriptions for high blood pressure medicines during that time. High blood pressure can strain the heart, damage arteries and the kidneys and increase the risk for ischemic heart disease and stroke.

Treatment prevalence for both Manitoba and Winnipeg significantly increased over the two time periods reported on (2000/2001 and 2005/2006): Manitoba (20.6% and 23.7%) and Winnipeg (20.3% to 22.9%). There is relatively little difference between CAs with the highest and lowest prevalence for the most recent 1-year period: Inkster (26.1%) and Assiniboine South (21.3%). All CAs showed a significant increase between the two, 1-year time periods.

Ischemic Heart Disease treatment prevalence is a group of cardiac disorders resulting from insufficient supply of oxygenated blood to the heart usually caused by narrowed or occluded coronary arteries. This indicator is defined as the proportion of Winnipeg residents age 19 or older who received treatment for IHD (including myocardial infarction, angina and other coronary heart diseases) in a 5-year period as identified by either at least two physician visits or one hospitalization with a diagnosis of IHD, or at least one physician visit for IHD and two or more prescriptions for IHD medications during that time period.

Treatment prevalence of IHD for Winnipeg and Manitoba decreased between the two time periods (1996/97-2000/01 and 2001/02-2005/06: Winnipeg (9.3% to 8.6%) and Manitoba (9.0% to 8.5%). The prevalence of IHD had significantly decreased in several CAs. The highest drop in prevalence was in the Downtown CA (9.0% to 8.3%) and River Heights (9.3% to 8.6%).

[12] Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2008. Clinical practice guidelines for the prevention and management of diabetes in Canada. Can J Diabetes. 2008;32(suppl 1): S10.

Stroke incidence A stroke is a circulatory event that results in rapid loss of brain function(s) due to a disturbance in the blood supply to the brain. Strokes are a significant cause of death and disability. This indicator is defined as the rate of hospitalizations or deaths due to stroke per 1000 residents age 40 or older.

Incidence of stroke decreased between the two time periods (1996/97-2000/01 and 2001/02-2005/06) in Winnipeg (3.67/1000 to 2.79/1000) and Manitoba (4.05/1000 to 3.05/1000). The incidence of stroke had significantly decreased in most CAs. The largest drop in incidence was in the Point Douglas CA (4.32/1000 to 2.99/1000) and St. Boniface (3.27/1000 to 2.08/1000).

MUSCULOSKELETAL DISEASES

We report on two musculoskeletal diseases: arthritis and osteoporosis; both diseases affect mobility, and can result in chronic pain, and diminished quality of life. Arthritis is a disease of the joints and surrounding tissues and includes both rheumatoid and osteoarthritis, the latter being more common. Osteoporosis is characterized by low bone mass and deterioration of bone tissue leading to increased bone fragility and risk of hip, spine and wrist fractures.

Arthritis treatment prevalence is the proportion of WHR residents age 19 or older who received treatment for rheumatoid or osteoarthritis in a 2-year period as identified by either at least two physician visits or one hospitalization for arthritis or one physician visit and two or more prescriptions for certain prescription medications used to treat arthritis during that time period. The prevalence of treated arthritis cases has decreased slightly over the two time periods (1999/00-2000/01 and 2004/05-2005/06) in Winnipeg (21.0% to 19.9%) and Manitoba (20.9% to 20.2%). Almost seven percentage points separate the highest and lowest prevalence for the most recent 2-year period: Point Douglas (24.9%) and Fort Garry (18.0%). Most CAs showed a significant decrease between the two, 2-year time periods.

Osteoporosis treatment prevalence is the proportion of WHR residents age 50 or older who received treatment for osteoporosis in a 3-year period as identified by either at least one physician visit for: osteoporosis, hip, spine, upper arm or wrist fracture or one or more prescriptions for medications to treat osteoporosis during that time period. Prevalence for both Manitoba and Winnipeg significantly increased over the two time periods (1998/99-2000/01 and 2003/04-2005/06): Manitoba (10.3% and 12.7%) and Winnipeg (10.6% to 12.9%). About four percentage points separate the highest and lowest prevalence for the most recent 3-year period: Assiniboine South and River Heights (14.3%) and Inkster (10.0%). All CAs showed a significant increase in prevalence between the two, 3-year time periods.

RESPIRATORY DISEASES

Chronic respiratory diseases are a significant health problem. We report on three indicators of respiratory disease: overall respiratory morbidity, asthma (all ages) and asthma in children 5-19 years of age.

The indicator for ***total respiratory morbidity*** is measured as the proportion of residents (all ages) who received treatment for any of the following diseases (identified by at least one physician visit or hospitalization) in two, 1-year time periods (2000/01 and 2005/06): asthma, acute bronchitis, chronic bronchitis, bronchitis not specified as acute or chronic, emphysema or chronic airway obstruction.

The total respiratory morbidity significantly decreased over the two time periods (2000/2001 and 2005/2006) in Manitoba (12.4% and 11.6%) and in Winnipeg (13.4% to 12.5%). About seven percentage points separate CAs with the highest and lowest prevalence for the most recent 1-year period: Point Douglas (17.5%) and Fort Garry (10.8%). Less than half of the CAs showed a significant difference in decreasing prevalence between the two, 1-year time periods.

Asthma (all ages). The proportion of individuals who received treatment from a health professional for asthma within a 2-year window is reported. Age-adjusted percentages of asthma in the WHR are reported for each year for a total of 5-years (2002/03 to 2006/07).

Treatment prevalence of asthma in all males for Manitoba and Winnipeg increased over the two time periods reported on (2002/03 and 2006/07): Manitoba (6.2% to 6.4%) and Winnipeg (7.2% and 7.5%). For the most recent period, the highest prevalence was in Inkster (9.0%) and the lowest in Transcona (6.4%), a difference of 2.6%.

Treatment prevalence of asthma in all females for Manitoba and Winnipeg increased over the two extreme time periods reported on (2002/03 and 2006/07): Manitoba (6.8% to 6.9%) and Winnipeg (7.8% and 8.1%). For the most recent period, the highest prevalence was in Point Douglas (10.6%) and the lowest in St. Vital (7.2%), a difference of 3.4%.

Asthma in children is the proportion of Winnipeg children age 5 to 19 who received treatment for asthma for two, 2-year periods (1999/2000-2000/01 and 2004/05-2005/06). Prevalence for both Manitoba and Winnipeg significantly increased over the two time periods: Manitoba (13.7% and 13.9%) and Winnipeg (16.0% to 16.4%). Over four percentage points separate the highest and lowest prevalence for the most recent 2-year period: Inkster (19.0%) and St. Boniface and St. Vital (14.6%). Only one CA showed a significant increase between the two, 2-year time periods reported on: Inkster (16.5% to 19.0%).

CANCER

Cancer incidence and survival indicators are included in the WRHA's Community Health Assessment and are also found in CancerCare Manitoba's Community Health Assessment.[13]

Because cancer diagnoses are reportable and therefore tracked and counted, this indicator represents an incidence rate rather than treatment prevalence. The incidence rate of new cancer diagnoses between the two time periods reported on (2000-2002 & 2005-2007) appears to have decreased slightly (482.4/100,000 to 456.6/100,000) in the WHR. The incidence rate of prostate cancer has decreased significantly between these two time periods (149.2/100,000 to 121.8/100,000). The incidence rate of female breast cancer has remained stable between 2000-2002 and 2005-2007 (123.6/100,000 and 125.3/100,000). Overall, cancer incidence (520.3/100,000) was higher for males than females (429.1/100,000). The incidence of lung, colorectal and melanoma cancer are lower among females.

Cancer survival rates (% 5-year relative ratios) have remained relatively stable with some modest improvements between the two time periods reported on (2000-2002 and 2005-2007). Lung (12.7% vs. 19.4%), colorectal (51.7% vs. 57.1%) and prostate (85.1% vs. 93.3%) have shown some improvement. Breast and prostate cancer have the highest 5-year survival rates.

ADDITIONAL INFORMATION*

Most of the indicators in this section are drawn from the Manitoba RHA Indicator (2009) report which is available at: http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html. Scroll down to 2009 and choose full report.

Chronic Disease Infobase: profiles the epidemiology of major non-communicable diseases in Canada, including cancers; and cardiovascular and respiratory diseases; by province/territory and by regional health unit.
http://204.187.39.30/surveillance/Index.aspx?L=eng

Report from the National Diabetes Surveillance System: Diabetes in Canada, 2009 The most recent Canadian surveillance report on diabetes (CDSS data to 2006/2007)
http://www.phac-aspc.gc.ca/publicat/2009/ndssdic-snsddac-09/index-eng.php

An Economic Tsunami: The Cost of Diabetes in Canada: A description of the economic burden of diabetes published by the Canadian Diabetes Association http://www.diabetes.ca/economicreport/

Report from the Canadian Chronic Disease Surveillance System: Hypertension in Canada, 2010 The Public Health Agency of Canada (PHAC) expanded the CCDSS to track information on the prevalence and incidence of diagnosed hypertension in the Canadian population in 2009.
http://www.phac-aspc.gc.ca/cd-mc/cvd-mcv/ccdss-snsmc-2010/2-1-eng.php

Tracking Heart Disease and Stroke in Canada (2009): A description of the prevalence of heart disease, stroke and risk factors (including hypertension) associated with cardiovascular disease by the Public Health Agency of Canada.
http://www.phac-aspc.gc.ca/publicat/2009/cvd-avc/index-eng.php

Life with Arthritis in Canada: A personal and public challenge (2010): The second national surveillance report on arthritis by the Public Health Agency of Canada,
http://www.phac-aspc.gc.ca/cd-mc/arthritis-arthrite/lwaic-vaaac-10/index-eng.php

Life and Breath: Respiratory Disease in Canada (2007) Surveillance of chronic respiratory diseases in Canada by the Public Health Agency of Canada http://www.phac-aspc.gc.ca/publicat/2007/lbrdc-vsmrc/index-eng.php.
A summary of the report's main tables can be found at: http://www.phac-aspc.gc.ca/cd-mc/crd-mrc/crd_figures-mrc_figures-eng.php

CancerCare Manitoba Community Health Assessment 2010. Similar to other Regional Health Authority reports, CancerCare MB reports on measures of prevention, screening, access to diagnostic services and treatment and outcomes. http://www.cancercare.mb.ca/resource/File/communications/CCMB_2010_CHA-Report.pdf

Statistics at a glance Summary of overall cancer statistics by the Canadian Cancer Society http://www.cancer.ca/Canada-wide/About%20cancer/Cancer%20statistics/Stats%20at%20a%20glance.aspx?sc_lang=en

[13] CancerCare Manitoba. Community Health Assessment 2010. Accessed on 09 August 2010 from: http://www.cancercare.mb.ca/resource/File/communications/CCMB_2010_CHA-Report.pdf
* Listing of these resources does not constitute endorsement or approval of the information contained herein by the WRHA.

Diabetes

The proportion (%) of residents age 19 or older who received treatment for diabetes in a 3-year period (as identified by at least two physician visits or one hospitalization with a diagnosis of diabetes, or one or more prescription for medication to treat diabetes).

Rates are reported for two 3-year periods, 1998-2000 and 2003-2005 and were age- and sex-adjusted to the Manitoba population in the first time period

Table 3.1

Community Area	1998/1999-2000/01		2003/04-2005/06		% Change
	Total in 3 years	Adjusted Rate	Total in 3 years	Adjusted Rate	
Fort Garry (1,2,t)	2241	5.2%	3289	7.0%	38.8%
Assiniboine South (1,2,t)	1306	4.7%	1816	5.9%	33.5%
St. Boniface (1,2,t)	1969	5.4%	2803	7.3%	33.6%
St. Vital (1,2,t)	2453	5.6%	3381	7.2%	34.1%
Transcona (t)	1527	6.9%	1959	8.6%	27.4%
River Heights (1,2,t)	2496	5.2%	3187	6.7%	28.0%
River East (1,2,t)	4180	6.0%	5700	7.7%	31.2%
Seven Oaks (t)	3071	6.8%	4440	9.3%	39.2%
St. James - Assiniboia (1,2,t)	3003	5.8%	3896	7.4%	31.1%
Inkster (1,2,t)	1467	7.7%	2128	10.7%	43.0%
Downtown (1,2,t)	3962	8.2%	5081	10.3%	25.0%
Point Douglas (1,2,t)	2539	8.8%	3270	11.3%	25.6%
Winnipeg (1,2,t)	30214	6.2%	40950	8.2%	31.8%
Manitoba (t)	56246	6.7%	75017	8.7%	29.9%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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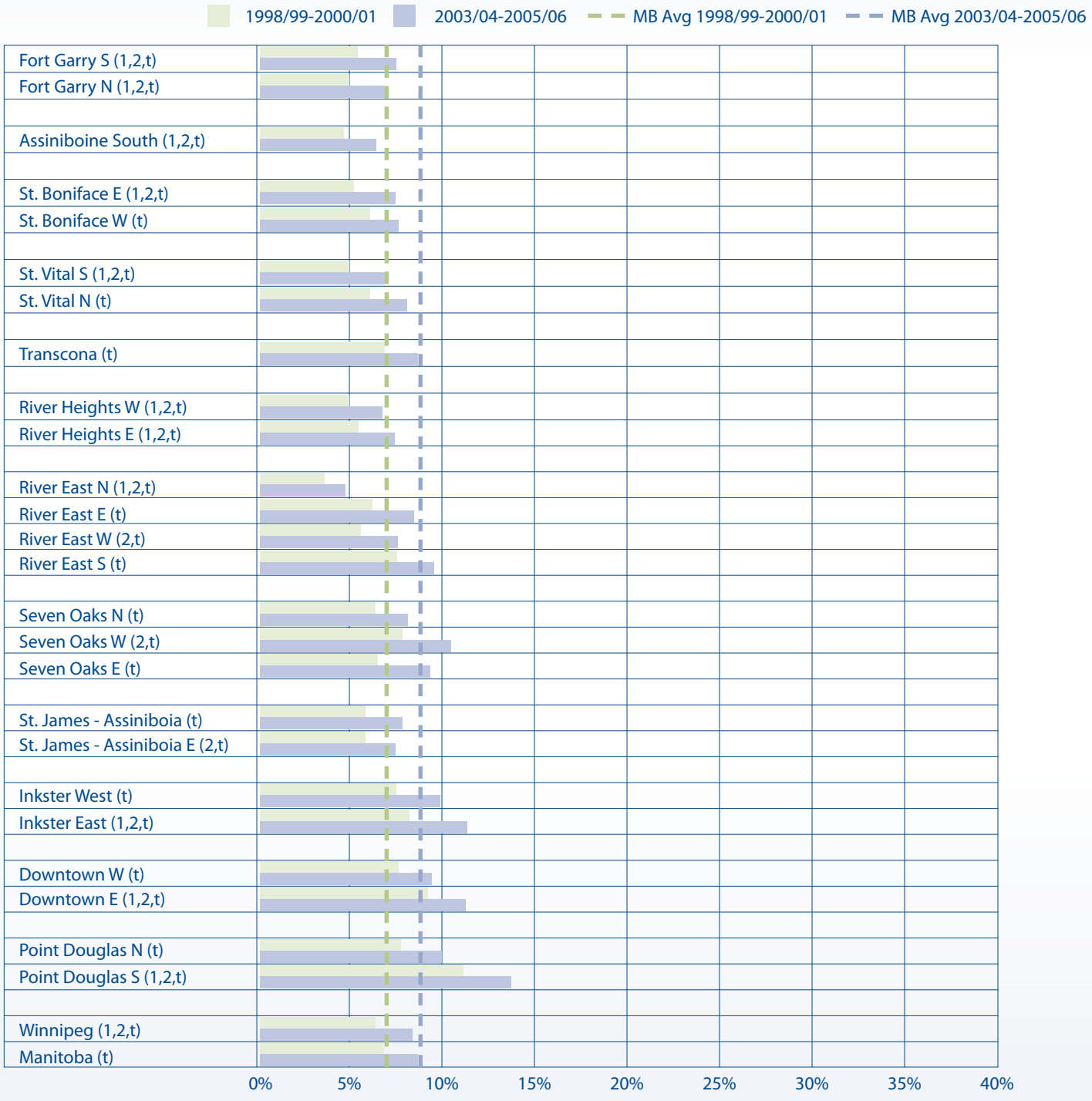
Diabetes Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents aged 19+ who received treatment for diabetes, 1998/99-2000/01 & 2003/04-2005/06.

Figure 3.1



Source: Manitoba Centre for Health Policy, 2009

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High Blood Pressure (Hypertension)

The proportion (%) of residents age 19 or older who received treatment for high blood pressure or hypertension in a 1-year period (as identified by either at least one physician visit or one hospitalization with a diagnosis of hypertension, or two or more prescriptions for high blood pressure medicine.)

Rates were calculated for two 1-year periods, 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in the first time period

Table 3.2

Community Area	2000/01		2005/06		% Change
	Total Cases	Adjusted Rate	Total Cases	Adjusted Rate	
Fort Garry (1,2,t)	8045	19.2%	10789	21.9%	34.1%
Assiniboine South (1,2,t)	5326	18.9%	6817	21.3%	28.0%
St. Boniface (2,t)	7280	20.3%	8755	22.2%	20.3%
St. Vital (2,t)	9075	20.5%	10947	22.3%	20.6%
Transcona (t)	4389	20.8%	5499	24.0%	25.3%
River Heights (1,2,t)	9481	19.5%	10508	21.7%	10.8%
River East (2,t)	14221	20.3%	17585	22.9%	23.7%
Seven Oaks (1,2,t)	9704	21.5%	12074	24.7%	24.4%
St. James - Assiniboia (2,t)	10773	20.4%	12490	22.9%	15.9%
Inkster (1,2,t)	4040	22.3%	5127	26.1%	26.9%
Downtown (t)	9861	20.3%	11237	23.3%	14.0%
Point Douglas (1,2,t)	6258	21.6%	7099	24.8%	13.4%
Winnipeg (2,t)	98453	20.3%	118927	22.9%	16.6%
Manitoba (t)	174002	20.6%	212532	23.7%	18.0%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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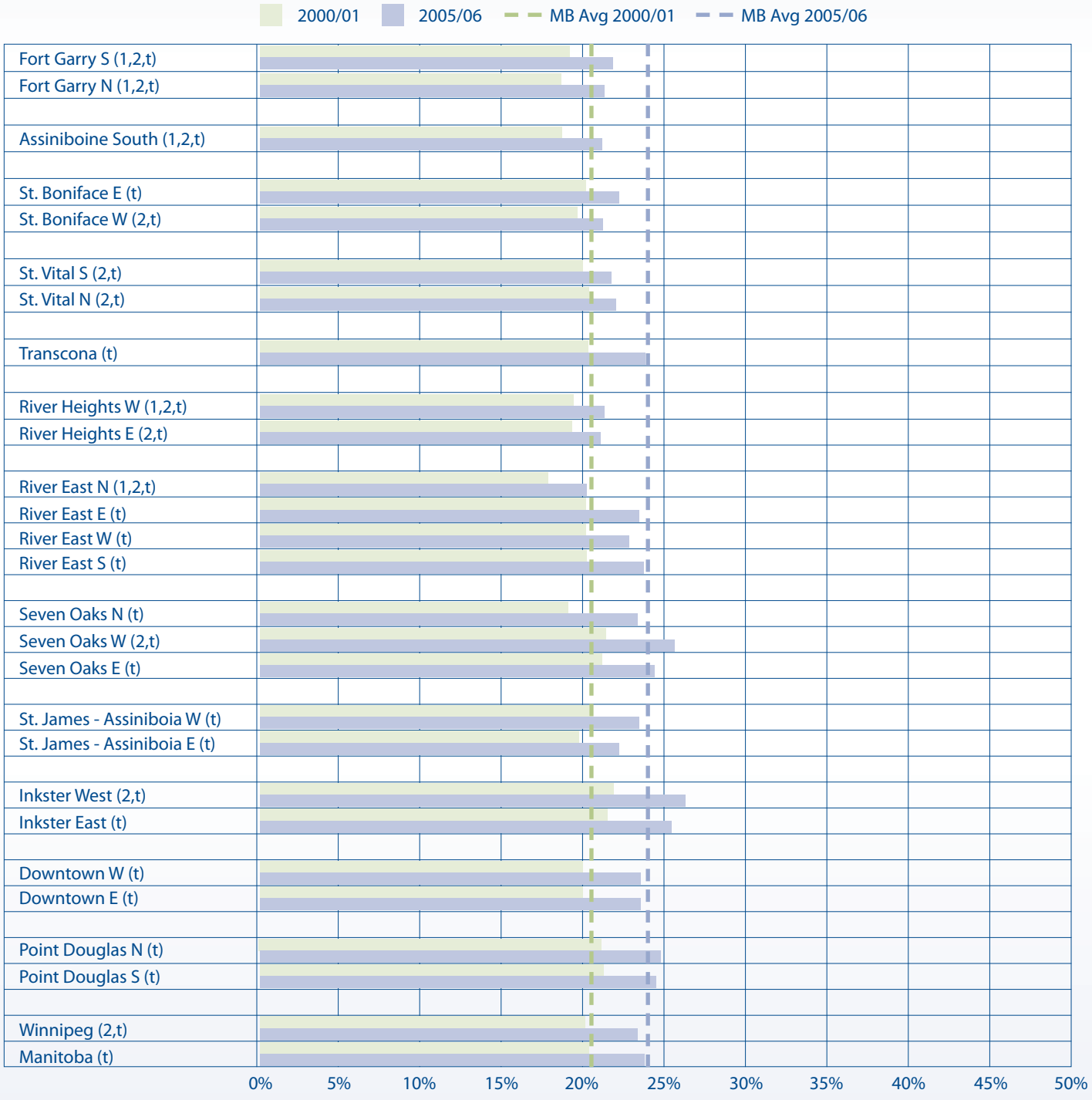
Hypertension Treatment Prevalence by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percent of residents aged 19+ who received treatment for high blood pressure, 2000/01 & 2005/06.

Figure 3.2



Source: Manitoba Centre for Health Policy, 2009

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Ischemic Heart Disease

The proportion (%) of residents age 19 or older who received treatment for ischemic heart disease in a 5-year period (as identified by either at least two physician visits or one hospitalization with a diagnosis of ischemic disease or at least one physician visit for IHD and two or more prescriptions for IHD medications.)

Rates are reported for two 5-year periods, 1996/97-2000/01 and 2001/02-2005/06 and were age- and sex-adjusted to the Manitoba population in the first time period

Table 3.3

Community Area	1996/1997-2000/01		2001/02-2005/06		% Change (based on crude rates)
	Total Cases in 5 years	Adjusted Rate	Total Cases in 5 years	Adjusted Rate	
Fort Garry (1,2)	3052	8.1%	3535	7.8%	8.1%
Assiniboine South (1,t)	2534	9.7%	2610	8.3%	-2.5%
St. Boniface	3118	9.0%	3297	8.8%	-1.1%
St. Vital	3682	8.9%	3971	8.6%	4.3%
Transcona	1716	9.2%	1867	8.9%	7.0%
River Heights (t)	4783	9.3%	4379	8.6%	-8.3%
River East (t)	6282	9.3%	6297	8.4%	-4.4%
Seven Oaks (2)	4136	9.4%	4394	9.2%	2.1%
St. James - Assiniboia (1,2,t)	5774	10.8%	5246	9.4%	-8.1%
Inkster	1391	8.5%	1424	8.1%	-1.3%
Downtown (t)	4320	9.0%	4019	8.3%	-10.8%
Point Douglas (1,2)	3092	10.0%	2894	10.0%	-8.6%
Winnipeg (t)	43880	9.3%	43933	8.6%	-3.3%
Manitoba (t)	75163	9.0%	75918	8.5%	-2.3%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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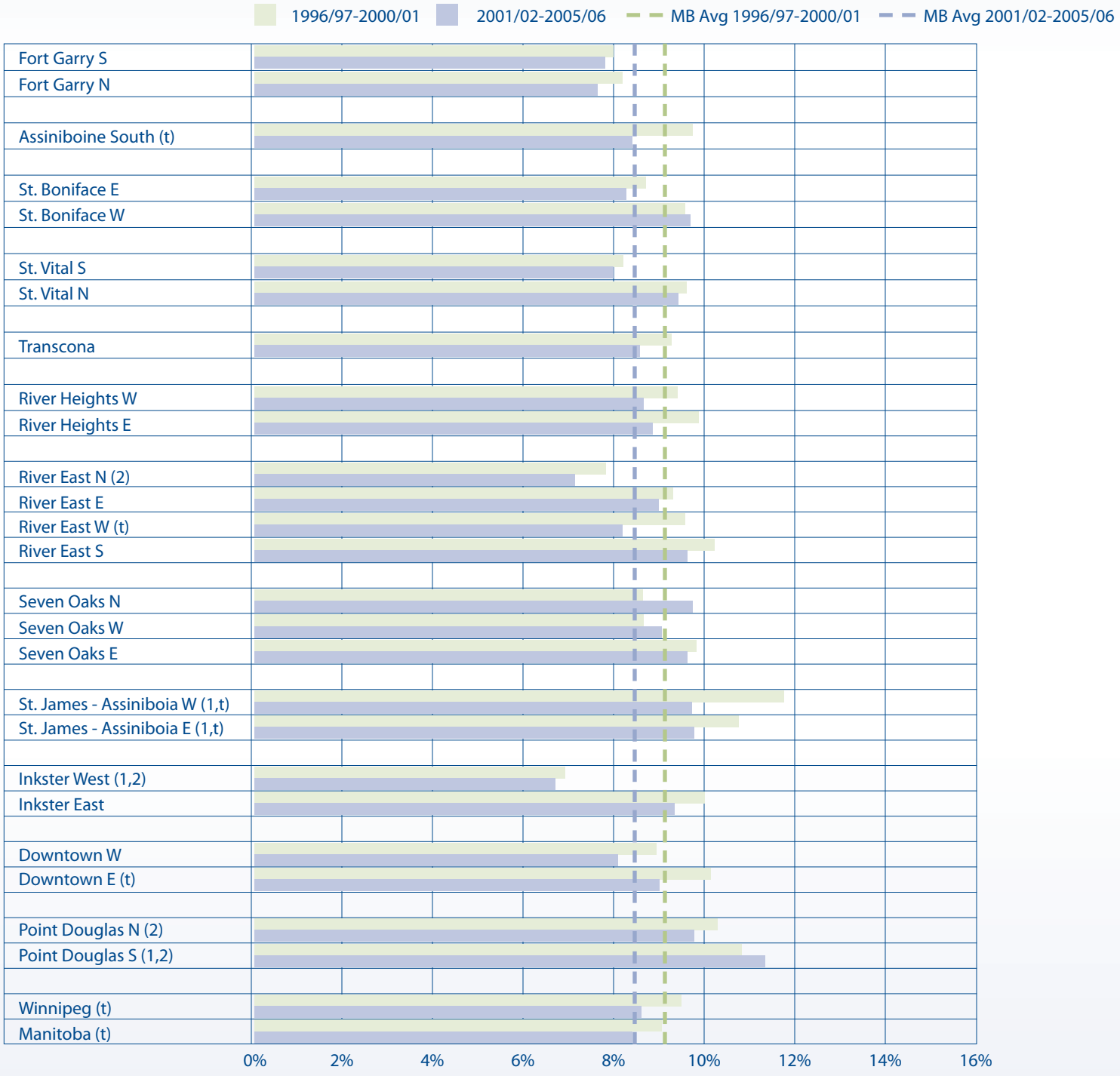
Ischemic Heart Disease Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents aged 19+ who received treatment for ischemic heart disease, 1996/97-2000/01 & 2001/02-2005/06.

Figure 3.3



Source: Manitoba Centre for Health Policy, 2009

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
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't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Stroke Incidence

The rate of hospitalizations or deaths due to stroke in Winnipeg residents age 40 or older.
Stroke was defined by ICD-9-CM codes in the most responsible diagnosis field for hospitalization, or as the cause of death in Vital Statistics files.

Rates are calculated for two 5-year periods, 1996/97-2000/01 and 2001/02-2005/06 and were age- and sex-adjusted to the Manitoba population in the first time period

Table 3.4

Community Area	1996/97-2000/01	2001/02-2005/06	% Change
	Adjusted rate per 1000	Adjusted rate per 1000	
Fort Garry (1)	3.24	2.95	1.4%
Assiniboine South (1,2)	2.90	2.44	-6.9%
St. Boniface (1,2,t)	3.27	2.08	-38.4%
St. Vital (1,2,t)	3.18	2.28	-27.0%
Transcona (t)	4.24	2.95	-29.1%
River Heights (1,2,t)	3.27	2.53	-23.5%
River East (t)	4.25	3.16	-24.3%
Seven Oaks (1,t)	3.50	2.76	-19.1%
St. James - Assiniboia (t)	3.67	3.00	-16.3%
Inkster (t)	3.96	2.57	-34.9%
Downtown (t)	4.01	2.88	-32.6%
Point Douglas (t)	4.32	2.99	-38.6%
Winnipeg (1,2,t)	3.67	2.79	-24.6%
Manitoba (t)	4.05	3.05	-25.7%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 1000 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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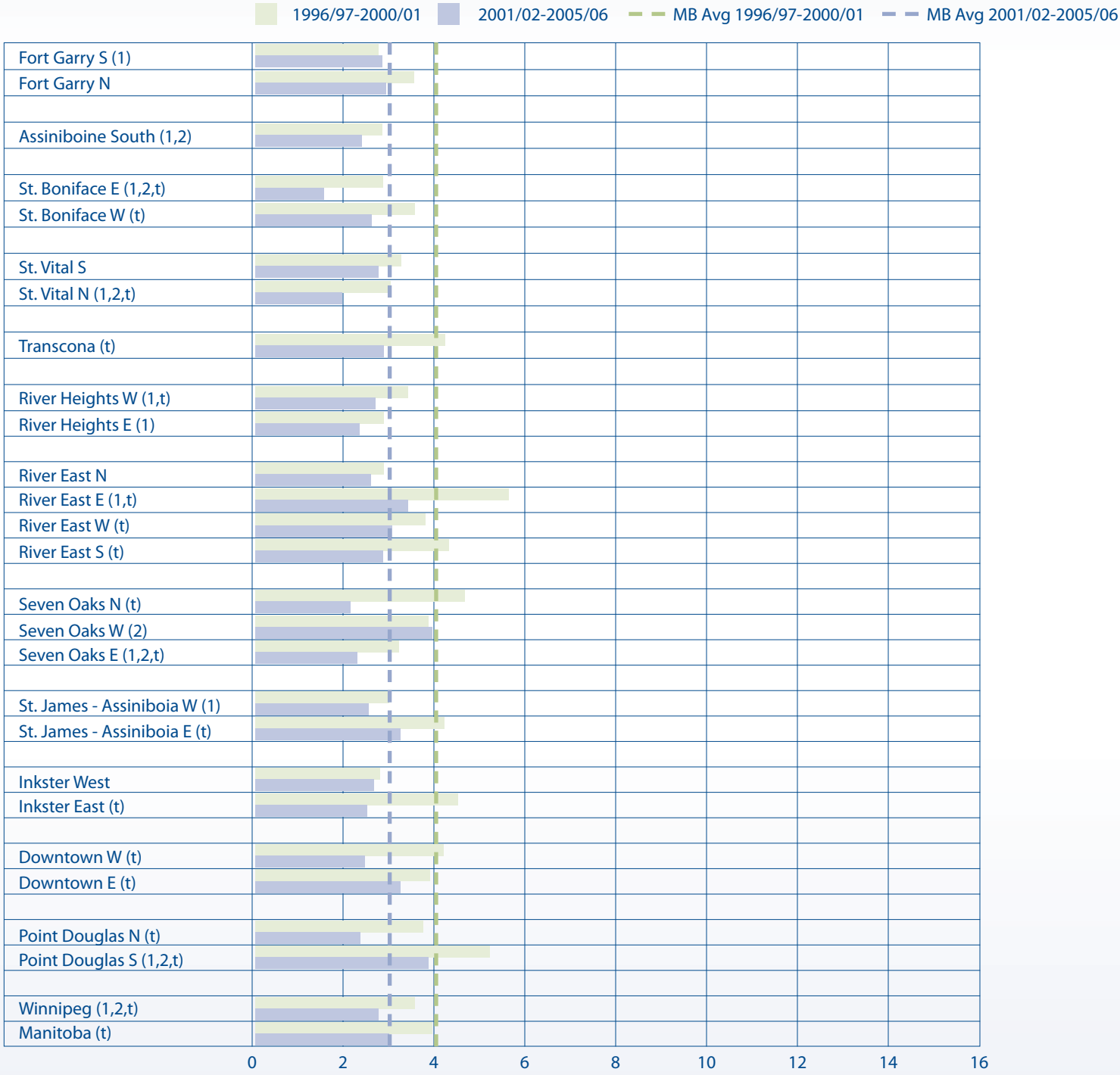
Stroke Incidence by Winnipeg Neighbourhood Cluster

Age- & sex-adjusted annual rate of death or hospitalization for stroke, per 1000 residents aged 40+, 1996/97-2000/01 & 2001/02-2005/06.

Figure 3.4



Source: Manitoba Centre for Health Policy, 2009

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Arthritis

The proportion (%) of residents age 19 or older who received treatment for arthritis (rheumatoid or osteo-arthritis) in a two-year period (as identified by either at least two physician visits or one hospitalization for arthritis or one physician visit for arthritis and two or more prescriptions for arthritis medications.)

Rates are reported for two 2-year periods, 1999/00-2000/01 and 2004/05-2005/06 and were age- and sex-adjusted to the Manitoba population in the first time period

Table 3.5

Community Area	1999/00-2000/01		2004/05-2005/06		% Change
	Total Cases in 2 years	Adjusted Rate	Total Cases in 2 years	Adjusted Rate	
Fort Garry (1,2,t)	8381	18.9%	9029	18.0%	-0.9%
Assiniboine South	5910	21.0%	6262	20.4%	1.6%
St. Boniface (1,2,t)	7092	19.6%	7374	18.6%	-4.2%
St. Vital (1,2)	9029	19.9%	9490	19.5%	0.8%
Transcona (1,2,t)	4602	20.1%	4753	19.7%	1.3%
River Heights (2,t)	9850	20.7%	9186	19.4%	-6.1%
River East (1,2,t)	14006	20.0%	14162	18.8%	-2.9%
Seven Oaks (t)	9628	21.5%	9642	20.0%	-5.1%
St. James - Assiniboia (t)	10509	21.0%	10108	19.9%	-3.2%
Inkster (t)	4380	21.7%	4181	19.6%	-7.3%
Downtown (1,2,t)	11918	23.1%	11613	22.4%	-3.9%
Point Douglas (1,2)	7387	25.4%	7359	24.9%	-3.0%
Winnipeg (t)	102692	21.0%	103159	19.9%	-3.0%
Manitoba (t)	176323	20.9%	180098	20.2%	-1.3%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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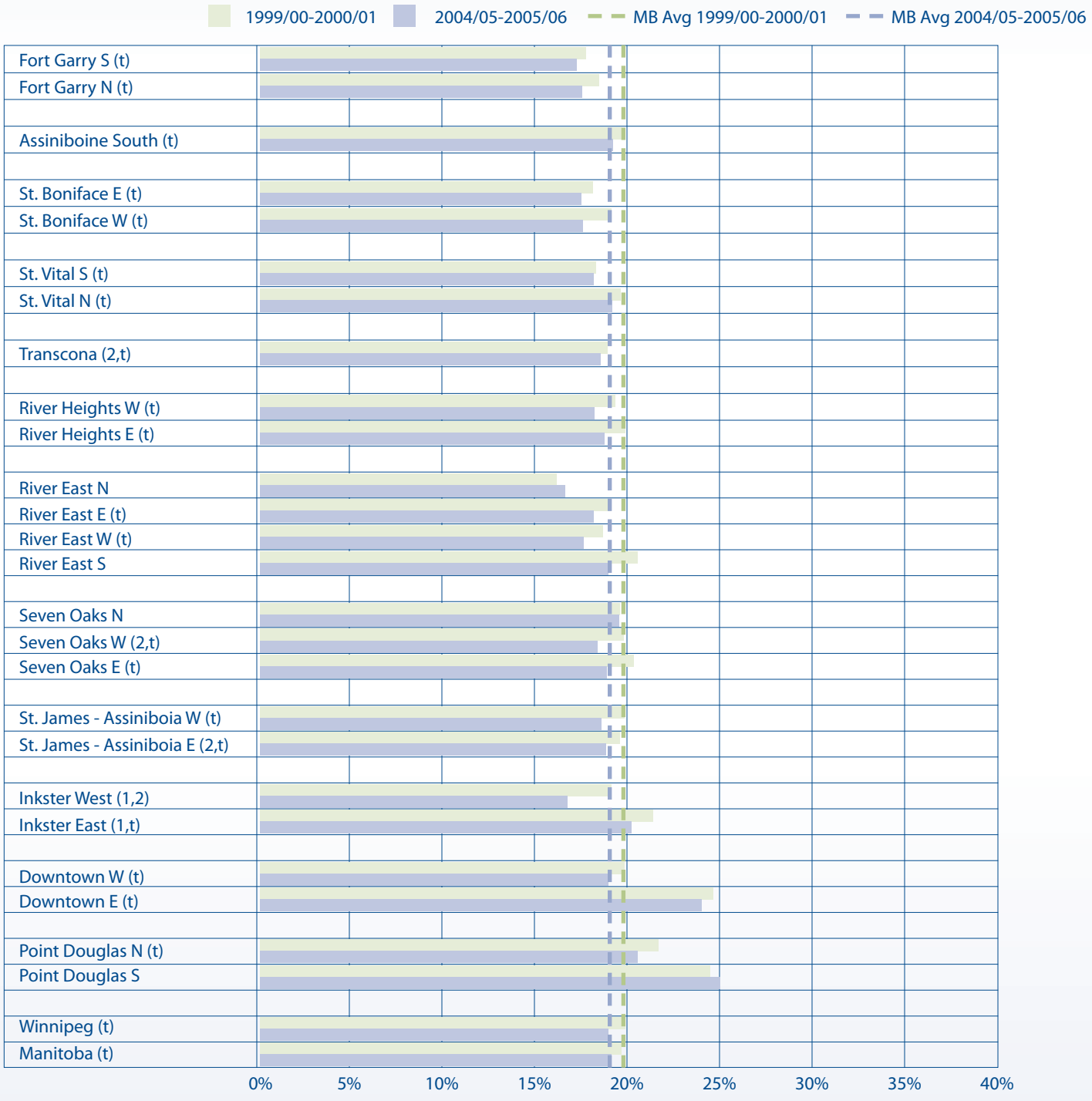
Arthritis Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents aged 19+ who received treatment for arthritis, 1999/00-2000/01 & 2004/05-2005/06.

Figure 3.5



Source: Manitoba Centre for Health Policy, 2009

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Osteoporosis

The proportion (%) of residents age 50 or older who received treatment for osteoporosis in a three-year period (as identified by either at least one physician visit for: osteoporosis, hip, spine, humerus (upper arm) or wrist fracture or one or more prescriptions for medications to treat osteoporosis.) Fractures associated with trauma were excluded.

Rates are reported for two 3-year periods, 1998/99-2000/01 and 2003/04-2005/06 and were age- and sex-adjusted to the Manitoba population in the first time period.

Table 3.6

Community Area	1998/1999-2000/01		2003/04-2005/06		% Change
	Total Cases in 3 years	Adjusted Rate	Total Cases in 3 years	Adjusted Rate	
Fort Garry (t)	1618	10.6%	2466	13.7%	32.0%
Assiniboine South (1,2,t)	1287	11.7%	1861	14.3%	26.3%
St. Boniface (t)	1423	10.1%	1859	12.5%	20.6%
St. Vital (t)	1803	10.7%	2461	13.0%	20.1%
Transcona (1,2,t)	671	9.1%	881	11.1%	22.2%
River Heights (1,2,t)	2513	11.8%	3046	14.3%	18.0%
River East (t)	2864	10.4%	3729	12.4%	17.3%
Seven Oaks (t)	1900	10.7%	2423	12.5%	15.7%
St. James - Assiniboia (1,2,t)	2480	11.1%	3223	14.3%	27.6%
Inkster (1,2,t)	498	7.8%	678	10.0%	23.2%
Downtown (t)	1967	10.4%	2444	12.8%	19.4%
Point Douglas (2,t)	1175	9.9%	1301	11.3%	10.8%
Winnipeg (t)	20199	10.6%	26372	12.9%	20.6%
Manitoba (t)	33485	10.3%	44481	12.7%	23.4%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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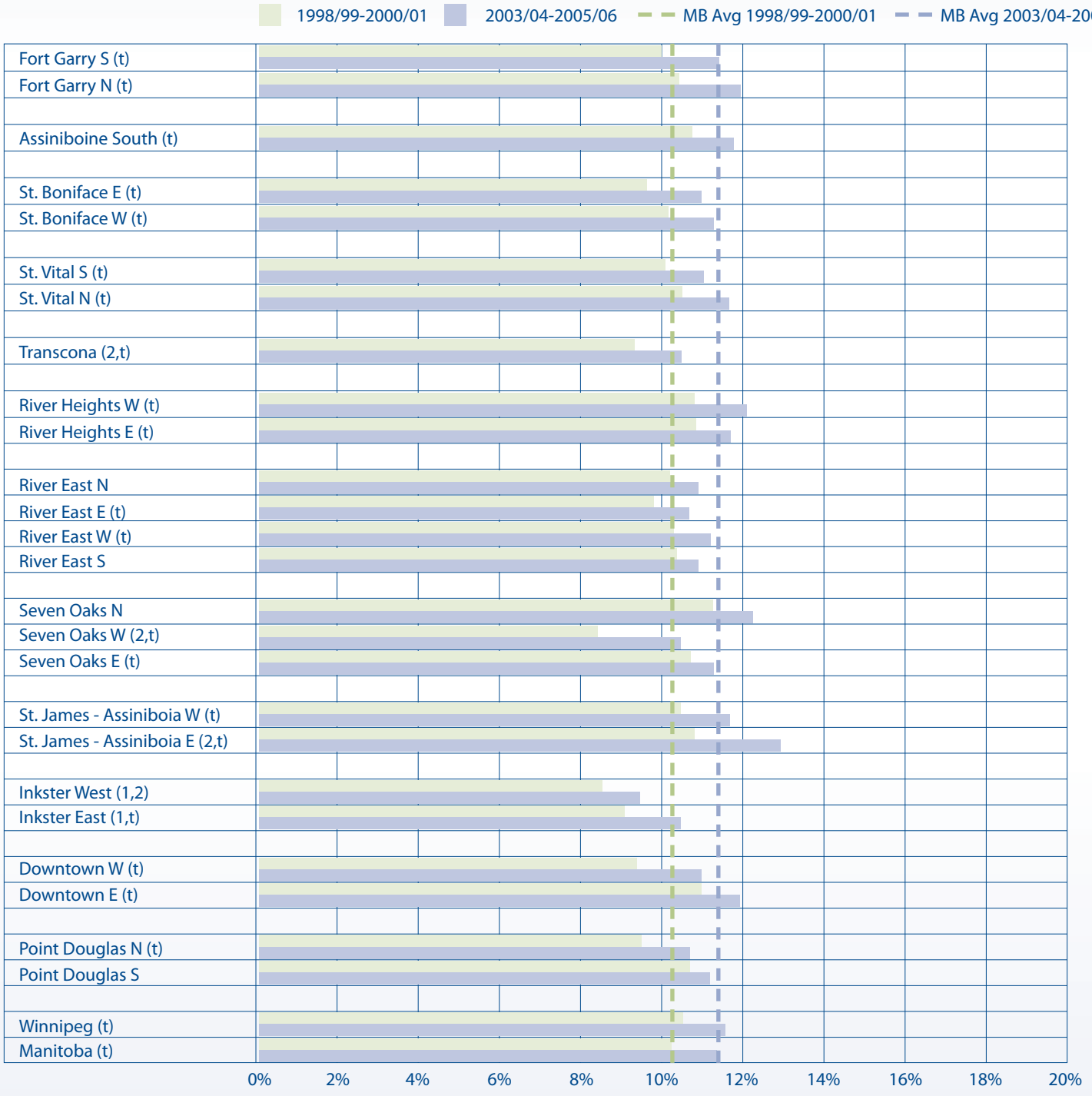
Osteoporosis Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents aged 50+ who received treatment for osteoporosis, 1998/99-2000/01 & 2003/04-2005/06.

Figure 3.6



Source: Manitoba Centre for Health Policy, 2009

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Total Respiratory Morbidity

The proportion (%) of residents (all ages) who received treatment for any of the following respiratory diseases as identified by claims for at least one physician visit or hospitalization in one year: asthma, acute bronchitis, chronic bronchitis not specified as acute or chronic, emphysema, or chronic airway obstruction.

Rates are reported for two 1-year periods, 2000/01 and 2005/06 and are age- and sex-adjusted to the Manitoba population in the first time period.

Table 3.7

Community Area	2000/01		2005/06		% Change (based on crude rates)
	Total Cases	Adjusted Rate	Total Cases	Adjusted Rate	
Fort Garry (1,2)	6737	11.3%	6967	10.8%	-3.0%
Assiniboine South (t)	4590	12.8%	4402	11.9%	-4.9%
St. Boniface (1)	4925	10.7%	5585	11.1%	4.8%
St. Vital (t)	7380	12.4%	6835	11.2%	-8.7%
Transcona (1,2)	4473	14.0%	4481	14.0%	0.3%
River Heights	6768	11.9%	6397	11.5%	-4.2%
River East	11374	12.4%	11431	12.1%	-1.7%
Seven Oaks (1,2,t)	8240	14.3%	7898	13.1%	-8.2%
St. James - Assiniboia (1,2,t)	8332	13.9%	7812	13.1%	-4.5%
Inkster (1,2)	4352	14.2%	4678	15.1%	6.7%
Downtown (1,2,t)	10417	14.6%	9553	13.5%	-8.1%
Point Douglas (1,2)	7079	17.2%	7393	17.5%	0.6%
Winnipeg (1,2,t)	84667	19.9%	83432	12.5%	-3.5%
Manitoba (t)	142317	13.1%	136867	11.6%	-5.7%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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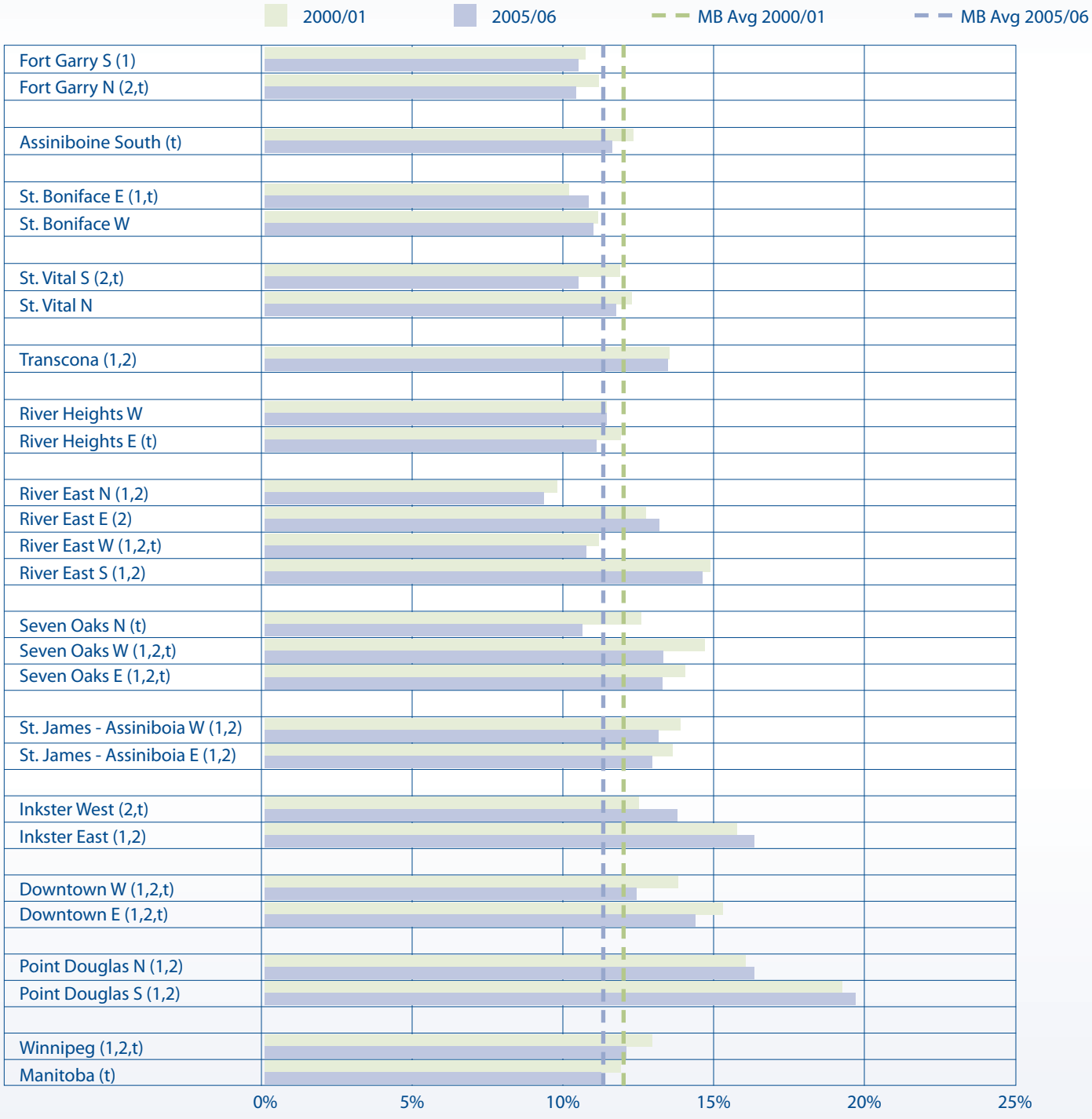
Total Respiratory Morbidity Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents (all ages) who received treatment for respiratory disease, 2000/01 & 2005/06.

Figure 3.7



Source: Manitoba Centre for Health Policy, 2009

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Asthma: All ages

The number of individuals (all ages) who received treatment for asthma from a health professional within a 2-year window.
Rates are reported for five 1-year periods, 2002/03 to 2006/07 by sex; rates are age-adjusted to the Manitoba population in the first time period.

Table 3.8

	Asthma Prevalence - Age Standardized Cases per 1,000 Residents by Community Area									
	Males					Females				
Community Area	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007
Fort Garry	73	72	74	77	76	76	75	74	74	75
Assiniboine South	68	67	66	71	71	72	71	69	74	75
St. Boniface	65	65	65	68	70	69	66	67	72	73
St. Vital	69	67	68	71	73	74	74	71	73	72
Transcona	67	68	65	65	64	74	72	74	78	77
River Heights	72	72	70	72	74	78	77	77	80	80
River East	66	66	66	69	69	73	69	70	75	74
Seven Oaks	80	80	81	85	85	83	82	83	85	85
St. James - Assiniboia	73	74	76	78	78	81	78	80	83	83
Inkster	80	81	86	93	90	83	92	93	95	94
Downtown	73	74	76	75	74	84	84	86	86	86
Point Douglas	79	80	80	85	86	95	98	100	104	106
Winnipeg	72	72	73	75	75	78	77	78	81	81
Manitoba	62	62	62	64	64	68	67	67	69	69

Source: Manitoba Hospital Abstracts, 2008

Asthma Treatment Prevalence (Males) by Winnipeg Community Area

Age Adjusted Cases per 1,000 Male Residents, 2002/03-2006/02

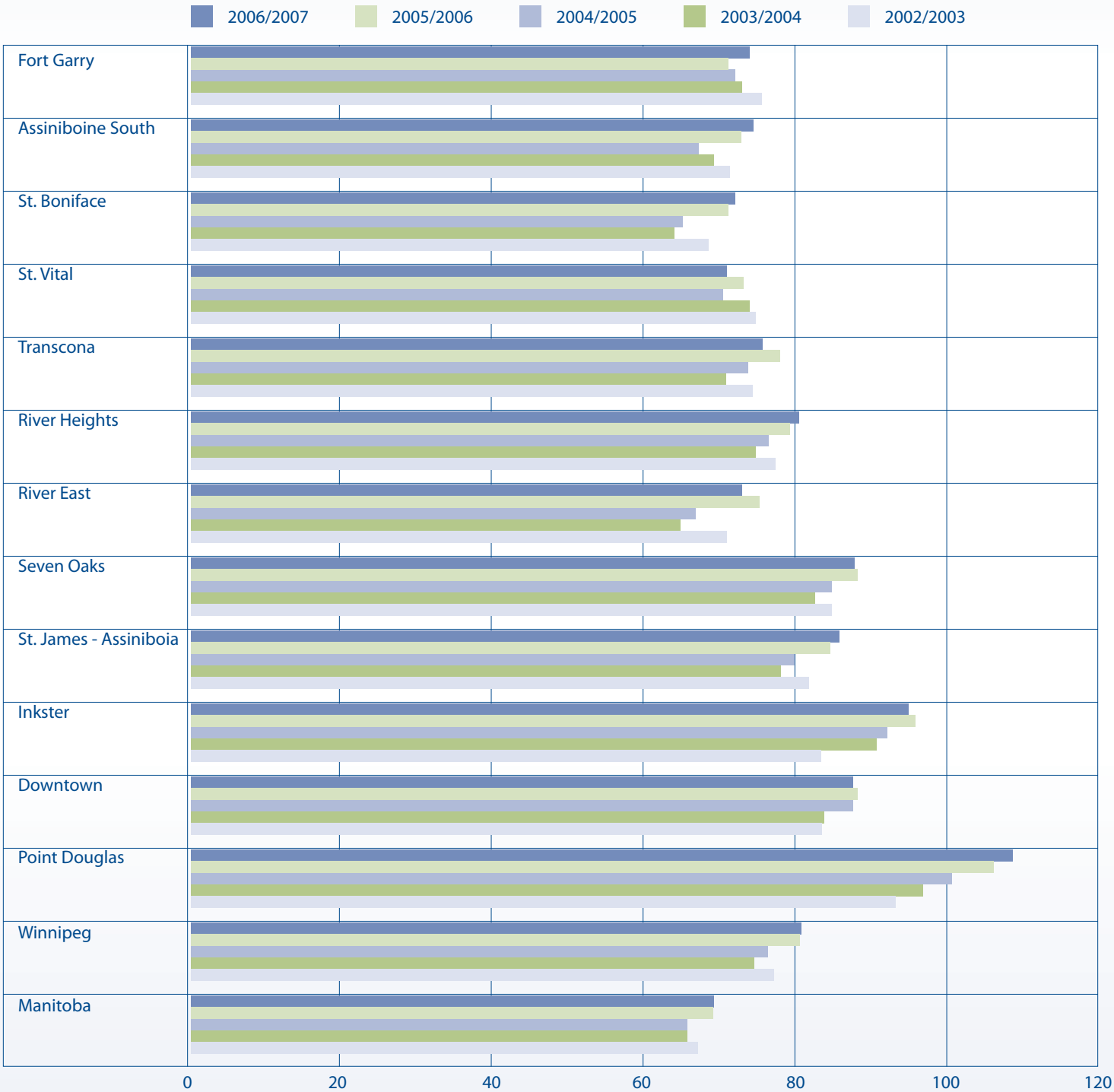
Figure 3.8

Source: Manitoba Hospital Abstracts, 2008

Asthma Treatment Prevalence (Females) by Winnipeg Community Area

Age Adjusted Cases per 1,000 Female Residents, 2002/03-2006/07

Figure 3.9



Source: Manitoba Hospital Abstracts, 2008

Asthma: Children

The proportion (%) of Winnipeg children aged 5 to 19 who received treatment for asthma in a two-year period.

Rates are reported for two 2-year periods, 1999/2000-2000/01 and 2004/05-2005/06 and were age- and sex-adjusted to the Manitoba population in the first time period.

Table 3.9

Asthma in Children (Treatment) Prevalence					
Community Area	1999/2000-2000/01		2004/05-2005/06		% Change
	Total Cases in 2 years	Adjusted Rate	Total Cases in 2 years	Adjusted Rate	
Fort Garry (1,2)	2053	16.0%	2271	17.5%	7.6%
Assiniboine South (1)	1242	15.6%	1167	15.3%	-3.2%
St. Boniface	1252	14.3%	1369	14.6%	1.6%
St. Vital	1893	15.3%	1778	15.1%	-3.5%
Transcona	1065	14.6%	1034	14.6%	-0.9%
River Heights (1,2)	1350	16.4%	1344	16.6%	0.6%
River East (1,2)	2884	15.5%	2942	16.0%	2.6%
Seven Oaks (1,2)	2100	18.3%	2088	18.5%	0.5%
St. James - Assiniboia (1,2)	1714	16.9%	1591	15.8%	-7.3%
Inkster (1,2,t)	1266	16.5%	1408	19.0%	14.0%
Downtown (2)	1926	15.2%	1986	15.8%	1.7%
Point Douglas (1,2)	1466	16.8%	1695	18.0%	5.8%
Winnipeg (1,2)	20211	16.0%	20673	16.4%	1.6%
Manitoba	34056	13.7%	34269	13.9%	0.8%

Source: Manitoba Centre for Health Policy, 2008

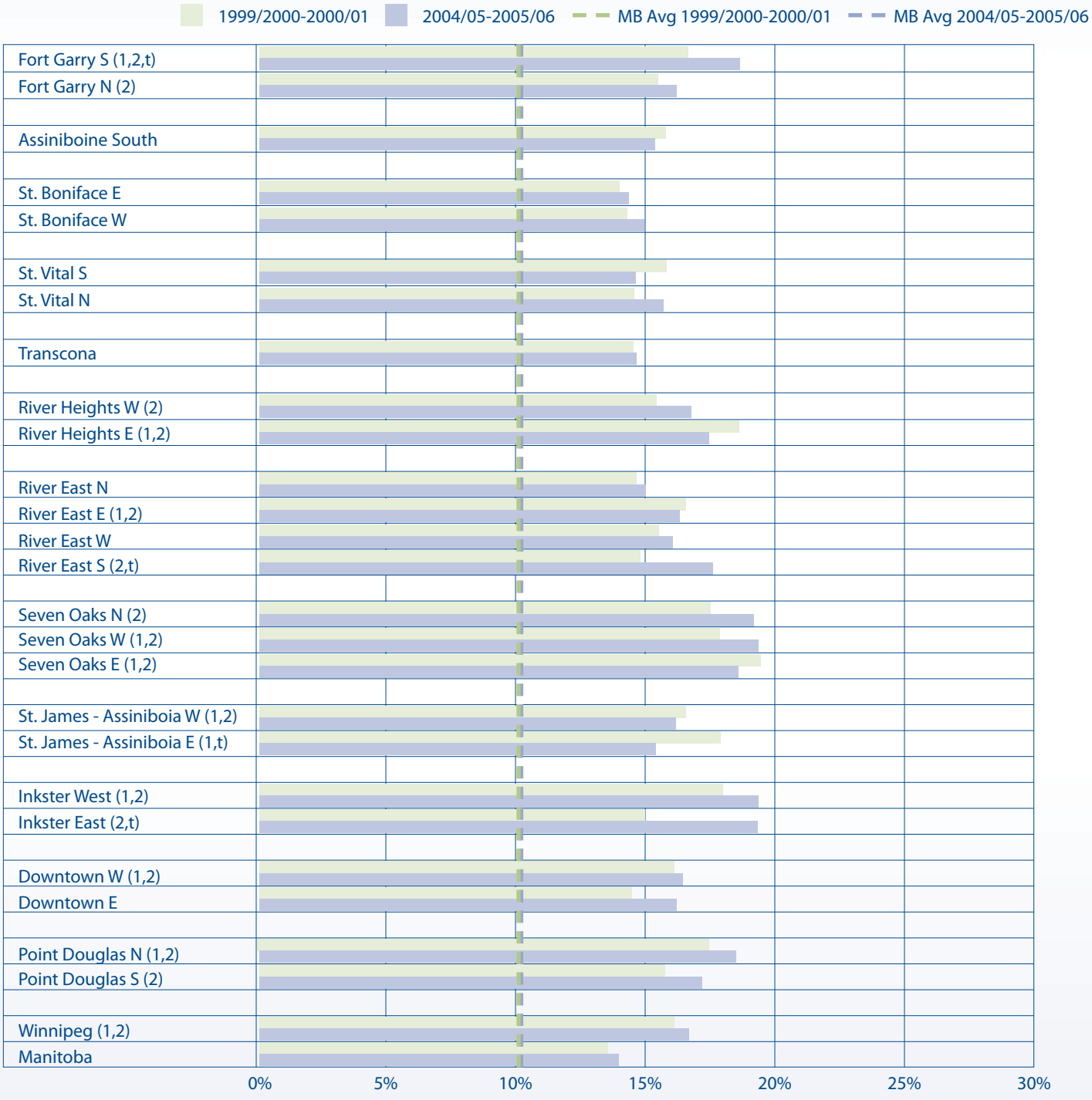
Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Children with Asthma by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percent of children aged 5-19 diagnosed with asthma, 1999/00-2000/01 & 2004/05-2005/06.

Figure 3.10



Source: Manitoba Centre for Health Policy, 2008

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Cancer Incidence

Rate of new cancers (all, lung, colorectal, prostate (males), breast & cervical (females) and melanoma) are based data from the Manitoba Cancer Registry. All rates are age-standardized per 100,000 residents for cancer, by cancer site for two, 3-year periods: 2000-2002 and 2005-2007. These rates are also reported on by sex for two 3-year periods: 2000-2002 and 2003-2005.

Table 3.10

Cancer Incidence				
Age-standardized rates per 100,000 for all invasive cancers				
	2000-2002		2005-2007	
	Winnipeg	Manitoba	Winnipeg	Manitoba
All	482.4	N/A	456.6	457.8
Lung	74.5	N/A	69.1	68.8
Colorectal	63.8	N/A	62.9	64.4
Breast (f)	123.6	N/A	125.3	121.3
Prostate (m)	149.2	N/A	121.8	117.9

Table 3.11

Cancer Incidence					
Age-standardized rates per 100,000 males & females for cancer, by cancer site					
	MALE			FEMALE	
	2000-2002	2003-2005		2000-2002	2003-2005
All Cancer	563.3	520.3	All Cancer	427.9	429.1
Lung	92	86	Lung	64	65
Colorectal	83	73	Breast	123	122
Prostate	148	124	Cervical	9	8
Melanoma	12	12	Colorectal	50	52
			Melanoma	9	8

Source: Cancer Care Manitoba, 2009
N/A = not available

Cancer Incidence

Rate of new cancers (all, lung, colorectal, prostate (males), breast & cervical (females) and melanoma) are based data from the Manitoba Cancer Registry. All rates are age-standardized per 100,000 residents for cancer, by cancer site for two, 3-year periods: 2000-2002 and 2005-2007. These rates are also reported on by sex for two, 3-year periods: 2000-2002 and 2003-2005.

Figure 3.11: Cancer Incidence of Common Cancers in Males, 2000-2002 & 2003-2005

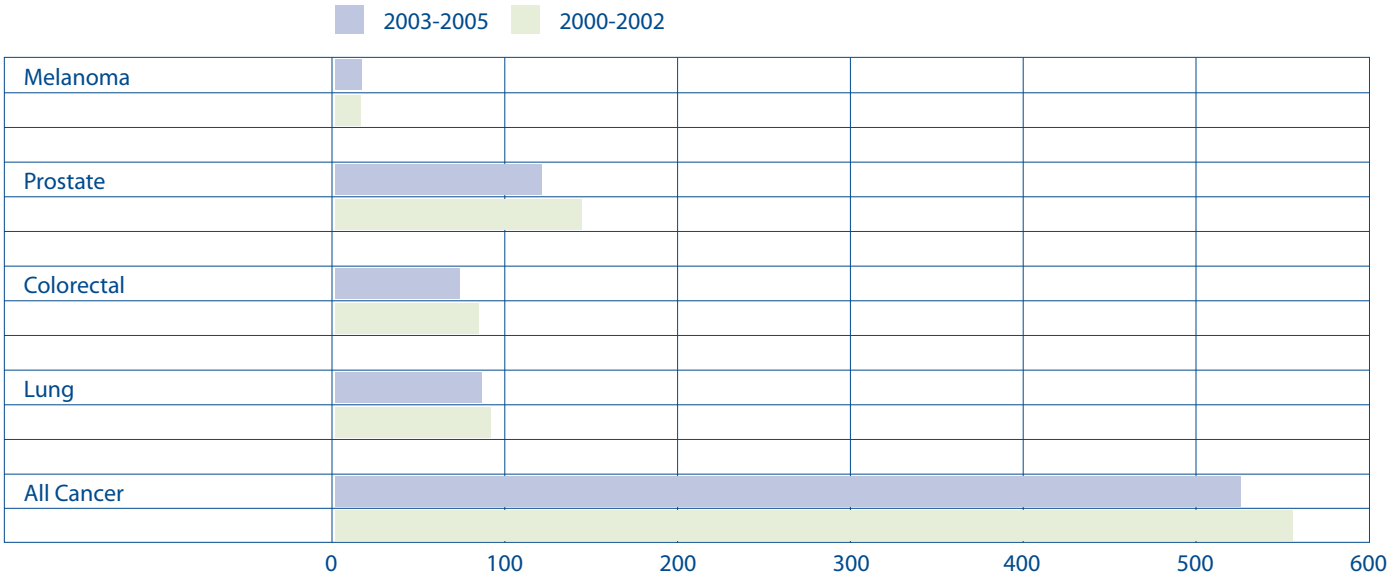
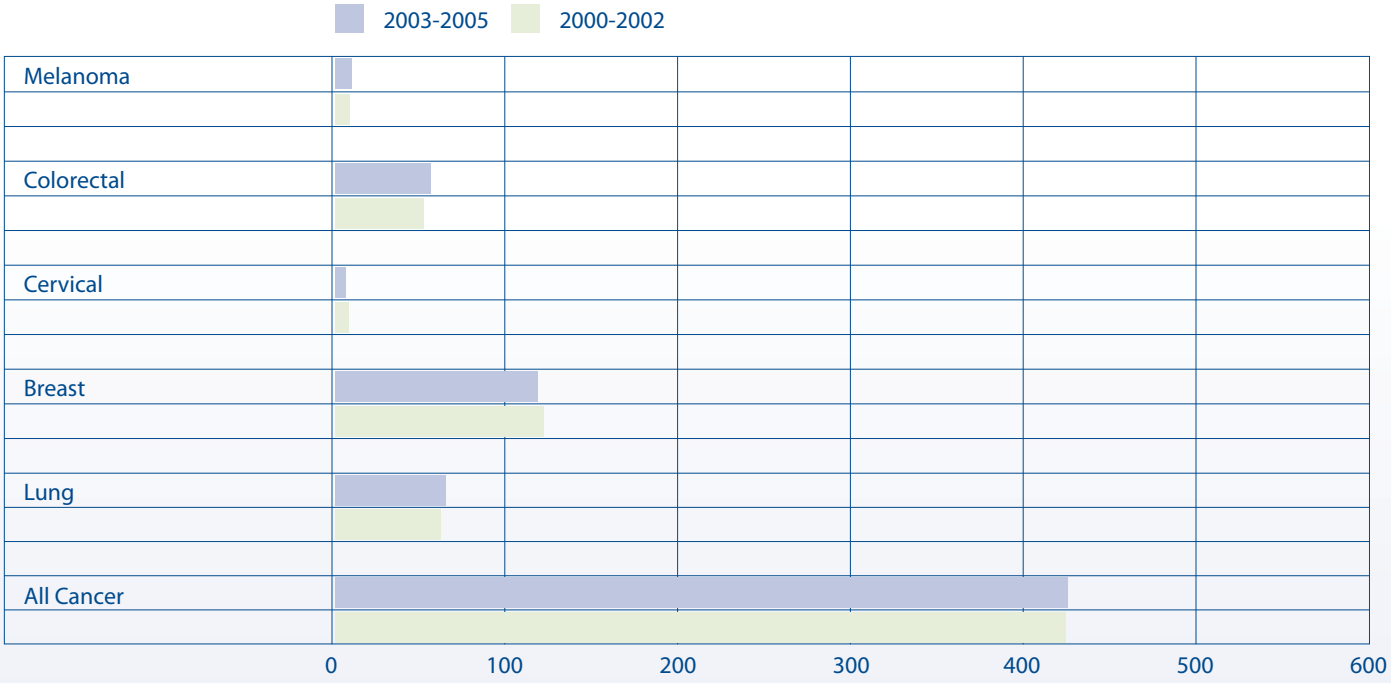


Figure 3.12: Cancer Incidence of Common Cancers in Females, 2000-2002 & 2003-2005



Source: Cancer Care Manitoba, 2009

Cancer Survival

Five-year relative survival ratios (percentage) for cancers (all, lung, colorectal, prostate (males), breast & cervical (females) and melanoma) from the Manitoba Cancer Registry. All ratios (percentages) are age-standardized for cancer (all sites combined), by two, 3-year periods: 2000-2002 and 2005-2007.

Table 3.12

Cancer Survival				
Age-standardized 5-year relative survival ratios (percent)				
	2000-2002		2005-2007	
	Winnipeg	Manitoba	Winnipeg	Manitoba
All	53.0%	N/A	56.4%	56.4%
Lung	12.7%	N/A	19.4%	18.9%
Colorectal	51.7%	N/A	57.1%	56.9%
Breast (f)	83.2%	N/A	83.0%	83.6%
Prostate (m)	85.1%	N/A	93.3%	91.1%

Source: Cancer Care Manitoba, 2009
N/A = not available

4. Mental Health

Winnipeg Regional Health Authority AT A GLANCE

NOTE: All estimates are based on who gets treatment for the disorder not those who have the disorder.

	Current Rate*	Previous Rate	Range of Current Estimates** (low CA-high CA)
Mood disorders and/or use of antidepressants/ mood stabilizers	20.3% 2001/02-2005/06	18.1% 1996/97-2000/01	15.8 -22.5%
Anxiety Disorders	8.3% 2001/02-2005/06	6.7% 1996/97-2000/01	6.8 -11.2%
Substance Abuse	4.7% 2001/02-2005/06	5.3% 1996/97-2000/01	2.6 -9.1%
Personality Disorder	0.99% 2001/02-2005/06	1.04% 1996/97-2000/01	0.66-1.77%
Schizophrenia	1.20% 2001/02-2005/06	1.20% 1996/97-2000/01	0.69 -2.65%
One or more Mental Disorders (cumulative mental illness)	25.6% 2001/02-2005/06	23.4% 1996/97-2000/01	20.9 -29.8%
Teenagers prescribed SSRI Antidepressants	15.5% 2005/06	19.4% 2002/03	9.0 -24.3%
Dementia (age 55 and older)	11.5% 2001/02-2005/06	10.7% 1996/97-2000/01	9.7-12.9%

*All rates are age- and sex-adjusted to the Manitoba population in the 1st time period of the rate/event calculation
Detailed definitions including data sources and ICD-9-CM diagnostic codes are available in Appendix A
**CA=Community Areas

This section presents several indicators focused on the **prevalence of treatment of certain mental illnesses** in the Winnipeg Health Region. By "treatment prevalence" we mean that only those persons who have received certain types of health services or treatment for the disorder (by visiting a doctor, being admitted to a hospital and/or having a prescription dispensed) are counted in our rates, but those who may have undetected disorders, disorders that do not require frequent medical care, and those not receiving the care they may need for their condition are not counted. This must be kept in mind when treatment prevalence rates are interpreted—rates that change may mean that the disease is actually getting more or less common, or it may mean that more or less people are getting diagnosed or receiving care. For example, an increase in the treatment prevalence for anxiety disorders could mean that more people are anxious or that more people are having their anxiety diagnosed and treated appropriately. We just do not know based on these rates.

Please note that the comparison of these mental illness prevalence indicators to results of other studies is challenging because of differences in data sources and definitions used.

Mood disorders and/or use of antidepressants/mood stabilizers[14] is an indicator that refers to all residents age 10 or older who have been treated for a large number of mental illnesses including depressive and bipolar disorders, affective psychoses, neurotic depression, adjustment reaction and/or anxiety disorders (when combined with a dispensed prescription for antidepressants or mood stabilizers). Consequently, this indicator does not correspond to any single, clinically-defined mental illness, and should be interpreted with caution.

The data suggest that this indicator has significantly increased over the two time periods (1996-2001 and 2001-2006) in both Manitoba (16.9% to 19.1%) and Winnipeg (18.1% to 20.3%). All CAs showed a similar increasing trend between the two time periods (1996-2001 & 2001-2006).

Treatment prevalence of ***Anxiety Disorders*** is based on counting among residents age 10 or older, hospitalizations and physician visits for a number of conditions including anxiety states, phobic disorders and obsessive-compulsive disorders.

Prevalence of treated anxiety disorders increased significantly for all CAs, and for Winnipeg and Manitoba between the two time periods (1996-2001 and 2001-2006): Winnipeg (6.7% to 8.3%) and Manitoba (6.1% to 7.4%). About 4 percentage points separate the CAs with the highest and lowest anxiety prevalence for the most recent 5-year period: Transcona (11.2%) and Fort Garry (6.8%). All CAs showed a significant increase in prevalence of treated anxiety between the two time periods (1996-2001 & 2001-2006).

Treatment prevalence of ***Substance Abuse*** is defined as the proportion of WHR's residents age 10 or older who were treated for alcoholic or drug psychoses, alcohol or drug dependence or nondependent abuse of drugs. Prevalence of treated substance abuse decreased for Winnipeg and Manitoba between the two time periods (1996-2001 and 2001-2006): Winnipeg (5.3% to 4.7%) and Manitoba (5.4% to 4.9%). Several CAs also had significantly decreased prevalence in treatment of substance abuse. There was over a threefold difference between the CA with the highest treatment prevalence (Point Douglas 9.1%) and the lowest (Fort Garry 2.6%).

Treatment prevalence of ***Personality Disorders*** is an indicator based on a diagnosis of any personality disorder as identified in hospital or physician claims in residents age 10 or older. The treatment prevalence of personality disorders has remained stable over time. Two CA treatment prevalence values are particularly high (2001-2006): Downtown (1.77%) and River Heights (1.66%). The lowest prevalence value is found in Inkster (0.66%). This represents about a two and a half fold difference.

Treatment prevalence of ***Schizophrenia*** is based on a diagnosis of schizophrenia as identified in hospital or physician claims. The treatment prevalence in the WHR (2001-2006,) was 1.20%. Records going back 12 years were examined to ensure inclusion of residents diagnosed earlier but who may not have had the diagnosis attributed to recent hospitalizations or physician visits. The prevalence of schizophrenia has remained stable over time in Winnipeg (1996-2001, 1.20% & 2001-2006, 1.20%) and Manitoba (1996-2001, 1.11% & 2001-2006, 1.12%). Three CA prevalence values are higher than Winnipeg overall (2001-2006): Downtown (2.65%), Point Douglas (1.92) and River Heights (1.36). The lowest prevalence value for schizophrenia is found in Transcona (0.69%).

Treatment prevalence of ***One or more of the Mental Illnesses*** listed above (cumulative mental illness) combines the occurrence of many mental illnesses in one person and provides an overall description of the prevalence of mental illness; it accounts for the considerable co-occurrence among mental illnesses. Five mental illness diagnoses are included in its calculation: depression, anxiety, substance abuse, personality disorders or schizophrenia.

[14] In the "Manitoba RHA Indicators Atlas 2009" (MCHP) this indicator can be found under the name "Depression". For the purpose of this report we have re-labelled it to more accurately reflect the treatment prevalence that it measures.

Treatment prevalence for both Manitoba and Winnipeg significantly increased over the two time periods (1996-2001 and 2001-2006): Manitoba (22.4% to 24.3%) and Winnipeg (23.4% to 25.6%). Nine percentage points separate the highest and lowest prevalence for the most recent 5-year period: Point Douglas (29.8%) and Fort Garry (20.9%). Most Community Areas (CAs) showed a significant difference (upwards) between the two time periods with the exception of St. Boniface (23.9%, 1996-2001 to 25.0%, 2001-2006) where the increase was not statistically significant.

Teenagers prescribed SSRI Antidepressants An examination of the prevalence of SSRI use in teenagers (aged 10-19 years) shows that there has been a significant decrease in their use in Winnipeg and Manitoba between the two time periods (2002/03 and 2005/06): Winnipeg (19.4% to 15.5%) and Manitoba (17.1% to 14.5%). Two CAs had significant decreases in prevalence of SSRI prescribed in teenagers between the two time periods: Transcona (20.6% to 14.5%) and River East (21.9% to 15.8%). The highest and lowest prevalence of SSRI use in teenagers in 2001-2006 were River Heights (24.3%) and Inkster (9.0%).

Dementia (in persons aged 55 and over) is not a mental illness but was included in this chapter for convenience. Dementia refers to a group of illnesses characterized by progressive decline in several mental functions including memory, learning, and communication. Therefore, the definition of dementia in Winnipeg residents 55 years of age and older involves many diagnostic codes included in hospital and physician visit data.

The prevalence of treatment for dementia (among those 55 or older) increased significantly for Winnipeg and Manitoba between the two time periods (1996-2001 and 2001-2006): Winnipeg (10.7% to 11.5%) and Manitoba (10.0% to 10.8%). About 3 percentage points separate the highest and lowest dementia prevalence for the most recent 5-year period: Point Douglas (12.9%) and Inkster (9.7%). All CAs show an increase in dementia prevalence between the two time periods (1996-2001 & 2001-2006). Note that the location of personal care homes in community areas or neighbourhood clusters may influence the treatment prevalence estimates.

ADDITIONAL INFORMATION

These indicators were derived initially from a Manitoba Centre for Health Policy (MCHP) report "Patterns of Regional Mental Illness Disorder Diagnoses and Service Use in Manitoba: A Population-Based Study" (2004). These indicators are also reported most recently in the "Manitoba RHA Indicators Atlas" (2009). Both reports including additional data links can be found at:
http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html
Scroll down to 2004 and 2009 and choose full report.

Mood Disorders and/or Use of Antidepressants/Mood Stabilizers

The proportion (%) of the population aged 10 or older who received treatment for mood disorder or were prescribed antidepressant or mood stablizers over a five-year period.

Values were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age– and sex–adjusted to the Manitoba population (10+) in the first time period.

Table 4.1

Mood Disorders and/or Use of Antidepressant/Mood Stabilizers 5-year Treatment Prevalence					
Community Area	1996/97-2000/01		2001/02-2005/06)		% Change
	Total Cases in 5 years	Adjusted Rate	Total Cases in 5 years	Adjusted Rate	
Fort Garry (1,2,t)	8838	15.3%	10468	17.0%	11.0%
Assiniboine South (1,2,t)	6248	18.0%	7420	20.6%	13.6%
St. Boniface (1,t)	8159	18.8%	9295	19.9%	6.8%
St. Vital (t)	10053	17.5%	11541	19.4%	11.2%
Transcona (t)	5539	17.7%	6407	20.2%	15.2%
River Heights (1,2,t)	11555	20.1%	12651	22.2%	9.6%
River East (t)	15249	17.8%	18002	19.9%	12.9%
Seven Oaks (t)	9693	17.7%	11280	19.9%	12.1%
St. James - Assiniboia (1,2,t)	11079	18.5%	12398	20.8%	13.0%
Inkster (1,2,t)	4016	14.1%	4619	15.8%	11.6%
Downtown (2,t)	12058	17.6%	14549	20.3%	14.1%
Point Douglas (1,2,t)	7398	19.6%	8689	22.5%	14.4%
Winnipeg (1,2,t)	109885	18.1%	127319	20.3%	12.0%
Manitoba (t)	177793	16.9%	207060	19.1%	12.9%

Source: Manitoba Centre for Health Policy, 2009

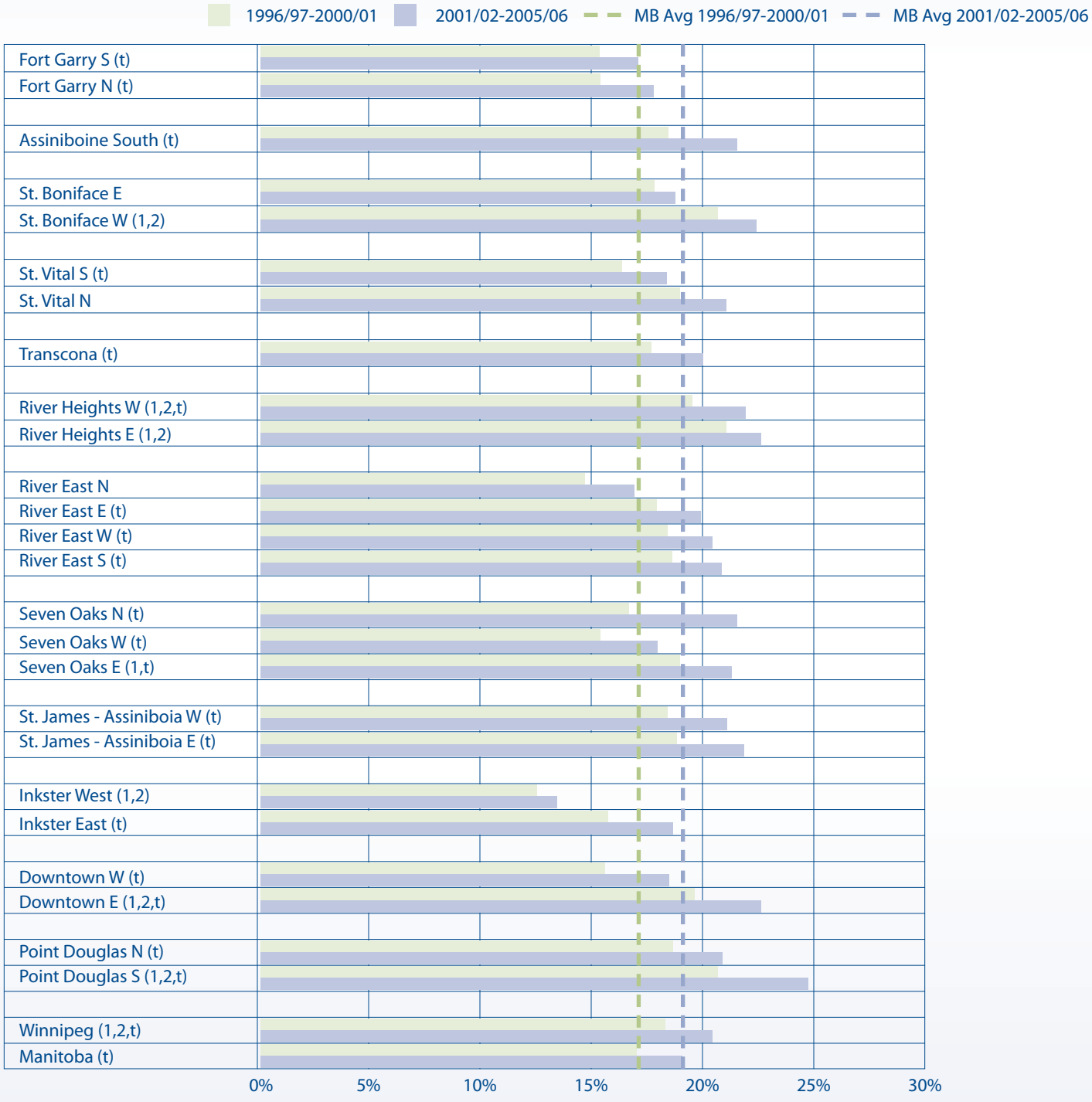
Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Mood Disorders and/or Use of Antidepressants/Mood Stabilizers Treatment Prevalence

Age- and sex-adjusted percentage of residents aged 10+ who received treatment for mood disorders, 1996/97-2000/01 & 2001/02-2005/06.

Figure 4.1



Source: Manitoba Centre for Health Policy, 2009

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Anxiety Disorders

The proportion (%) of residents age 10 or older who received treatment for anxiety over a five–year period

Values were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age– and sex–adjusted to the Manitoba population (10+) in the first time period.

Table 4.2

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Total Cases in 5 years	Adjusted Rate	Total Cases in 5 years	Adjusted Rate	
Fort Garry (1,2,t)	2914	5.1%	4056	6.8%	30.5%
Assiniboine South (t)	2194	6.5%	2778	7.9%	21.1%
St. Boniface (1,2,t)	2963	6.9%	3908	8.6%	23.7%
St. Vital (1,2,t)	4020	7.1%	4727	8.2%	13.9%
Transcona (1,2,t)	2724	9.0%	3378	11.2%	23.6%
River Heights (1,2,t)	3912	6.9%	4753	8.5%	21.7%
River East (t)	4970	5.8%	6644	7.5%	27.8%
Seven Oaks (1,2,t)	3878	7.1%	4601	8.2%	14.3%
St. James - Assiniboia (t)	3799	6.5%	4225	7.3%	12.3%
Inkster (t)	1662	6.0%	2087	7.2%	21.8%
Downtown (1,2,t)	5148	7.6%	6752	9.5%	24.1%
Point Douglas (1,2,t)	2935	7.8%	3556	9.3%	18.0%
Winnipeg (1,2,t)	41119	6.7%	51465	8.3%	20.9%
Manitoba (t)	63655	6.1%	79538	7.4%	21.1%

Source: Manitoba Centre for Health Policy, 2009

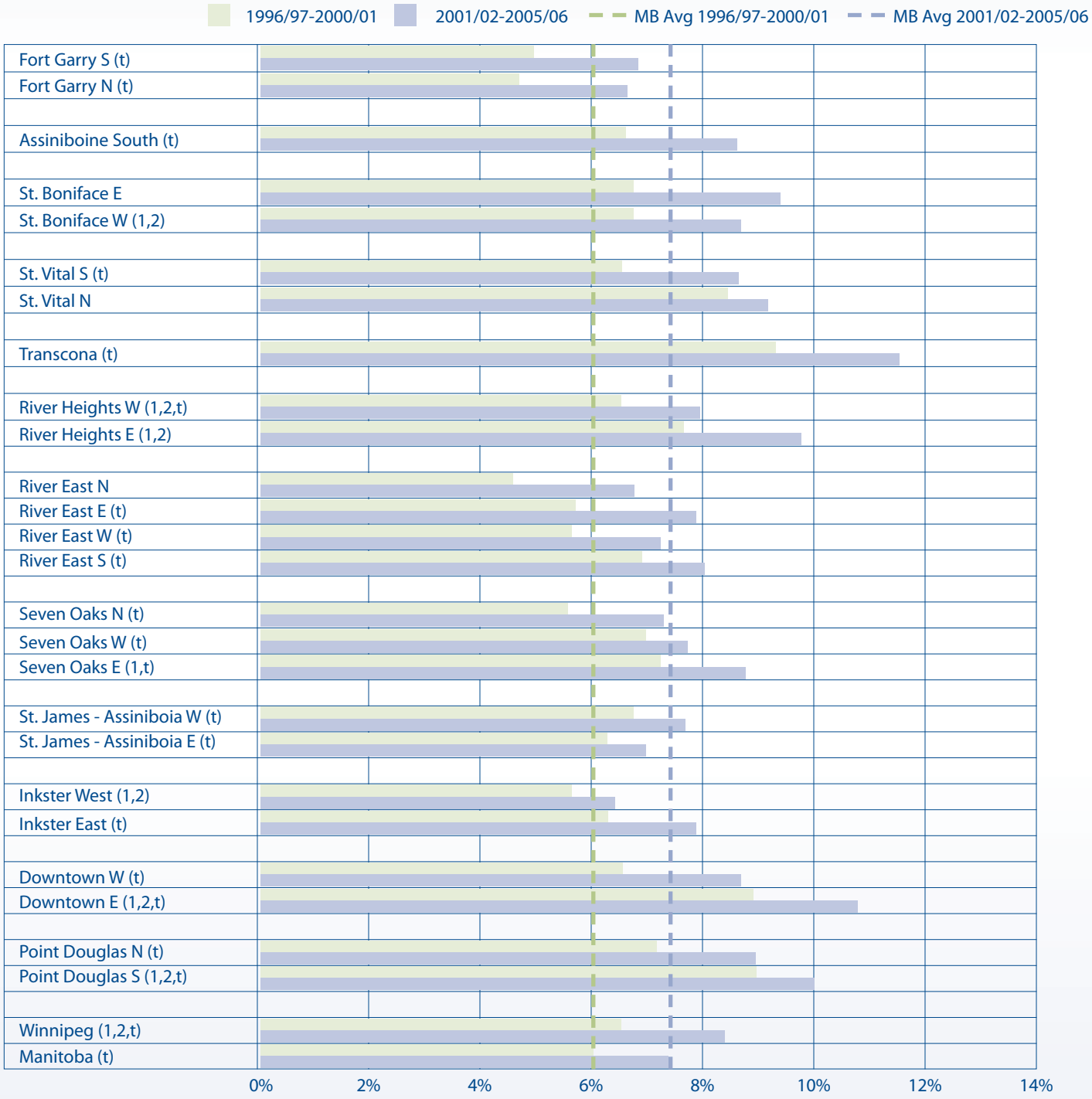
Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Anxiety Disorders Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percentage of residents aged 10+ who received treatment for anxiety disorders, 1996/97-2000/01 & 2001/02-2005/06.

Figure 4.2



Source: Manitoba Centre for Health Policy, 2009

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Substance Abuse

The proportion of residents age 10 or older who received treatment for substance abuse (as identified by any of the following codes in one or more physician visits or hospital abstracts over a five–year period: alcoholic or drug psychoses, alcohol or drug dependence or non-dependent abuse of drugs (ICD–9–CM codes 291, 292, 303, 304, 305; ICD–10–CA codes F10–F19, F55).

Values were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age– and sex–adjusted to the Manitoba population (10+) in the first time period.

Table 4.3

Community Area	1996/97-2000/01		2001/02-2005/06		% Change (based on crude rates)
	Total Cases in 5 years	Adjusted Rate	Total Cases in 5 years	Adjusted Rate	
Fort Garry (1,2,t)	1928	3.3%	1595	2.6%	-22.4%
Assiniboine South (1,2)	1201	3.6%	1178	3.3%	-6.2%
St. Boniface (2,t)	2274	5.3%	1904	4.1%	-21.5%
St. Vital (1,2,t)	2542	4.6%	2098	3.6%	-20.0%
Transcona (2,t)	1630	5.1%	1380	4.3%	-15.7%
River Heights (1,2,t)	2627	4.8%	2270	4.2%	-13.5%
River East (1,2,t)	4148	4.8%	3828	4.2%	-11.8%
Seven Oaks (1,2)	2280	4.2%	2324	4.2%	-1.8%
St. James - Assiniboia (1,2,t)	2773	4.8%	2317	4.0%	-15.7%
Inkster (1)	1382	4.8%	1420	4.8%	-0.3%
Downtown (1,2)	5251	7.7%	5931	8.0%	6.8%
Point Douglas (1,2)	3322	8.7%	3630	9.1%	6.4%
Winnipeg (t)	31358	5.3%	29875	4.7%	-7.9%
Manitoba (t)	57175	5.4%	53996	4.9%	-8.5%

Source: Manitoba Centre for Health Policy, 2009

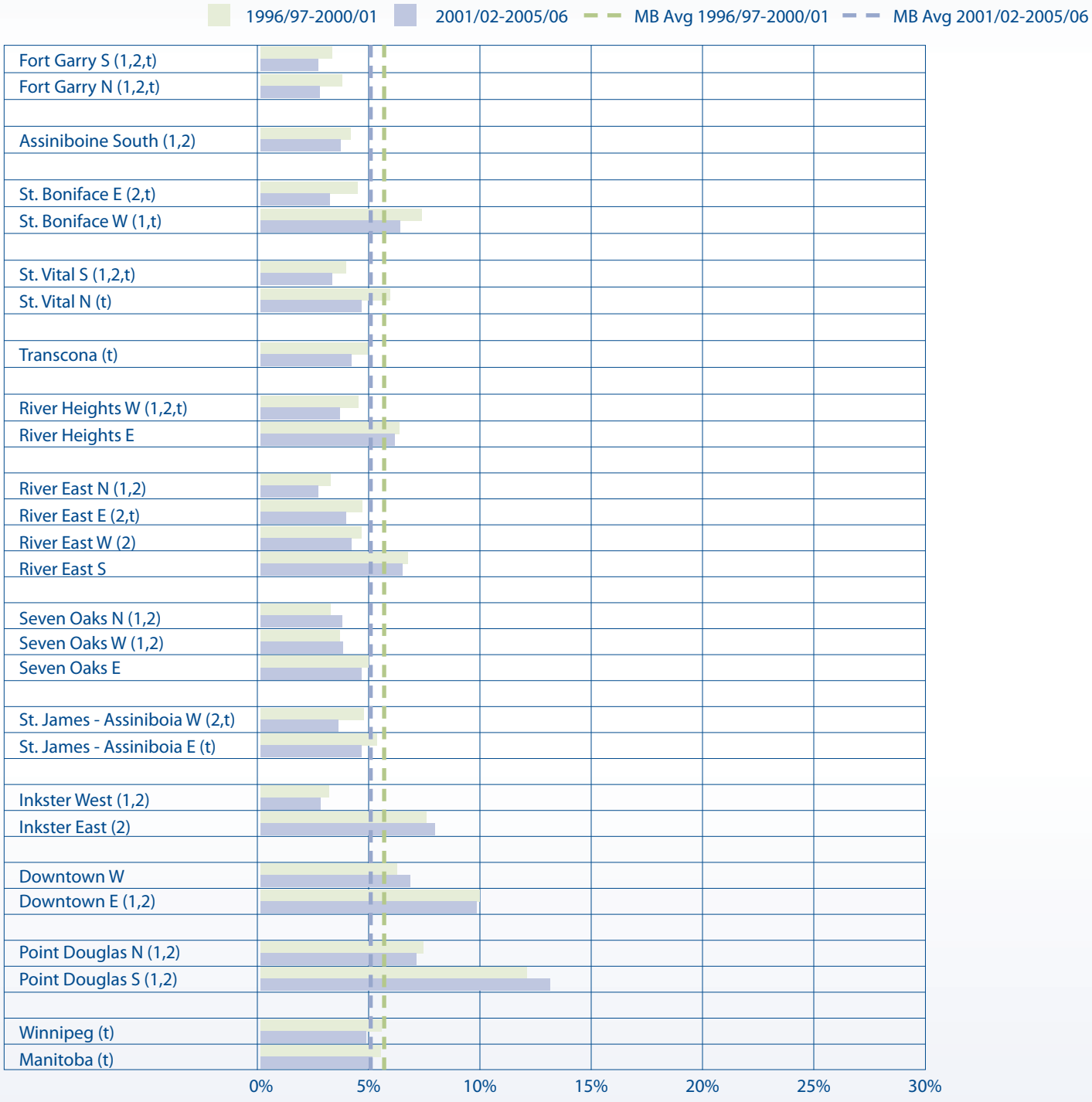
Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Substance Abuse Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents aged 10+ who received treatment for substance abuse, 1996/97-2000/01 & 2001/02-2005/06.

Figure 4.3



Source: Manitoba Centre for Health Policy, 2009

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Personalty Disorder

The proportion of residents age 10 or older who received treatment for personality disorders (ICD–9–CM code 301; ICD–10–CA codes F34.0, F60, F61, F62, F68.1, F68.8, F69) in hospital abstracts or physician claims.

Values were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age– and sex–adjusted to the Manitoba population (10+) in the first time period.

Table 4.4

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Total Cases in 5 years	Adjusted Rate	Total Cases in 5 years	Adjusted Rate	
Fort Garry (1)	434	0.74%	458	0.73%	-1.1%
Assiniboine South (t)	356	1.03%	256	0.71%	-31.2%
St. Boniface	438	1.01%	407	0.87%	-12.9%
St. Vital	464	0.81%	487	0.83%	1.7%
Transcona	249	0.79%	220	0.70%	-12.0%
River Heights (1,2)	879	1.53%	948	1.66%	8.0%
River East (1,t)	856	1.01%	773	0.86%	-13.7%
Seven Oaks	430	0.80%	434	0.78%	-2.7%
St. James - Assiniboia (1,t)	598	1.01%	477	0.82%	-19.5%
Inkster (1,2)	185	0.65%	194	0.66%	1.7%
Downtown (1,2)	1131	1.60%	1335	1.77%	11.6%
Point Douglas (1,2)	495	1.29%	474	1.20%	-6.8%
Winnipeg (1,2)	6515	1.04%	6463	0.99%	-4.1%
Manitoba	9240	0.88%	9355	0.85%	-1.9%

Source: Manitoba Centre for Health Policy, 2009

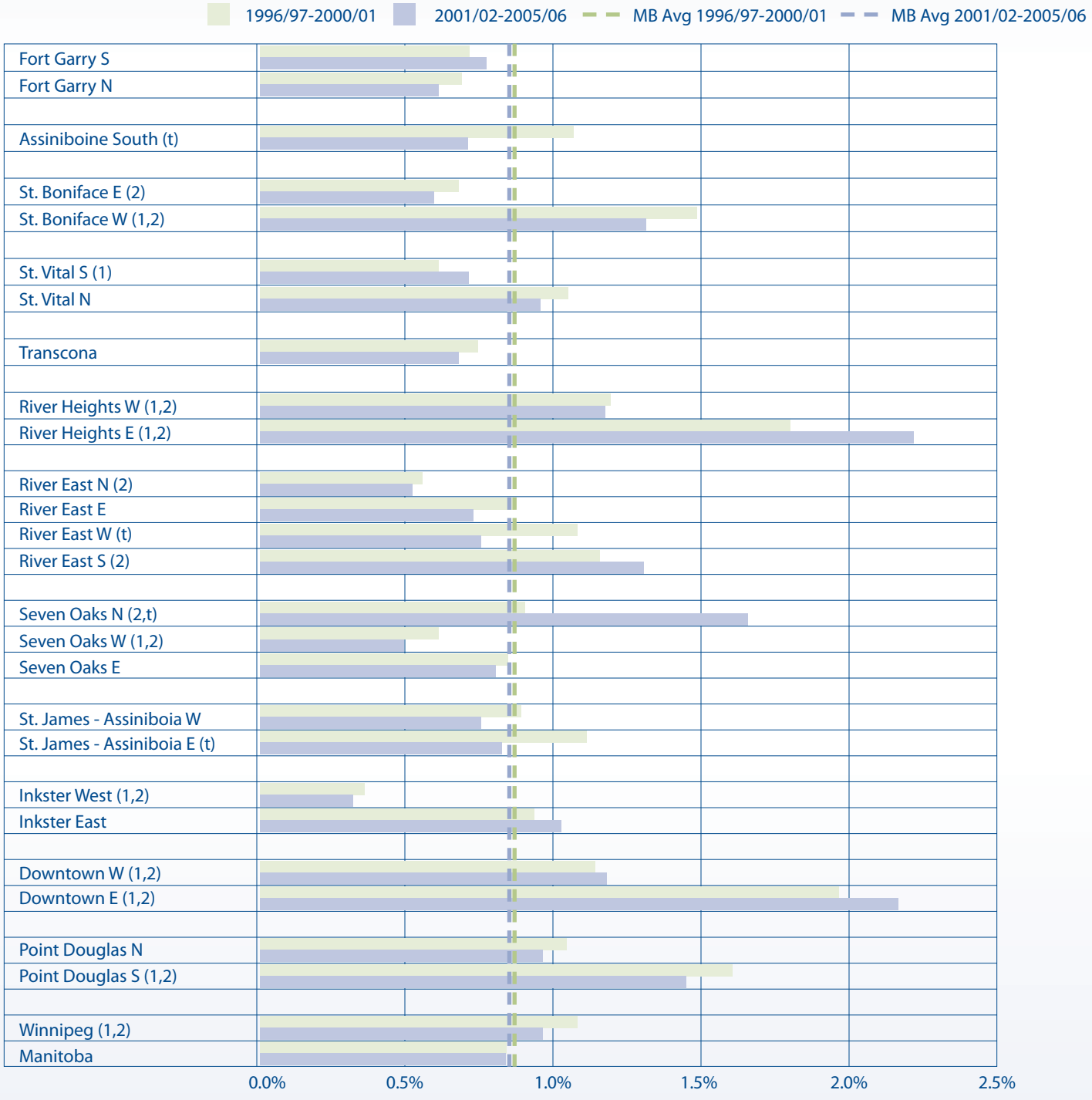
Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Personality Disorder Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents aged 10+ who were received treatment for personality disorder, 1996/97-2000/01 & 2001/02-2005/06.

Figure 4.4



Source: Manitoba Centre for Health Policy, 2009

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Schizophrenia

The percentage of residents age 10 or older who received treatment for schizophrenia (ICD–9–CM code 295; ICD–10–CA codes F20, F21, F23.2, F25) in hospital abstracts or physician visits.

Values were calculated for two 5–year periods, 1996/97– 2000/01 and 2001/02–2005/06 and were age- and sex-adjusted to the Manitoba population (10+) in the first time period.

Within each period, records going back 12 years were examined to ensure inclusion of residents diagnosed earlier, but who have not had the diagnosis attributed to recent service use records.

Table 4.5

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Total Cases in 5 years	Adjusted Rate	Total Cases in 5 years	Adjusted Rate	
Fort Garry (1,2)	459	0.82%	445	0.73%	-9.1%
Assiniboine South (1,2)	228	0.67%	251	0.69%	5.3%
St. Boniface	503	1.14%	540	1.14%	0.7%
St. Vital (1,2)	492	0.88%	485	0.83%	-4.5%
Transcona (1,2)	230	0.77%	211	0.69%	-8.6%
River Heights (1,2)	820	1.40%	790	1.36%	-3.5%
River East (2)	858	1.01%	886	0.98%	-1.3%
Seven Oaks (2,t)	585	1.09%	528	0.94%	-13.0%
St. James - Assiniboia (2)	611	1.00%	581	0.96%	-4.0%
Inkster	268	1.00%	263	0.94%	-4.8%
Downtown (1,2)	1720	2.45%	1972	2.65%	8.4%
Point Douglas (1,2)	693	1.81%	746	1.92%	4.8%
Winnipeg	7467	1.20%	7698	1.20%	-0.4%
Manitoba	11635	1.11%	12095	1.12%	0.8%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
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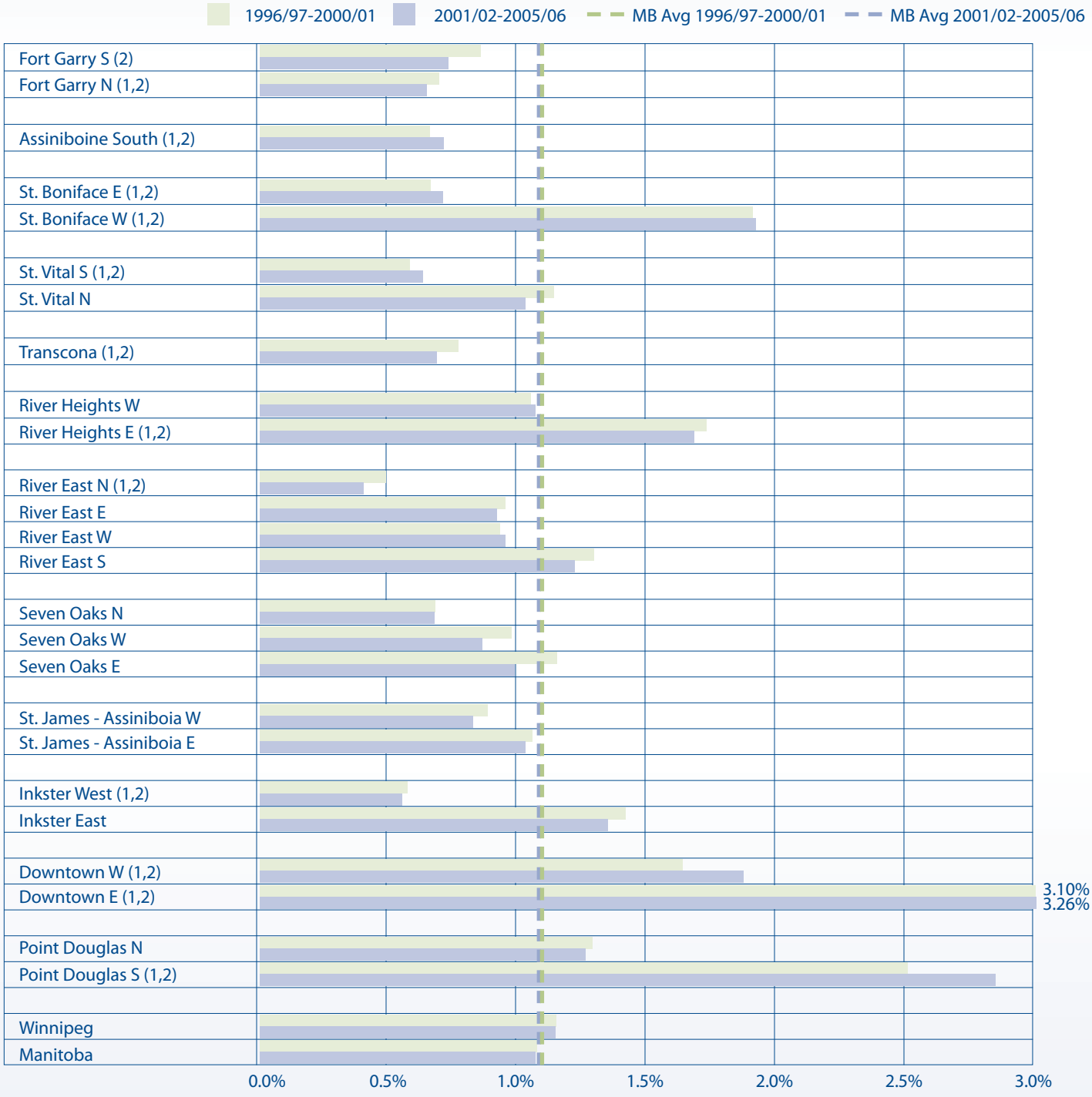
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Schizophrenia Treatment Prevalence by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents aged 10+ who received treatment for schizophrenia, 1996/97-2000/01 & 2001/02-2005/06.

Figure 4.5



Source: Manitoba Centre for Health Policy, 2009

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
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't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

One or More Mental Disorders (Cumulative Over 5 Years)

The proportion (%) of the population aged 10 or greater who received treatment for one or more of the following mental illness disorders: depression, anxiety disorders, substance abuse, schizophrenia, and personality disorder.

Values were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age– and sex–adjusted to the Manitoba population (10+) in the first time period.

Table 4.6

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Total Cases in 5 years	Adjusted Rate*	Total Cases in 5 years	Adjusted Rate*	
Fort Garry (1,2,t)	10993	19.0%	12802	20.9%	9.2%
Assiniboine South (t)	7679	22.3%	8881	24.7%	10.7%
St. Boniface (1)	10350	23.9%	11602	25.0%	5.1%
St. Vital (t)	12895	22.6%	14298	24.3%	7.4%
Transcona (1,2,t)	7540	24.3%	8492	27.1%	12.2%
River Heights (1,2,t)	14117	24.6%	15290	26.9%	8.4%
River East (t)	19264	22.4%	22173	24.5%	10.0%
Seven Oaks (t)	12538	23.0%	14261	25.1%	9.6%
St. James - Assiniboia (t)	13954	23.5%	14922	25.1%	7.9%
Inkster (1,2,t)	5606	19.8%	6309	21.6%	9.2%
Downtown (1,2,t)	17023	25.0%	19967	27.8%	10.9%
Point Douglas (1,2,t)	10191	27.0%	11581	29.8%	10.6%
Winnipeg (t)	142150	23.4%	160578	25.6%	9.2%
Manitoba (t)	235592	22.4%	263692	24.3%	8.5%

Source: Manitoba Centre for Health Policy, 2009

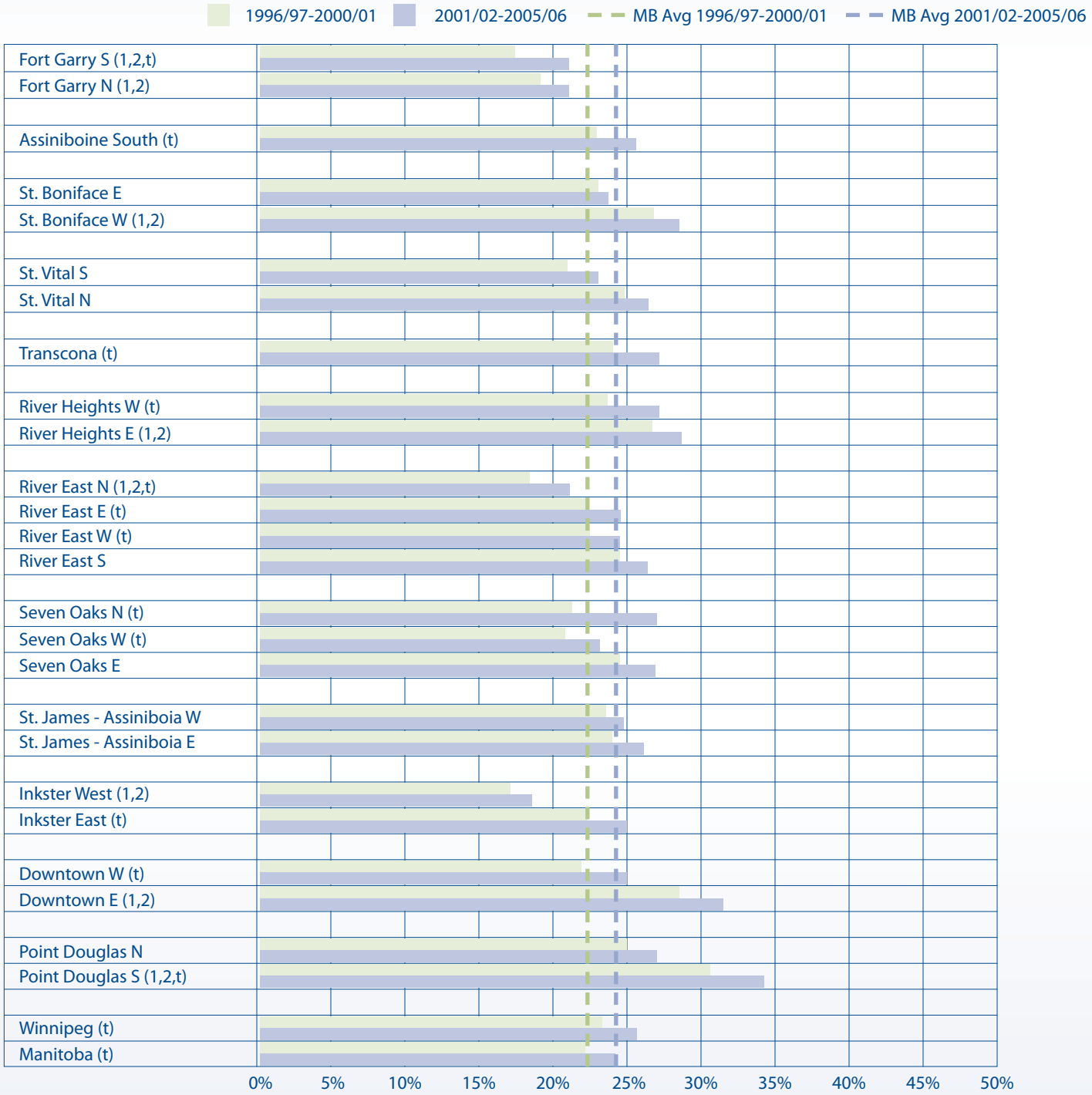
Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Cumulative Mental Illness Treatment Prevalence by Winnipeg Neighborhood Clusters

Age- and sex-adjusted percentage of residents aged 10+ treated for mental illness, 1996/97-2000/01 & 2001/02-2005/06

Figure 4.6



Source: Manitoba Centre for Health Policy, 2009

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Teenagers Prescribed SSRI Antidepressants

The rate of SSRI (Selective Serotonin Reuptake Inhibitor) antidepressant prescription per 1000 children aged 10-19

Values were calculated for two 1–year periods, 2002/03 and 2005/06, and were age– and sex–adjusted to the Manitoba population (10-19) in the first time period.

Table 4.7

Community Area	FY 2002/03		FY 2005/06		% Change
	Cases	Adjusted Rate per 1000	Cases	Adjusted Rate per 1000	
Fort Garry	173	19.4	139	15.0	-22.6%
Assiniboine South (1,2)	152	26.8	125	22.3	-14.7%
St. Boniface	113	18.8	112	17.3	-7.2%
St. Vital	158	19.2	127	15.0	-20.2%
Transcona (t)	101	20.6	73	14.5	-28.8%
River Heights (1,2)	133	23.7	129	24.3	-3.4%
River East (t)	271	21.9	210	15.8	-23.1%
Seven Oaks	123	15.8	107	13.5	-16.9%
St. James - Assiniboia	149	21.7	124	17.5	-17.2%
Inkster (2)	59	11.8	44	9.0	-25.0%
Downtown	148	17.3	123	13.4	-18.7%
Point Douglas	91	15.7	79	12.2	-21.3%
Winnipeg (t)	1671	19.4	1392	15.5	-18.6%
Manitoba (t)	2871	17.1	2537	14.5	-12.9%

Source: Manitoba Centre for Health Policy, 2008

Adjusted rates per 1000 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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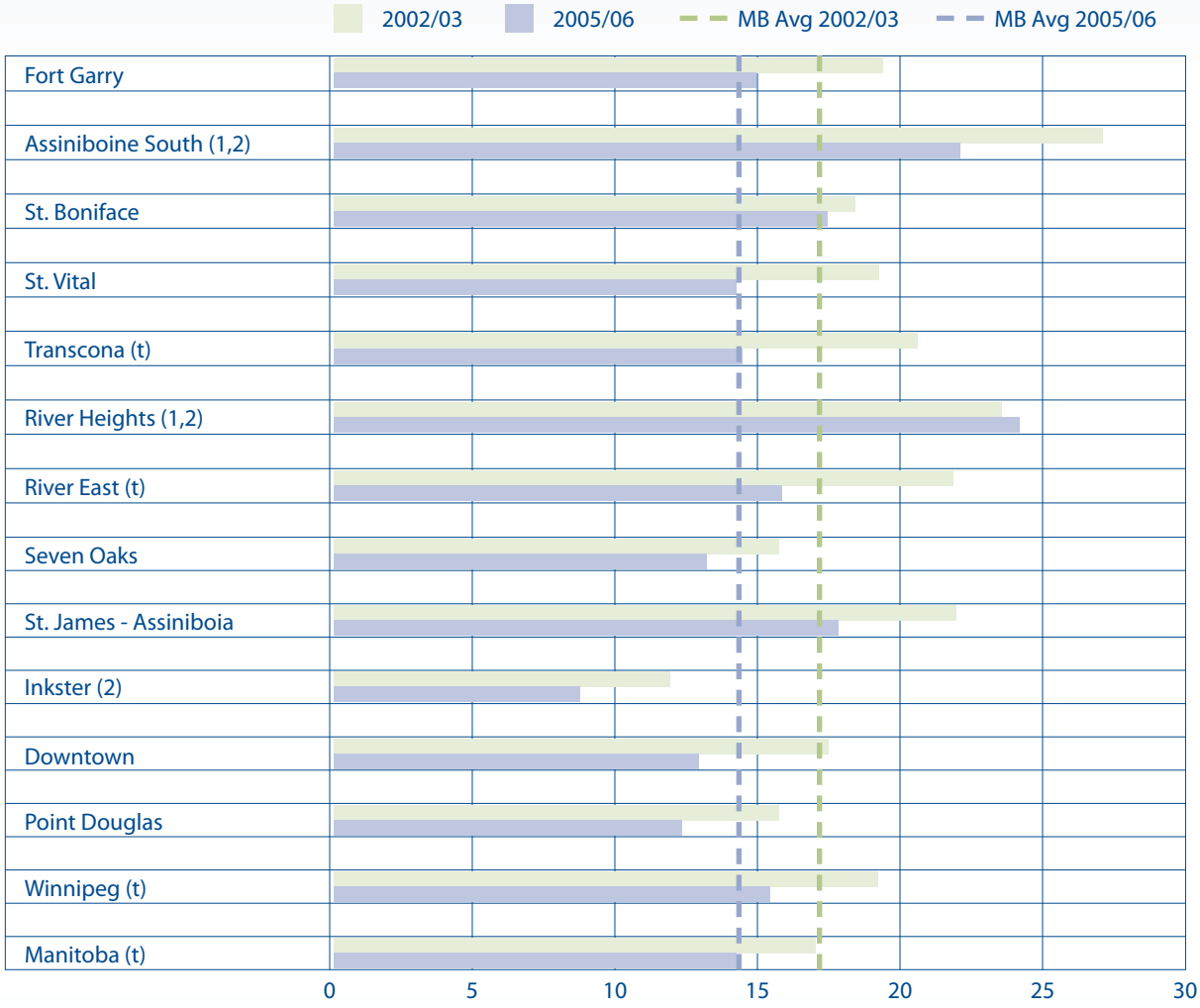
Teenagers Prescribed SSRI Antidepressants by Winnipeg Neighborhood Cluster

Age- and sex-adjusted rate of SSRI antidepressant prescription, per 1000 children aged 10-19, 2002/03 & 2005/06.7

Figure 4.7



Source: Manitoba Centre for Health Policy, 2008

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
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't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Dementia (age 55+)

Dementia is a loss of brain function; it is neither a single disease nor, technically, a mental illness. Dementia refers to a group of illnesses characterized by progressive decline in several mental functions including memory, learning, and communication. Therefore, the definition of dementia in Winnipeg residents 55 years of age and older involves many diagnostic codes included in hospital and physician visit data.

The proportion (%) of residents age 55 or older with at least one physician visit or hospitalization for any of the codes found below (see footnote):[15]
Values were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age– and sex–adjusted to the Manitoba population (55+) in the first time period.

Table 4.8

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Total Cases in 5 years	Adjusted Rate%	Total Cases in 5 years	Adjusted Rate%	
Fort Garry (t)	878	9.47%	1283	10.69%	24.6%
Assiniboine South (1,2)	1073	13.36%	1265	12.66%	-3.1%
St. Boniface (t)	925	9.46%	1167	11.01%	15.8%
St. Vital (t)	1277	10.72%	1575	11.73%	10.3%
Transcona	457	10.16%	572	11.24%	14.6%
River Heights (2,t)	1917	10.91%	2109	11.92%	10.3%
River East (1)	2165	10.96%	2520	11.18%	7.2%
Seven Oaks (2,t)	1327	10.30%	1750	11.89%	20.4%
St. James - Assiniboia (1)	1826	11.00%	2063	11.42%	10.4%
Inkster	378	8.90%	446	9.68%	10.3%
Downtown (1,2,t)	1772	11.25%	2014	12.45%	14.6%
Point Douglas (1,2,t)	1245	11.58%	1270	12.92%	10.3%
Winnipeg (t)	15240	10.65%	18034	11.49%	11.0%
Manitoba (t)	25976	10.01%	30079	10.81%	9.4%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

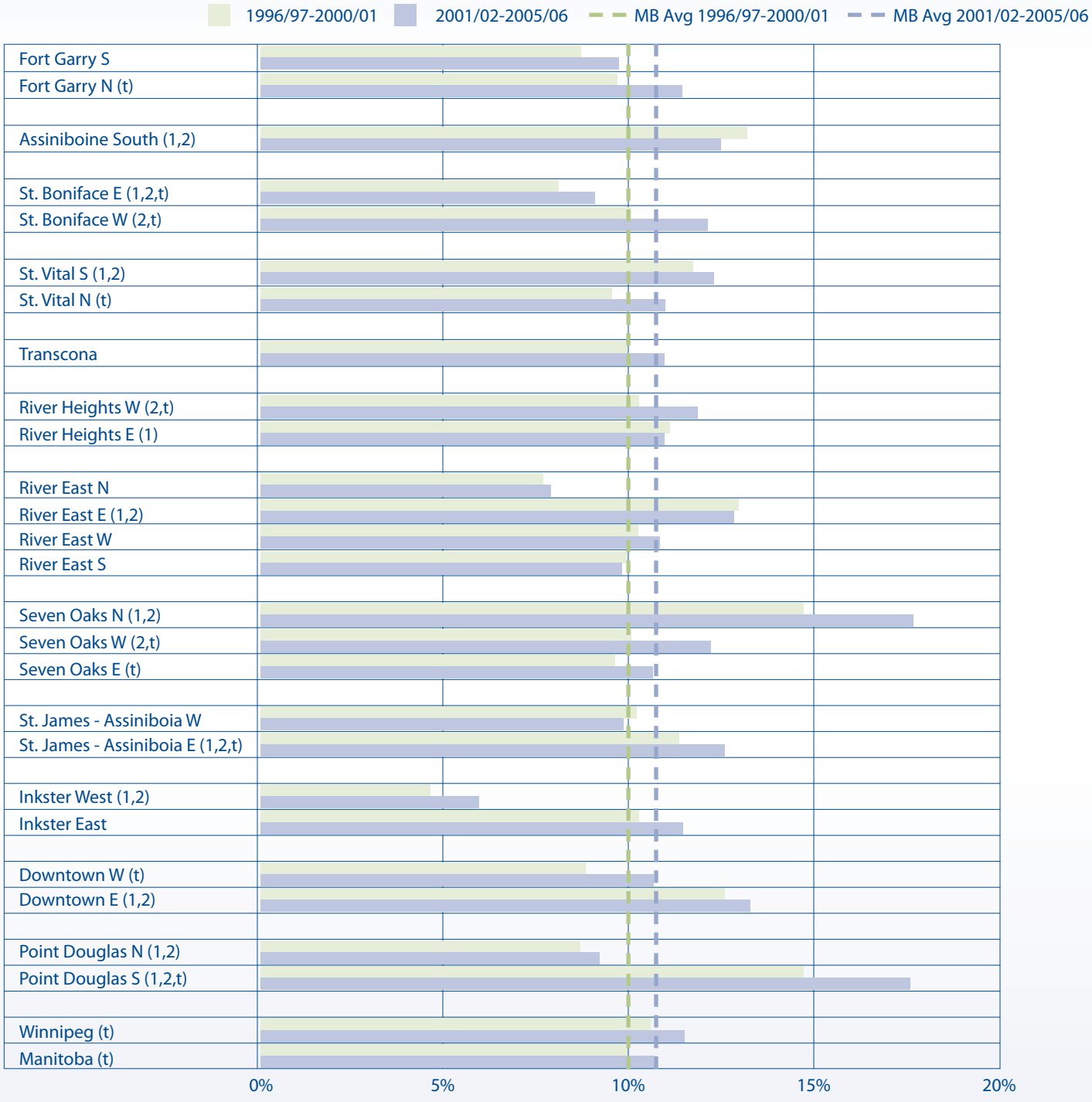
'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

[15] ICD–9–CM 290, 291, 292, 294, 331, 797; ICD–10–CA codes F00, F01, F02, F03, F04, F05.1, F06.5, F06.6, F06.8, F06.9, F09, F10–F19, G30, G31.0, G31.1, G31.9, G32.8, G91, G93.7, G94, R54 (but excluding: F10.0, F10.1, F10.2, F10.3,F10.4, F10.8, F10.9, F11.1, F11.2, F12.1, F12.2, F13.1, F13.2, F14.1, F14.2, F15.1, F15.2, F16.1, F16.2, F17.1, F17.2, F18.1, F18.2, F19.1, F19.2).

Dementia Treatment Prevalence (age 55+) by Winnipeg Neighborhood Cluster

Age- and sex-adjusted percent of residents aged 55+ treated for dementia, 1996/97-2000/01 & 2001/02-2005/06.

Figure 4.8



Source: Manitoba Centre for Health Policy, 2009

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5. Injuries

Winnipeg Regional Health Authority AT A GLANCE

	Current Estimates	Previous Estimates	Range of Current Estimates* (low CA-high CA)
Injury Hospitalizations (0-19 years of age)	33.2 / 10,000 2001/02-2005/06	41.1 / 10,000 1996/97-2000/01	20.9 – 64.4 / 10,000
Unintentional Injury Death Rates	Females: 30.6/100,000 Males: 32.0/100,000 2006	Females: 23.0/100,000 Males: 32.9/100,000 2002	N/A
Suicide Rates	15/100,000 2001/02-2005/06	14/100,000 1996/97-2000/01	5 - 32/100,000

*CA=Community Areas
Detailed definitions including data sources and ICD-9-CM diagnostic codes are available in Appendix A
N/A = not available by Community Area

This section presents a few overview descriptors of the **burden of injury** in the Winnipeg Health Region (WHR). It includes hospitalizations due to unintentional and intentional injury for children age 0-19 years and deaths from both unintentional injury and suicide. These indicators only begin to point to the large, and largely preventable, toll that injury takes in the WHR.

Injury Hospitalizations in Children ages 0-19 years is the rate of hospitalizations for Winnipeg children aged 0-19 years for which any injury code was included as one of the discharge diagnoses on a hospital discharge abstract. Only hospitalizations lasting one day or longer were included. In Winnipeg, the rate of hospitalizations due to injuries in children (age 0-19 years) is reported per 10000 children residents. The overall Winnipeg rate has decreased significantly (41.1.0/10000 to 33.2/10000 between 1996/97-2000/01 and 2001/02-2005/06). The Winnipeg rates are significantly lower than Manitoba rates (57.8/10000 in 2001/02-2005/06). There is a 3-fold difference between CAs with the lowest and highest rates: Fort Garry (20.9/10000) and Point Douglas (64.4/10000).

Unintentional Injury Death Rates are defined as the rate of death from unintentional injuries per 100,000 residents. The definition of unintentional injury excludes injuries caused by suicide and violence, but includes injuries caused by motor vehicle collisions, falls, drowning, burns and poisoning. Medical misadventures and complications are also not included. These data are from Vital Statistics (as opposed to Manitoba Health's administrative data). They are presented annually from 2002 to 2006 rather than by fiscal year time periods and as sex-specific rates only. The rate of death due to unintentional injury increased in females in the WHR from 2002 to 2006: 23.0/100,000 (2002) and 30.6/100,000 (2006). The same rate in males appears to be steady: 32.9/100,000 (2002) and 32.0/100,000 (2006). There are no data available for Winnipeg Community Areas or Neighbourhood Clusters.

Suicide Rates in Winnipeg have remained stable between the two 5-year periods reported on: from 13.9/100,000 (1996/97-2000/01) to 15.0/100,000 (2001/02-2005/06). There was more than a 6-fold difference between the CA with the lowest rate Fort Garry (5.0/100,000) and the CA with the highest rate Downtown (31.9/100,000).

ADDITIONAL INFORMATION[16]

The following reports provide additional description of injury in Winnipeg and in Manitoba:

Data for one of the indicators (Injury Hospitalizations 0-19) are from a Manitoba Centre for Health Policy (MCHP) report: "Manitoba Child Health Atlas Update" (2008) where more detailed description of childhood injury is presented. The entire report including additional data links can be found at: http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html
Scroll down to 2008 and choose full report, summary or data extras.

Suicide Deaths are from another MCHP report, "Manitoba RHA Indicators Atlas 2009". The entire report including additional data links can be found at:
http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html
Scroll down to 2008 and choose full report, summary or data extras.

In August 2007, the WRHA published an "Injury Data Report" which can be found on the Region's external website.
http://www.wrha.mb.ca/healthinfo/preventinj/files/IDR_080131.pdf
Some data go to 1999 and other data are to 2003. The report offers more detailed analyses of injury by cause, age and community area.

"Injuries in Manitoba: A Ten Year Review" was released in April 2004 and can be found at:
http://www.gov.mb.ca/healthyliving/injuryreview.html. This report outlines the injury trends in Manitoba over a ten-year period from 1992-2001 and includes data on both unintentional and intentional injury.

The "Economic Burden of Unintentional Injuries in Manitoba" (2004) report and the more recent "Economic Burden of Injury in Canada" (2009) can both be found at: http://www.smartrisk.ca/index.php/burden

[16] Listing of these resources does not constitute endorsement or approval of the information contained herein by the WRHA.

Injury Hospitalizations (0-19 years of age)

Age- & sex-adjusted annual rate of hospitalizations for injury, per 10,000 children age 0-19 years. The number of hospital separations for an area's residents for which any injury code was included as one of the diagnoses (the code did not need to be the "most responsible"), per 10,000 children age 0-19 years per year. In any given period, a resident could be hospitalized for injury more than once, so this measure indicates the total number of injury–related separations from acute care facilities by all residents of the area. This definition encompasses injuries by all causes (including self–inflicted). See Appendix A for the list of diagnosis codes used to define Injury Hospitalization. Rates were calculated for 1996/97–2000/01 and 2001/02–2005/06 and were age– and sex–adjusted to the Manitoba population in 2000/01.

Table 5.1

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Hospitalizations in 5 years	Adjusted Rate/10,000	Hospitalizations in 5 years	Adjusted Rate/10,000	
Fort Garry (1,2,t)	240	28.7	183	20.9	-24.7%
Assiniboine South (1,2)	157	30.0	145	28.1	-2.9%
St. Boniface (1,2)	184	31.3	146	23.4	-24.9%
St. Vital (1,2)	267	32.9	217	27.0	-13.4%
Transcona (1,2,t)	169	34.8	111	23.1	-30.9%
River Heights (1,2)	199	35.2	155	27.6	-19.4%
River East (1,2,t)	460	37.0	353	28.9	-21.5%
Seven Oaks (1,2)	244	32.2	234	30.7	-1.1%
St. James - Assiniboia (1,2)	226	32.5	194	28.2	-10.7%
Inkster (1,2)	202	40.0	177	35.4	-8.6%
Downtown	613	71.5	533	59.8	-13.6%
Point Douglas	455	80.8	412	64.4	-13.5%
Winnipeg (1,2,t)	3416	41.1	2860	33.2	-14.9%
Manitoba (t)	11127	68.5	9661	57.8	-11.7%

Source: Manitoba Centre for Health Policy, 2008

Adjusted rates per 10,000 children age 0-19 years estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
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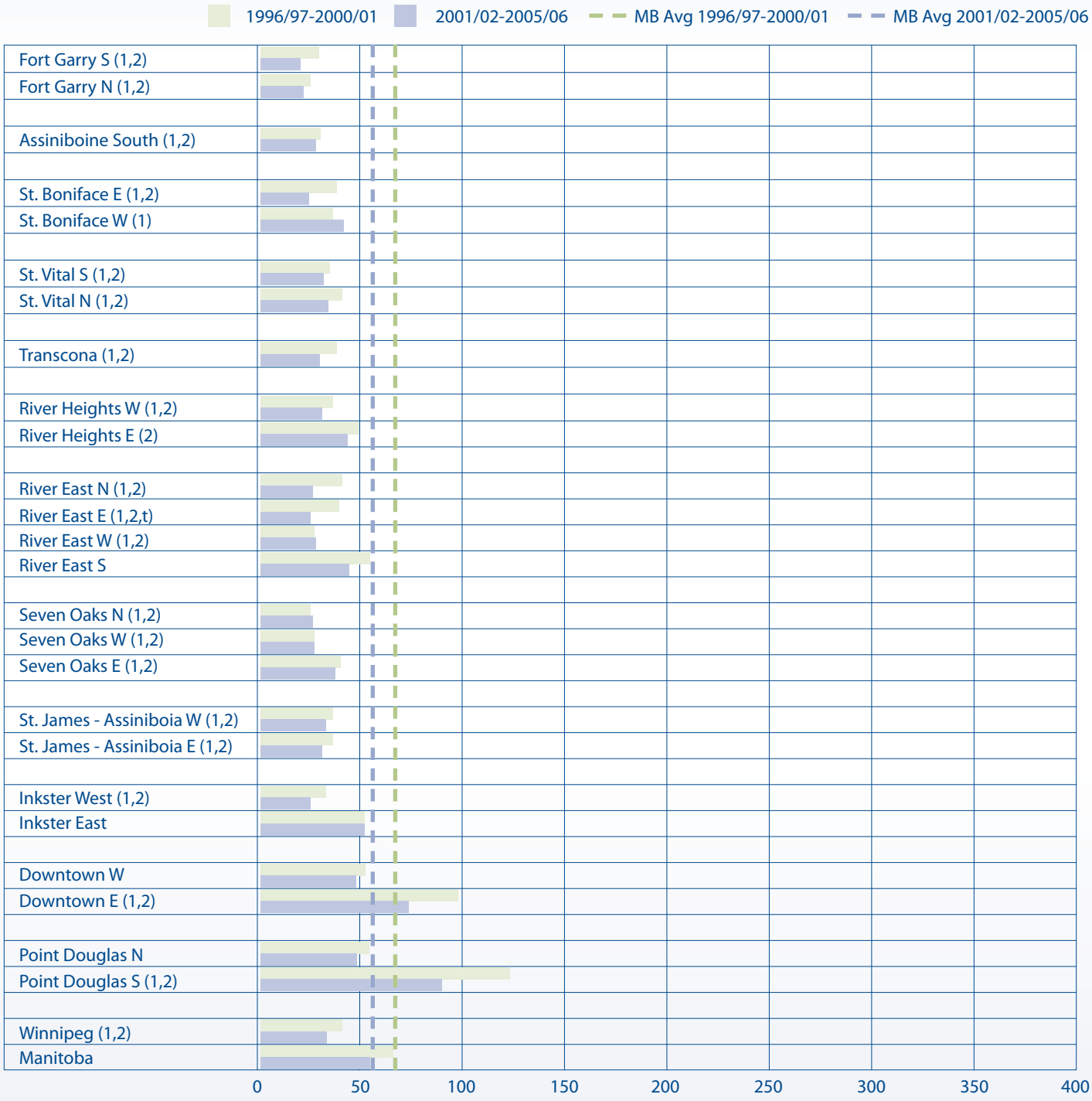
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Injury Hospitalizations by Winnipeg Neighborhood Cluster

Age- & sex-adjusted annual rate of hospitalizations for injury, per 10,000 children age 0-19 years, 1996/97-2000/01 & 2001/02-2005/06.

Figure 5.1



Source: Manitoba Centre for Health Policy, 2008

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Unintentional Injury Death Rates

Rate per 100,000 population of death from unintentional injuries. Unintentional injuries include injuries due to causes such as motor vehicle collisions, falls, drowning, burns and poisoning, but not medical misadventures/complications. Age-standarized rates are reported for five 1-year periods, 2002-2006.

Table 5.2

	WRHA Female Unintentional Injury Deaths per 100,000 residents Age-Standardized Rates by Year - 2002-2006				
	2002	2003	2004	2005	2006
Winnipeg	23.0	26.8	27.7	26.4	30.6
Manitoba	27.8	26.4	30.0	28.0	33.2

Source: Vital Statistics, 2008

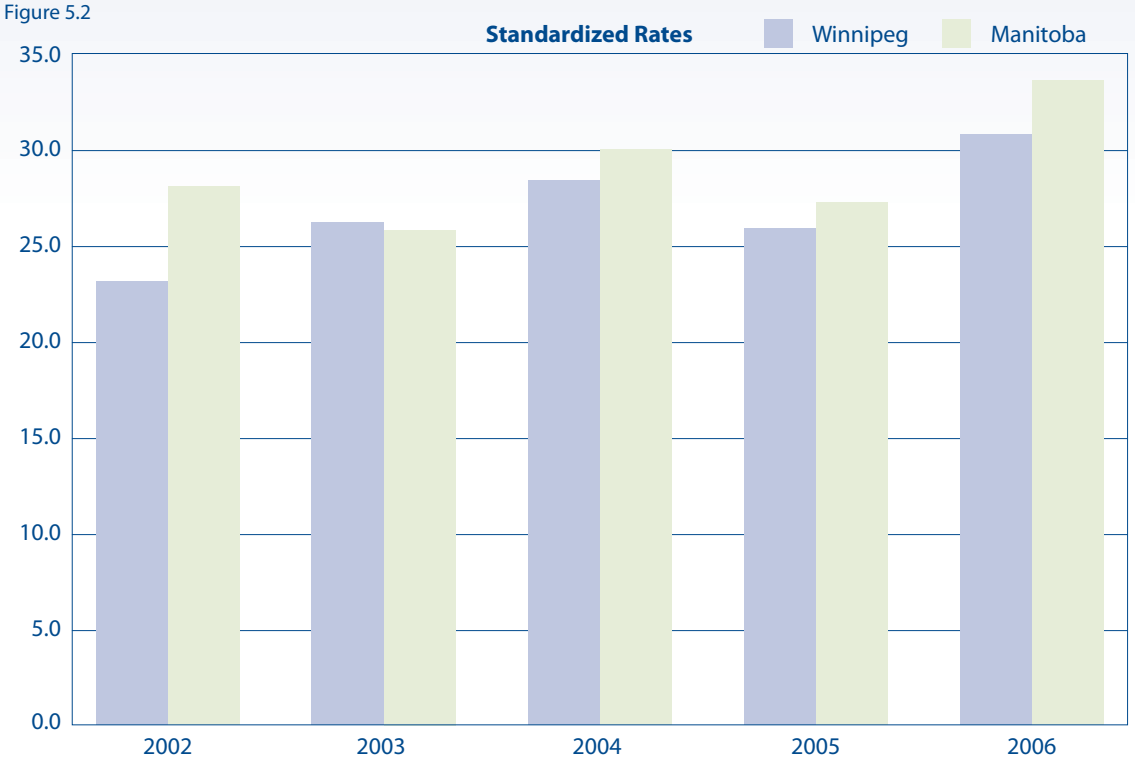
Table 5.3

	WRHA Male Unintentional Injury Deaths per 100,000 residents Age-Standardized Rates by Year - 2002-2006				
	2002	2003	2004	2005	2006
Winnipeg	32.9	30.5	30.7	31.9	32.0
Manitoba	39.3	38.1	43.6	41.2	41.5

Source: Vital Statistics, 2008

Female Unintentional Injury Deaths per 100,000 residents by Year

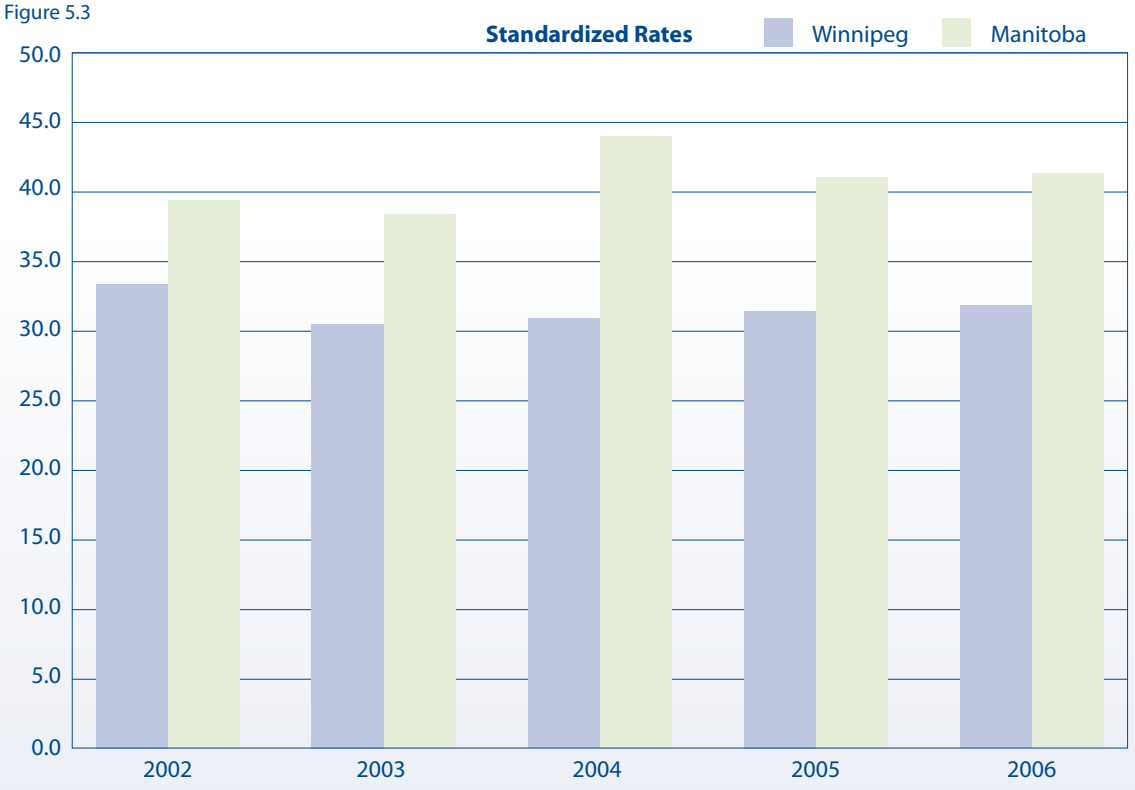
Figure 5.2



Source: Vital Statistics, 2008

Male Unintentional Injury Deaths per 100,000 residents by Year

Figure 5.3



Source: Vital Statistics, 2008

Suicide Rates

The number of deaths due to suicide among residents age 10+, per 100,000 area residents age 10+, per year. A relatively 'inclusive' definition was used in an attempt to overcome suspected under–counting of suicides in administrative data. See Appendix A for the list of ICD codes used to define suicide.
Results are shown by Community Area but not by Neighbourhood Cluster, due to the relatively small number of suicides.
Rates were adjusted to the Manitoba population in the first time period. Rates were calculated for two 5–year periods, 1996–2000 and 2001–2005, and were age– and sex–adjusted to the Manitoba population in the first time period.

Table 5.4

Community Area	1996-2000		2001-2005		% Change
	Suicides	Adjusted Rate/100,000	Suicides	Adjusted Rate/100,000	
Fort Garry (1,2)	18	7	14	5	-27.0%
Assiniboine South (2,t)	20	13	9	6	-56.9%
St. Boniface	27	13	27	13	-6.5%
St. Vital	32	12	27	10	-18.1%
Transcona	22	15	16	11	-28.2%
River Heights	34	14	34	14	0.3%
River East	42	11	60	15	37.2%
Seven Oaks	28	11	36	14	24.0%
St. James - Assiniboia	30	11	36	14	20.7%
Inkster	19	15	23	17	18.3%
Downtown (1,2)	76	24	104	32	32.8%
Point Douglas (1,2)	41	24	49	28	16.2%
Winnipeg	389	14	435	16	8.4%
Manitoba	705	14	793	16	9.3%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 100,000 residents estimate what an area's rate might have been, if that area's age and sex distribution was the same as that for the province overall.

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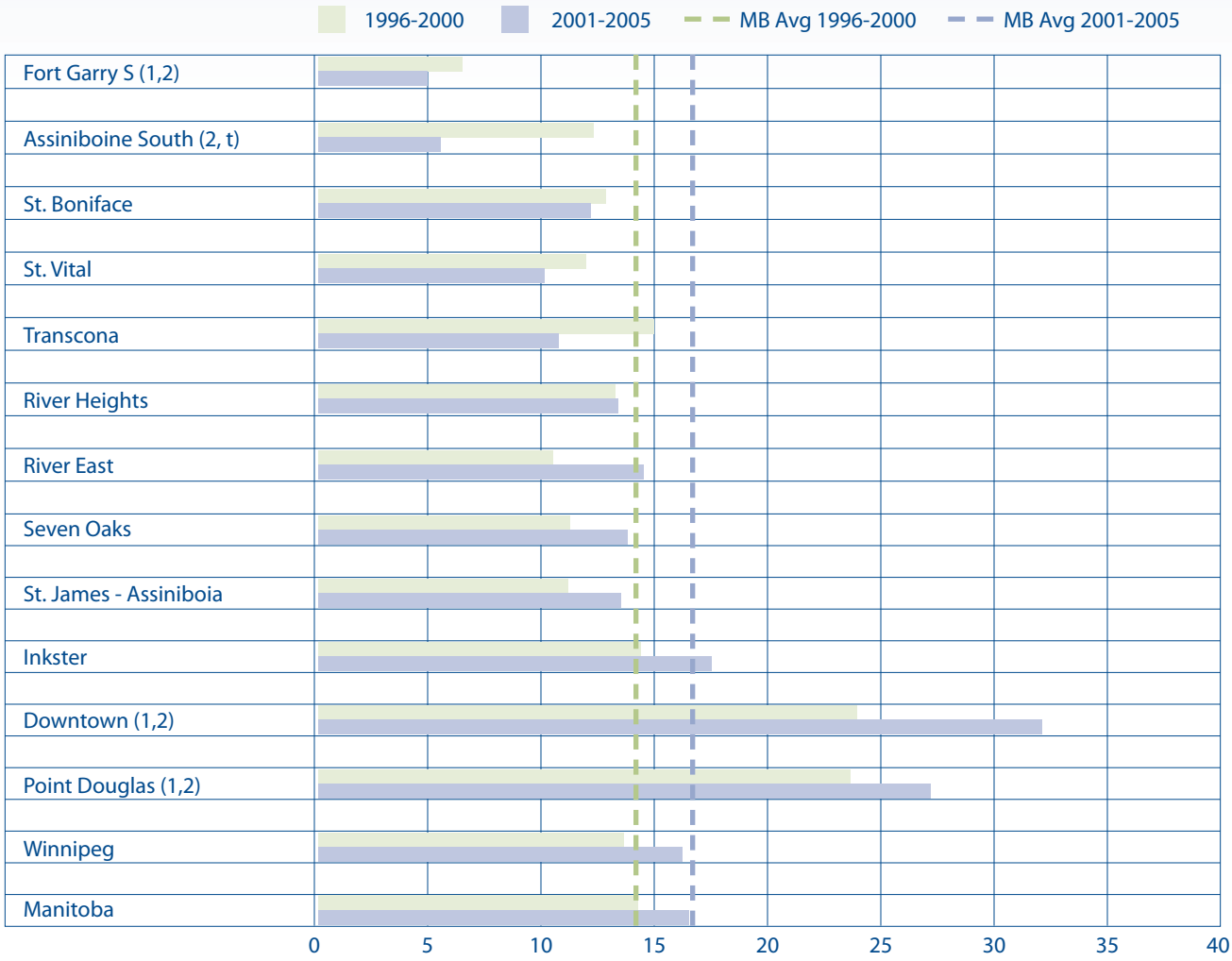
Suicide Rates by Winnipeg Community Area

Age- & sex-adjusted annual rate per 100,000 residents aged 10+ , 1996-2000 & 2001-2006.

Figure 5.4



Source: Manitoba Centre for Health Policy, 2009

'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

6. Sexually Transmitted Infections

Winnipeg Regional Health Authority AT A GLANCE

Crude incidence rates of laboratory-confirmed cases of:

	Current Estimates
Chlamydia trachomatis	515.5/100,000 2008
Neisseria gonorrhoeae	89.9/100,000 2008

Source: Based on data provided by the Communicable Disease Control Branch, Public Health Division, Manitoba Health, 2009

In this section, we report on two relatively common sexually transmitted bacterial infections: chlamydia and gonorrhoea. Crude incidence rates of laboratory-confirmed cases were calculated using data provided by the Communicable Disease Control Branch of Manitoba Health. The number of laboratory-confirmed cases largely reflects the proportion of symptomatic patients who present for medical care and are tested for these infections, and is, therefore, likely an underestimate of the incidence rate of these infections in the population.

Infections with Chlamydia trachomatis are often asymptomatic, especially among women, but can lead to significant long-term complications including pelvic inflammatory disease, ectopic pregnancy and infertility. Also, acute chlamydia infection increases the risk of sexual transmission of HIV.

For the purpose of calculating this indicator, a case of chlamydia is defined as a laboratory-confirmed episode of genital, rectal or oropharyngeal infection with *Chlamydia trachomatis*. In 2008, the crude incidence rate of laboratory-confirmed chlamydia infections among WHR residents was 515.5 per 100,000, and was higher for females (676.8 per 100,000) than for males (345.6 per 100,000). The rate of infection in males is likely an underestimate, because, typically, far fewer males are tested for chlamydia than females. In both sexes, the age-specific rate peaked between the ages of 20 and 24 years.

Table 6.1: Crude Rate per 100,000 Residents of Laboratory-confirmed Chlamydia Infections in the Winnipeg Health Region by age group and sex, 2008

Age Group	Males	Females	ALL
≤14 years	5.0	26.2	15.3
15-19 years	841.5	3238.0	2027.8
20-24 years	1559.5	3326.1	2456.5
25-29 years	1133.3	1773.2	1457.4
30-34 years	550.6	920.5	736.9
35-39 years	316.3	358.9	337.6
40-44 years	181.1	168.2	174.6
45-49 years	145.8	87.1	116.4
50 + years	34.4	20.6	26.9
TOTAL WHR	**345.6**	**676.8**	**515.5**

Source: Based on data provided by the Communicable Disease Control Branch, Public Health Division, Manitoba Health, 2009

Infections with Neisseria gonorrhoeae are less common than those caused by *Chlamydia trachomatis*, but have similar long-term consequences for reproductive health. In addition, maternal infection with *Neisseria gonorrhoeae* can cause severe eye infections in newborn infants.

For the purpose of calculating this indicator, a case of gonorrhea is defined as a laboratory- confirmed episode of genital or extra-genital infection with Neisseria *gonorrhoeae*. In 2008, the crude incidence rate of laboratory-confirmed gonorrhea infections among WHR residents was 89.8 per 100,000, and was slightly higher among females (94.5 per 100,000) than males (84.7 per 100,000). The age-specific rate of gonorrhea infections peaked between the ages of 20 and 24 years.

Table 6.2: Crude Rate per 100,000 Residents of Laboratory-confirmed Gonorrhea Infections in the Winnipeg Health Region by age group and sex, 2008

Age Group	Males	Females	ALL
≤14 years	3.3	3.5	3.4
15-19 years	193.2	416.8	303.8
20-24 years	368.2	420.0	394.5
25-29 years	201.8	305.3	254.2
30-34 years	176.2	134.6	155.3
35-39 years	81.2	51.3	66.2
40-44 years	64.4	28.0	46.2
45-49 years	43.7	7.3	25.5
50 + years	13.7	5.8	9.4
Overall	**84.7**	**94.5**	**89.8**

Source: Based on data provided by the Communicable Disease Control Branch, Public Health Division, Manitoba Health, 2009

ADDITIONAL INFORMATION*

PHAC Report on Sexually Transmitted Infections in Canada: 2008 accessible on line at http://www.phac-aspc.gc.ca/std-mts/report/sti-its2008/index-eng.php

* Listing of these resources does not constitute endorsement or approval of the information contained herein by the WRHA.