

A photograph of a man with dark hair and glasses, wearing a white shirt, gently kissing a young child on the cheek. The child is smiling and looking towards the camera. The background is bright and slightly out of focus. In the top right corner, there is a colorful, abstract graphic resembling a stylized flower or sunburst with rays in shades of blue, green, yellow, and orange. In the bottom left corner, there is another colorful graphic with overlapping circles in shades of purple, pink, orange, and green. The overall tone is warm and positive.

Section B

DETERMINANTS OF HEALTH AND WELL-BEING



Winnipeg Regional
Health Authority
Caring for Health

Office régional de la
santé de Winnipeg
À l'écoute de notre santé

7. PREVENTIVE HEALTH INTERVENTIONS

Winnipeg Regional Health Authority AT A GLANCE

	Current Rate*	Previous Rate	Range of Current Estimates** (low CA-high CA)
Adult Pneumococcal Immunization (cumulative % in residents aged 65+)	60.3% 2005/06	23.9% 2000/01	57.8% - 64.9%
Adult Influenza Immunization (annual)	67.9% 2005/06	55.5% 2000/01	59.2% - 73.5%
Childhood Immunization			
1-year olds Babies born:	85.8% 2003-2005	87.7% 1998-2000	75.7% - 91.0%
2-year olds Babies born:	73.0% 2002-2004	74.8% 1997-1999	58.5% - 79.6%
7-year olds Babies born:	71.1% 1997-1999	76.7% 1992-1994	60.5% - 75.1%
Cervical Cancer Screening (PAP tests)	73.2% 2003/04-2005/06	73.8% 1998/99-2000/01	61.3% - 78.3%
Breast Cancer Screening (Mammography)	60.7% 2004/05-2005/06	58.9% 1999/00-2000/01	43.6 - 68.1%

* Rate is age- and/or sex-adjusted to the Manitoba population in the 1st time period of the rate/event calculation

**CA=Community Areas

Detailed definitions including data sources and ICD-9-CM diagnostic codes are available in Appendix A

This section presents several indicators of **preventive health interventions**: immunizations in adults for pneumococcal infection (pneumonia) and influenza, childhood immunizations, and cervical (Pap test) and breast (mammography) cancer screening.

Immunization is a highly effective and cost-effective preventive intervention. We report first on **adult pneumococcal immunizations** in Winnipeg residents 65 years of age or over; this vaccine is usually given only once to those over 65 years of age although some require two doses. **Adult influenza immunizations** are given annually for prevention of infection by influenza A and B viruses. **Childhood immunization** provides protection to children against a number of different infections. The vaccines are administered in a series throughout the childhood years. Screening tests [**Cervical cancer screening** (Pap tests) and **Breast cancer screening** (mammography)] aim to prevent cancers or detect them early at a treatable stage.

Adult pneumococcal immunizations are counted as the percentage of Winnipeg Health Region (WHR) residents aged 65 or older who have ever received a pneumococcal polysaccharide vaccine to prevent pneumococcal disease (e.g., pneumonia). Adult pneumococcal polysaccharide vaccine has been routinely recommended in Manitoba since 2000 for persons 65 years of age and over, anyone living in a long-term care facility, and those with certain chronic medical conditions.

The proportion of persons aged 65 and over receiving a vaccine for pneumococcal disease increased significantly over the two time periods reported on (2000/2001 and 2005/2006) for Manitoba (23.6% and 58.8%) and Winnipeg (23.9% and 60.3%). A significant increase in this rate (181.2%) was expected as this vaccine has only been routinely recommended since 2000. The proportion of residents immunized has increased for all Community Areas (CAs) with the lowest and highest proportion of residents for the most recent 1-year period (2005/06) seen in Inkster (57.8%) and St. Vital (64.9%).

Adult influenza immunizations are counted as the percentage of residents aged 65 or older who received a vaccine for influenza in a given year. Influenza is an acute respiratory illness caused by influenza A and B viruses. Outbreaks of influenza occur seasonally nearly every winter. People aged 65 or above are the largest group at high risk of complications from influenza and are one of the groups included in the eligibility criteria.

The proportion of persons aged 65 and over receiving an annual vaccine for influenza increased significantly over the two time periods reported on (2000/2001 and 2005/2006) for Manitoba (54.5% and 66.4%) and Winnipeg (55.5% and 67.9%). The proportion of residents 65 years and over immunized against influenza has increased significantly for all CAs. In the most recent 1-year period (2005/06), the lowest and highest proportion of residents vaccinated was seen in Inkster (59.2%) and St. James-Assiniboia (73.5%).

Childhood immunizations are reported as the percentage of children identified from birth cohorts who had completed their immunization schedules at 1-year of age, 2-years of age and 7-years of age. These percentages should be interpreted with caution. The number of types of vaccines recommended for children has increased over time, meaning that more vaccines are needed to be completely immunized. Although the newer vaccines are not included in the criteria used in this report for “complete vaccination”, they may influence the complete coverage rate of the traditional vaccines. Children who are only partially immunized (missing one or more doses in a particular vaccine series) are considered not completely immunized. Also, the data on immunizations comes from the Manitoba Immunization Monitoring System (MIMS). Because MIMS relies on physician claims (fee-for-service and salaried physicians) to capture information on physician-administered immunizations, immunization rates might be underestimated if physicians did not submit claims for the immunizations they administered. In addition, immunization records may be incomplete for children who have not lived in Manitoba since birth. Further analysis of changes in immunization coverage rates requires examination of the type of vaccine and factors, such as immunization schedule changes, that may have impacted the rates. Annual MIMS reports produced by Manitoba Health allow for further analysis and are available online at: <http://www.gov.mb.ca/health/publichealth/cdc/vpd.html>.

Immunization coverage rates of one-year old children were estimated for children born in 1998-2000 and in 2003-2005. Both cohorts were followed until their 1st birthday. By the end of their first year, infants should have received immunizations for DaPTP (diphtheria, pertussis, tetanus, polio) and Haemophilus influenzae B (Hib). In 2004, pneumococcal conjugate vaccine (PCV7) was added to the infant series, but was not included in this analysis.

The proportion of 1-year old children receiving their full complement of immunizations has decreased between the two time periods (children born in 1998-2000 and 2003-2005) for Manitoba (84.6% and 82.5%) and Winnipeg (87.7% and 85.8%). A decrease in the percentage immunized was seen in virtually all CAs (except Fort Garry), but it was statistically significant only in Seven Oaks (91.2% to 88.0%), St. James-Assiniboia (90.8% to 87.0%) and Inkster (87.6% and 83.6%). In the most recent birth cohort (born 2003-2005), the lowest proportion of children 1-year old receiving the full complement of immunizations was in Point Douglas (75.7%) and the highest proportion was in Transcona (91.0%).

Immunization coverage rates of two-year old children were estimated for children born in 1997-1999 and those born in 2002-2004. Both cohorts were followed until their 2nd birthday. Immunizations required by two years of age include 4 doses of DaPTP and Hib as well as 1 dose of the MMR (measles, mumps and rubella) vaccines. In 2004, pneumococcal conjugate vaccine (PCV7) was added to the infant series, as well as a dose of varicella (chicken pox) vaccine at one year of age. In 2009, meningococcal C conjugate vaccine was also added to the schedule at one year of age. These new vaccines are not included in this analysis.

The proportion of 2-year old children receiving their full complement of immunizations at two years of age has decreased significantly between the two time periods reported on (children born in 1997-1999 and 2002-2004) for Manitoba (72.3% and 69.6%) and Winnipeg (74.8% and 73.0%). A decrease in percentage immunized was seen in virtually all CAs (except St. Boniface), but it was statistically significant only in Transcona (80.2% to 75.7%). In the most recent birth cohort (born 2002-2004), the lowest proportion of children 2-years old receiving the full complement of immunizations was in Point Douglas (58.5%) and the highest proportion was in St. Boniface (79.6%).

Immunizations of seven-year old children were identified from children born in 1992-1994 and those born in 1997-1999. Both of these cohorts were followed until their 7th birthday. Immunizations required by age seven include 5 doses of DaPTP, 4 doses of Hib and 2 doses of MMR vaccine. The earlier cohort for this age group did not receive the combined DaPTP, but a separate vaccine for diphtheria, pertussis and tetanus (DPT) and polio. In 2004, varicella (chicken pox) vaccine was added to the preschool schedule for children who had not yet had chicken pox disease. Varicella vaccine is not included in this analysis.

The proportion of 7-year old children receiving their full complement of immunizations at seven years of age has decreased significantly between the two time periods (children born in 1992-1994 and 1997-1999) for Winnipeg (76.7% and 71.1%) but not for Manitoba (74.2% and 76.4%). A statistically significant decrease in percentage immunized was seen in all but two CAs except Inkster and Downtown. In the most recent birth cohort (born 1997-1999), the lowest proportion of children 7-years old receiving the full complement of immunizations was in Point Douglas (60.5%) and the highest proportion was in Seven Oaks (75.1%).

Cervical Cancer Screening (Pap test) Cervical cancer incidence and mortality rates have been declining for decades, in large part due to widespread regular use of Pap test screening. The current incidence of cervical cancer in Manitoba (2003-2005) is 8/100,000 females.¹⁷ In Manitoba, Pap tests are usually offered every one to two years. This indicator reports the proportion (%) of women age 18-69 who received at least one Pap test in two three-year periods (1998/99-2000/01 and 2003/04-2005/06).

The percentage of women receiving at least one Pap test in a three-year period is down slightly but not significantly between the two periods (1998/99-2000/01 and 2003/04-2005/06) in Manitoba (70.1% and 69.2%) and Winnipeg (73.8% and 73.2%). In the most recent time period (2003/04-2005/06), the lowest proportion of women receiving a Pap test was in Point Douglas (61.3%) and the highest proportion was in St. Vital (78.3%).

Breast Cancer Screening (Mammogram) Breast cancer is the most common cancer among women in Manitoba, affecting one in nine women during their lifetime. Breast cancer incidence in Winnipeg was 125.3/100,000 females in 2005-2007.¹⁷ A consensus has been reached that a screening mammography every 2 years is beneficial for women 50-69 years of age.¹⁸ In a summary of research studies, 25-30% fewer women died of breast cancer if they had regular screening mammograms starting at age 50.¹⁸ We report on the proportion (%) of women age 50-69 that had at least one mammogram in a 2-year period. Rates included both screening and diagnostic mammograms and are reported for two, 2-year time periods (1999/00-2000/01 and 2004/05-2005/06).

The percentage of women (age 50-69) receiving at least one mammogram in a two-year period is up slightly but not significantly between the two time periods (1999/00-2000/01 and 2004/05-2005/06) in Manitoba (61.4% and 61.7%) and Winnipeg (58.9% and 60.7%). In the most recent time period (2004/05-2005/06), the lowest proportion of women receiving a mammogram was in Point Douglas (43.6%) and the highest proportion was in Assiniboine South (68.1%).

¹⁷ Cancer Care Manitoba, Community Health Assessment 2009/2010. http://www.cancercare.mb.ca/resource/File/communications/CCMB_2010_CHA-Report.pdf

¹⁸ Efficacy of screening mammography. A meta-analysis. JAMA. 273: 1995; 149-154.

ADDITIONAL INFORMATION¹⁹

Annual Manitoba Immunization Monitoring System (MIMS) reports produced by Manitoba Health allow for further analysis and are available online at: <http://www.gov.mb.ca/health/publichealth/cdc/vpd.html>.

The adult immunization 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.

Immunization Schedule for Manitoba <http://www.gov.mb.ca/health/publichealth/cdc/fs/irg.pdf>

The Manitoba Child Health Atlas Update (2008) is available from the Manitoba Centre for Health Policy (MCHP) and contains information on the vaccination schedules in place at the time of the analysis for this report.

<http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html>

Scroll down to 2008 and choose full report.

Manitoba Cervical Cancer Screening Program Operations & Statistical Report 2005 and 2006, CancerCare Manitoba includes additional data on screening across Manitoba.

http://www.cancercare.mb.ca/resource/File/MCCSP/Stats_Reports/MCCSP_Statistical_Report_05-06.pdf

Manitoba Breast Screening Program Biennial Report 2006-2008 provides a description of the characteristics of participants in the program, risk factor information and other dimensions of breast cancer screening across Manitoba:

<http://www.cancercare.mb.ca/resource/File/MBSP/BiennialReport08e.pdf>

CancerCare Manitoba. Community Health Assessment 2010 is available from: www.cancercare.mb.ca/resource/File/communications/CCMB_2010_CHA-Report.pdf

¹⁹ Listing of these resources does not constitute endorsement or approval of the information contained herein by the WRHA.

Adult Pneumococcal Immunization

The proportion (%) of residents age 65 or older who ever received a vaccine for pneumococcal disease. For most seniors, a pneumococcal vaccination is considered a 'once in a lifetime' event, so these rates show the 'cumulative' percent of residents who ever had a pneumococcal vaccination. Values were calculated as of 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population 65+ in 2000/01.

Table 7.1

Community Area	FY 2000/01		FY 2005/06		% Change
	Persons Immunized	Adjusted Rate	Persons Immunized	Adjusted Rate	
Fort Garry (t)	1799	24.5%	5766	62.4%	171.4%
Assiniboine South (t)	1102	22.0%	3835	62.1%	200.2%
St. Boniface (1,t)	1928	28.6%	4759	62.9%	134.7%
St. Vital (1,t)	2235	27.0%	6033	64.9%	154.7%
Transcona (t)	754	20.9%	2526	63.6%	215.9%
River Heights (t)	2395	22.3%	6133	60.8%	178.5%
River East (1,t)	2753	19.9%	9785	62.6%	237.7%
Seven Oaks (t)	2195	24.6%	5999	62.2%	165.1%
St. James - Assiniboia (t)	2571	23.2%	7701	63.2%	191.0%
Inkster (t)	742	24.3%	1815	57.8%	147.4%
Downtown (1,t)	1865	19.2%	5145	58.1%	212.0%
Point Douglas (t)	1556	25.5%	3232	58.7%	140.6%
Winnipeg (t)	21895	23.9%	62729	60.3%	181.2%
Manitoba (t)	37143	23.6%	107676	58.8%	184.5%

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

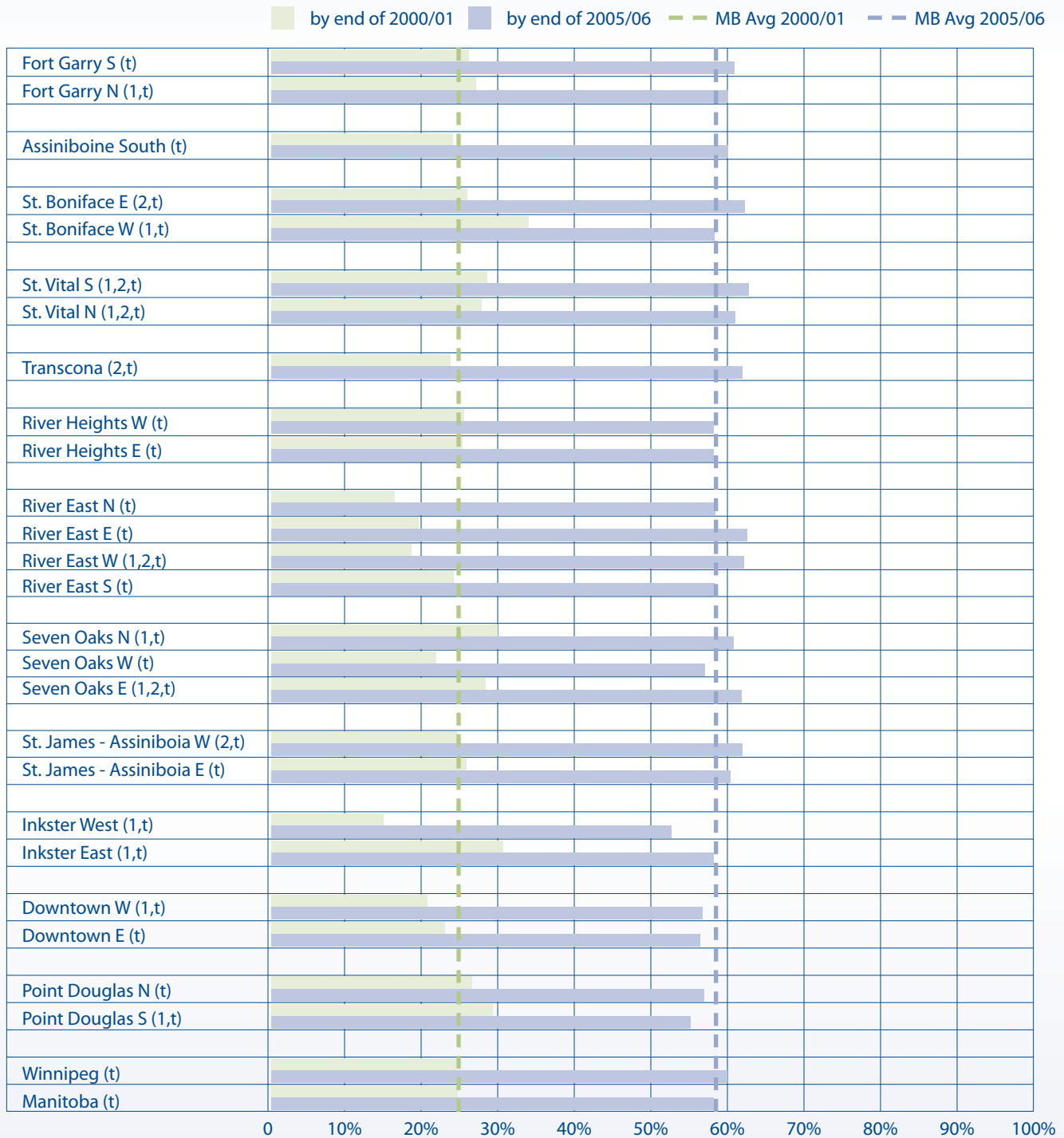
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Adult Pneumococcal Immunization Rates by Winnipeg Neighborhood Clusters

Age and sex adjusted rates of adults aged 65+ who received pneumococcal immunization shots, 2000-2006

Figure 7.1



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

Adult Influenza Immunization

The proportion (%) of residents age 65 or older who received a vaccine for influenza in a given year.
Values were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population 65+ in 2000/01.

Table 7.2

Adult Influenza Immunization					
Community Area	FY 2000/01		FY 2005/06		% Change
	Persons Immunized	Adjusted Rate	Persons Immunized	Adjusted Rate	
Fort Garry (1,t)	4217	60.4%	5798	69.2%	16.4%
Assiniboine South (1,2,t)	3269	68.2%	4048	72.3%	6.8%
St. Boniface (t)	3486	53.1%	4706	68.2%	28.4%
St. Vital (1,2,t)	4713	59.0%	5993	70.9%	20.0%
Transcona (t)	1828	54.0%	2497	69.4%	28.8%
River Heights (t)	5442	54.7%	6180	67.6%	23.5%
River East (t)	7620	56.9%	9671	68.9%	20.6%
Seven Oaks (t)	4809	57.2%	5882	67.8%	18.7%
St. James - Assiniboia (1,2,t)	6489	60.9%	8103	73.5%	21.3%
Inkster (1,2,t)	1321	45.8%	1692	59.2%	29.5%
Downtown (1,2,t)	4320	47.7%	4886	61.3%	27.9%
Point Douglas (1,2,t)	2843	49.1%	3085	61.6%	25.7%
Winnipeg (t)	50357	55.5%	62541	67.9%	24.1%
Manitoba (t)	85664	54.5%	107276	66.4%	22.9%

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

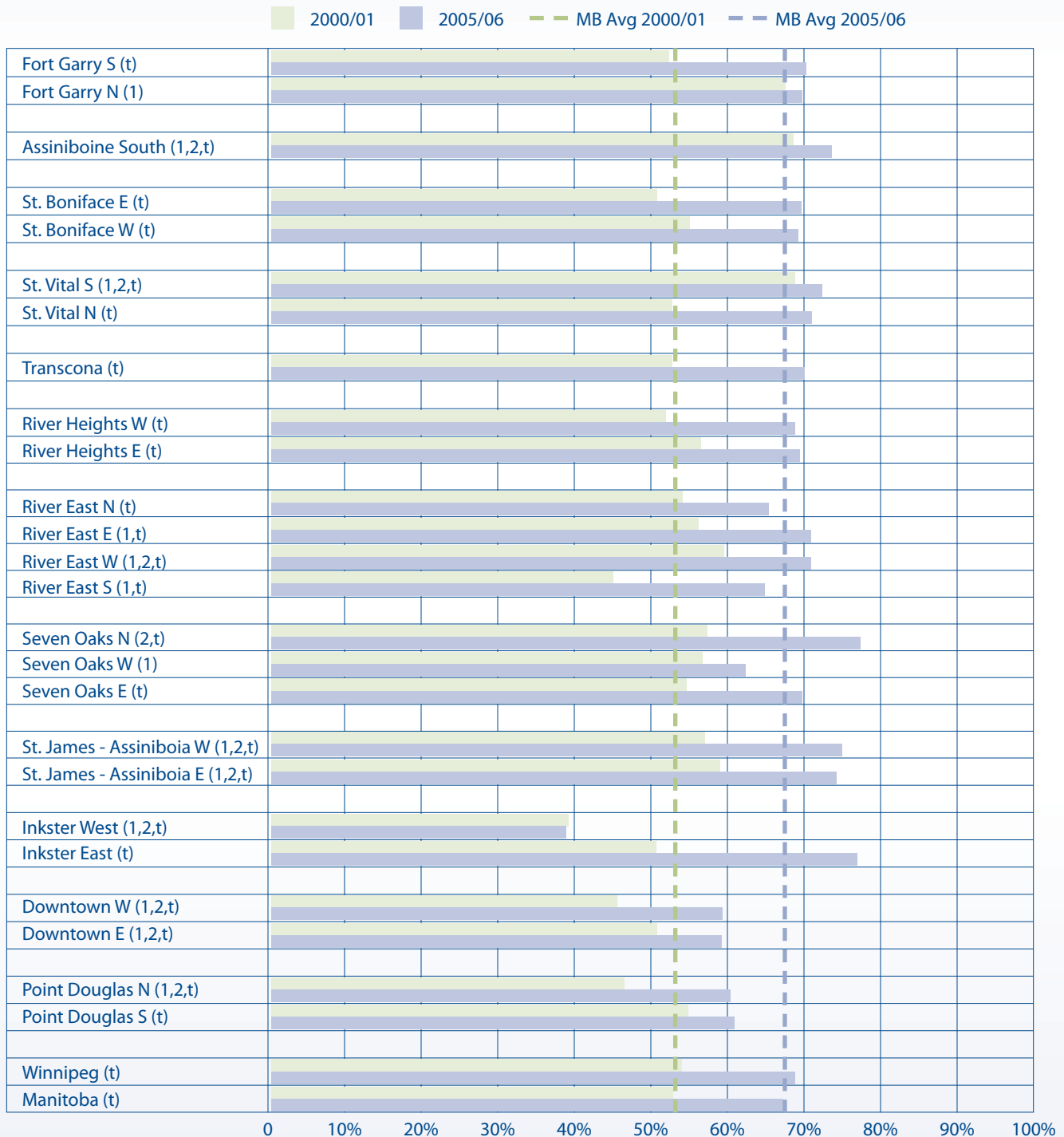
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Adult Influenza Immunization Rates by Winnipeg Neighborhood Clusters

Adults aged 65+ who received a Flu Shot, 2001/02-2005/06

Figure 7.2



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

Childhood Immunization Rates: 1 year olds

Immunization rates for 1-year-old children as identified by two birth cohorts—those born in 1998 through 2000 and those born in 2003 through 2005. Both cohorts were followed until their first birthday. Immunizations by one year include diphtheria, pertussis, tetanus, polio (all combined in one vaccine—DaPTP) and *Haemophilus influenzae B* (Hib).

CAUTION: The analysis of these data does not include immunization for *Pneumococcal conjugate 7 valent* which was not introduced into the immunization schedule until 2004.

Table 7.3

Community Area	Born 1998-2000		Born 2003-2005		% Change
	Children Immunized	Adjusted Rate	Children Immunized	Adjusted Rate	
Fort Garry (1,2)	1190	87.8%	1173	87.8%	0.05%
Assiniboine South (1,2)	518	90.9%	516	87.8%	-3.44%
St. Boniface (1,2)	887	91.1%	873	89.0%	-2.28%
St. Vital (1,2)	1242	91.3%	1088	89.5%	-2.03%
Transcona (1,2)	741	92.3%	637	91.0%	-1.38%
River Heights (2)	957	87.4%	896	87.2%	-0.17%
River East (1,2)	1794	89.3%	1608	87.4%	-2.03%
Seven Oaks (1,2,t)	1037	91.2%	1001	88.0%	-3.56%
St. James - Assiniboia (1,2,t)	1041	90.8%	869	87.0%	-4.16%
Inkster (t)	732	87.6%	620	83.6%	-4.57%
Downtown (1)	1538	81.0%	1412	80.7%	-0.38%
Point Douglas (1,2)	948	78.0%	951	75.7%	-2.88%
Winnipeg (1,2,t)	12625	87.7%	11644	85.8%	-2.12%
Manitoba (t)	23699	84.6%	22271	82.5%	-2.45%

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 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

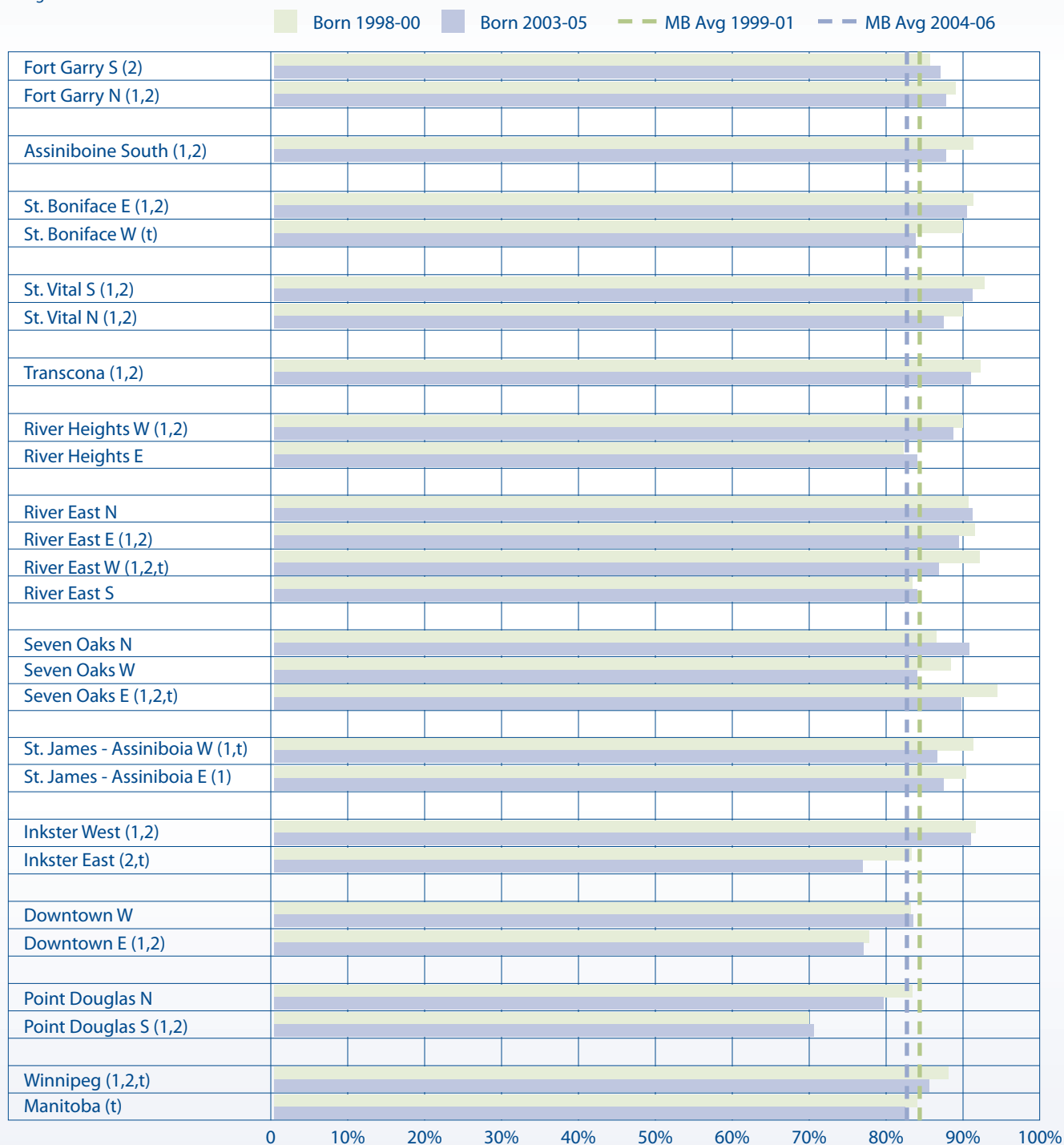
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Childhood Immunization Rates for Infants Aged 1 Year by Neighborhood Clusters

Sex adjusted percent of 1-year old infants who have completed immunization schedules

Figure 7.3



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

Childhood Immunization Rates: 2 year olds

Immunization rates for 2-year-old children as identified in two separate cohorts including children born in 1997 through 1999 and those born in 2002 through 2004. Both cohorts were followed until their second birthday. Immunizations required by two years of age include additional doses of DaPTP and Hib, as well as the measles, mumps and rubella (MMR) vaccine.

CAUTION: The analysis of these data does not include immunization for Pneumococcal conjugate 7 valent and Varicella which were not introduced into the immunization schedule until 2004.

Values are the sex-adjusted percent of 2-year old children who have completed immunization schedules.

Table 7.4

Community Area	Born 1997-1999		Born 2002-2004		% Change
	Children Immunized	Adjusted Rate	Children Immunized	Adjusted Rate	
Fort Garry (2)	982	74.7%	940	74.7%	-0.02%
Assiniboine South (1,2)	464	79.6%	484	77.1%	-3.16%
St. Boniface (1,2)	747	78.3%	812	79.6%	1.67%
St. Vital (1,2)	1102	80.4%	927	79.2%	-1.58%
Transcona (1,2,t)	644	80.2%	544	75.7%	-5.66%
River Heights (2)	777	75.1%	698	74.7%	-0.45%
River East (1,2)	1562	76.3%	1372	75.7%	-0.88%
Seven Oaks (1,2)	932	79.7%	917	77.8%	-2.28%
St. James - Assiniboia (1,2)	863	77.3%	739	74.8%	-3.19%
Inkster	609	73.7%	524	69.4%	-5.87%
Downtown (1,2)	1183	67.1%	1035	64.4%	-3.96%
Point Douglas (1,2)	719	61.9%	723	58.5%	-5.39%
Winnipeg (1,2,t)	10584	74.8%	9715	73.0%	-2.43%
Manitoba (t)	19935	72.3%	18454	69.6%	-3.65%

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 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

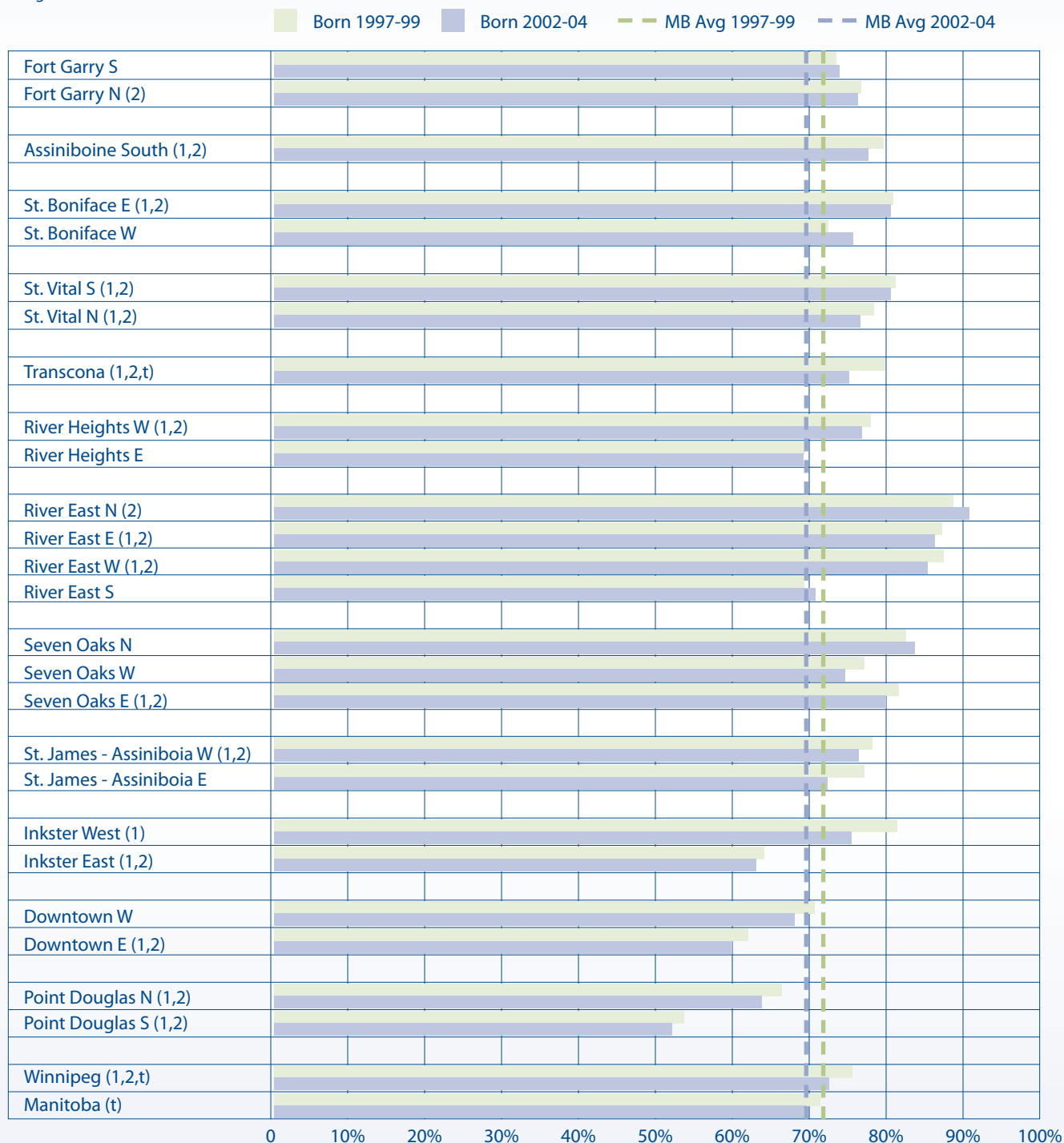
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Childhood Immunization Rates for Children Aged 2 Years by Neighborhood Clusters

Sex adjusted percent of 2-year old children who have completed immunization schedules

Figure 7.4



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

Childhood Immunization Rates: 7 year olds

Immunization rates for 7-year-old children as identified in two separate cohorts including children born in 1992 through 1994 and those born in 1997 through 1999. Both cohorts were followed until their seventh birthday. Values are the sex-adjusted percent of 7-year old children who have completed immunization schedules.

Immunizations required by seven years of age include additional doses of the same vaccines required at 2 years of age (i.e., DaPTP, Hib, and MMR).

CAUTION: The earlier cohort for this age group did not receive the combined DaPTP, but a separate vaccine for diphtheria, pertussis and tetanus (DPT) and polio.

Table 7.5

Community Area	Born 1992-1994		Born 1997-1999		% Change
	Children Immunized	Adjusted Rate	Children Immunized	Adjusted Rate	
Fort Garry (1,2,t)	1026	78.9%	831	70.3%	-10.85%
Assiniboine South (1,2,t)	573	80.6%	385	70.4%	-12.66%
St. Boniface (1,t)	892	82.4%	731	73.9%	-10.34%
St. Vital (1,t)	1240	85.9%	799	74.2%	-13.67%
Transcona (1,t)	703	78.0%	548	72.8%	-6.73%
River Heights	662	74.9%	588	73.7%	-1.61%
River East (1,2,t)	1760	80.3%	1328	72.8%	-9.32%
Seven Oaks (1)	1019	78.1%	852	75.1%	-3.94%
St. James - Assiniboia (1,2,t)	1014	86.4%	704	71.2%	-17.58%
Inkster (1,2)	647	68.0%	488	68.6%	0.99%
Downtown (1,2)	916	63.4%	710	66.8%	5.37%
Point Douglas (1,2)	692	60.6%	526	60.5%	-0.14%
Winnipeg (1,2,t)	11144	76.7%	8490	71.1%	-7.26%
Manitoba (t)	21321	74.2%	16819	76.4%	2.96%

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 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

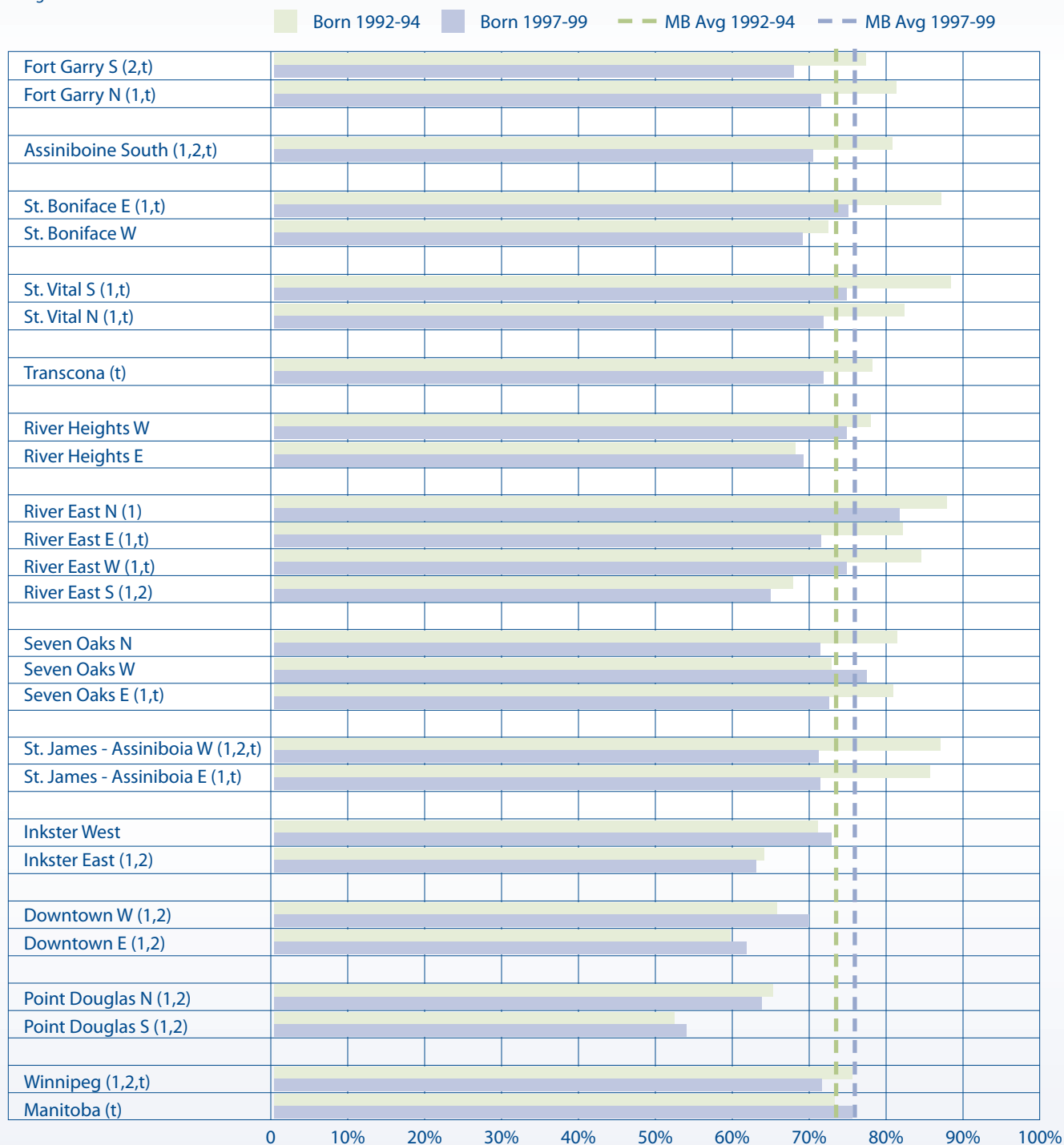
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Childhood Immunization Rates for Children Aged 7 Year by Neighborhood Clusters

Sex adjusted percent of 7-year old children who have completed immunization schedules

Figure 7.5



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

Cervical Cancer Screening (PAP Tests)

The proportion (%) of women age 18–69 who received at least one Pap test in a three–year period. This was identified by a physician visit with a tariff code for a Pap test, including a visit for a physical or regional exam with a Pap test or a visit for a Pap test only, or a laboratory tariff code. Rates were calculated for two 3–year periods, 1998/99–2000/01 and 2003/04–2005/06, and adjusted to the female population age 18–69 in the first period.

Table 7.6

Community Area	1998/99-2000/01		2003/04-2005/06		% Change
	Number of Women in 3 years	Adjusted Rate	Number of Women in 3 years	Adjusted Rate	
Fort Garry (1,2)	15621	77.0%	16160	77.5%	-0.2%
Assiniboine South (1,2)	8971	77.1%	8982	77.4%	-1.0%
St. Boniface (1,2)	11659	78.3%	12193	77.3%	-2.0%
St. Vital (1,2)	15266	77.7%	15295	78.3%	0.0%
Transcona (1,2)	8133	77.2%	8004	77.7%	-0.1%
River Heights (1,2)	14621	76.3%	14408	75.7%	-1.1%
River East (1,2)	21307	74.3%	21296	73.4%	-1.7%
Seven Oaks	13082	71.5%	13173	71.3%	-0.9%
St. James - Assiniboia (1,2)	14867	78.7%	13923	76.2%	-3.4%
Inkster (2)	6448	66.5%	6192	64.6%	-4.0%
Downtown (1,2)	13841	63.4%	13851	61.8%	-3.0%
Point Douglas (1,2)	7170	62.9%	7276	61.3%	-2.9%
Winnipeg (1,2)	150986	73.8%	150753	73.2%	-1.6%
Manitoba	241939	70.1%	239754	69.2%	-2.1%

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 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

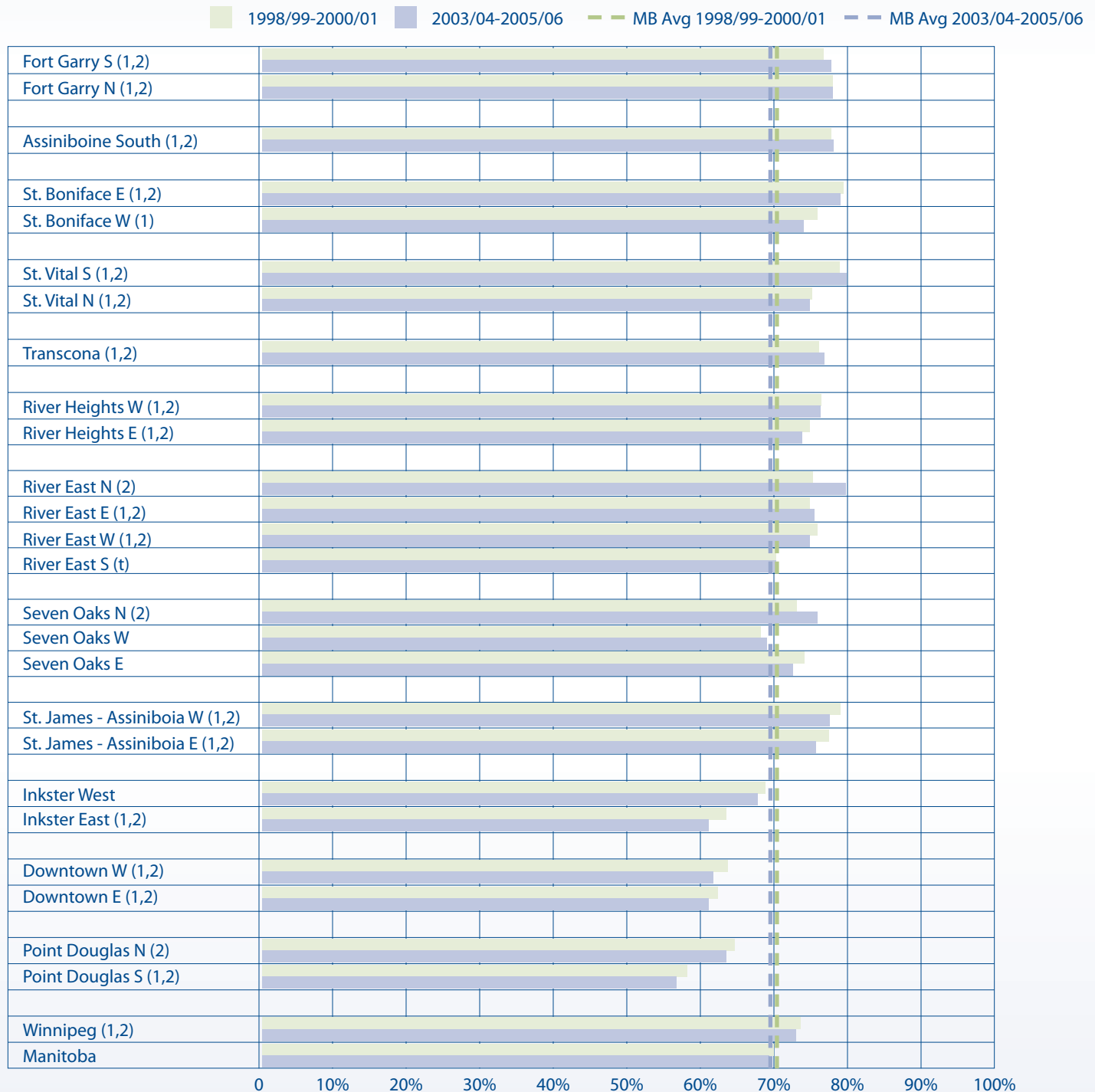
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Cervical Cancer Screening (PAP Tests) Rates by Winnipeg Neighborhood Clusters

Age adjusted percent of women aged 18-69 who received one or more PAP Tests in a three year period, 1998/99-2000/01 & 2003/04-2005/06.

Figure 7.6



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

Breast Cancer Screening (Mammogram)

The proportion (%) of women age 50–69 that had at least one mammogram in a two-year period. This included screening and diagnostic mammograms. Rates were calculated for two 2-year periods, 1999/00–2000/01 and 2004/05–2005/06, and adjusted to the female population age 50–69 in the first period.

Table 7.7

Community Area	1999/2000-2000/01		2004/05-2005/06		% Change
	Number of Women in 2 years	Adjusted Rate	Number of Women in 2 years	Adjusted Rate	
Fort Garry	3784	63.2%	4762	65.7%	3.2%
Assiniboine South	2695	64.5%	3333	68.1%	4.4%
St. Boniface	2932	60.5%	3647	64.8%	7.0%
St. Vital	3727	62.5%	4580	64.2%	1.4%
Transcona	1888	61.5%	2128	61.5%	0.1%
River Heights	3619	62.3%	4120	63.5%	1.9%
River East	5360	58.6%	6420	60.9%	3.3%
Seven Oaks	3494	56.8%	4273	59.6%	5.2%
St. James - Assiniboia	4700	67.1%	4763	65.9%	-2.0%
Inkster (1,2)	1211	47.8%	1622	51.2%	7.6%
Downtown (1,2)	2487	44.5%	2875	45.8%	1.9%
Point Douglas (1,2)	1500	46.2%	1558	43.6%	-5.9%
Winnipeg	37397	58.9%	44081	60.7%	2.4%
Manitoba	66903	61.4%	76774	61.7%	-0.1%

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 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

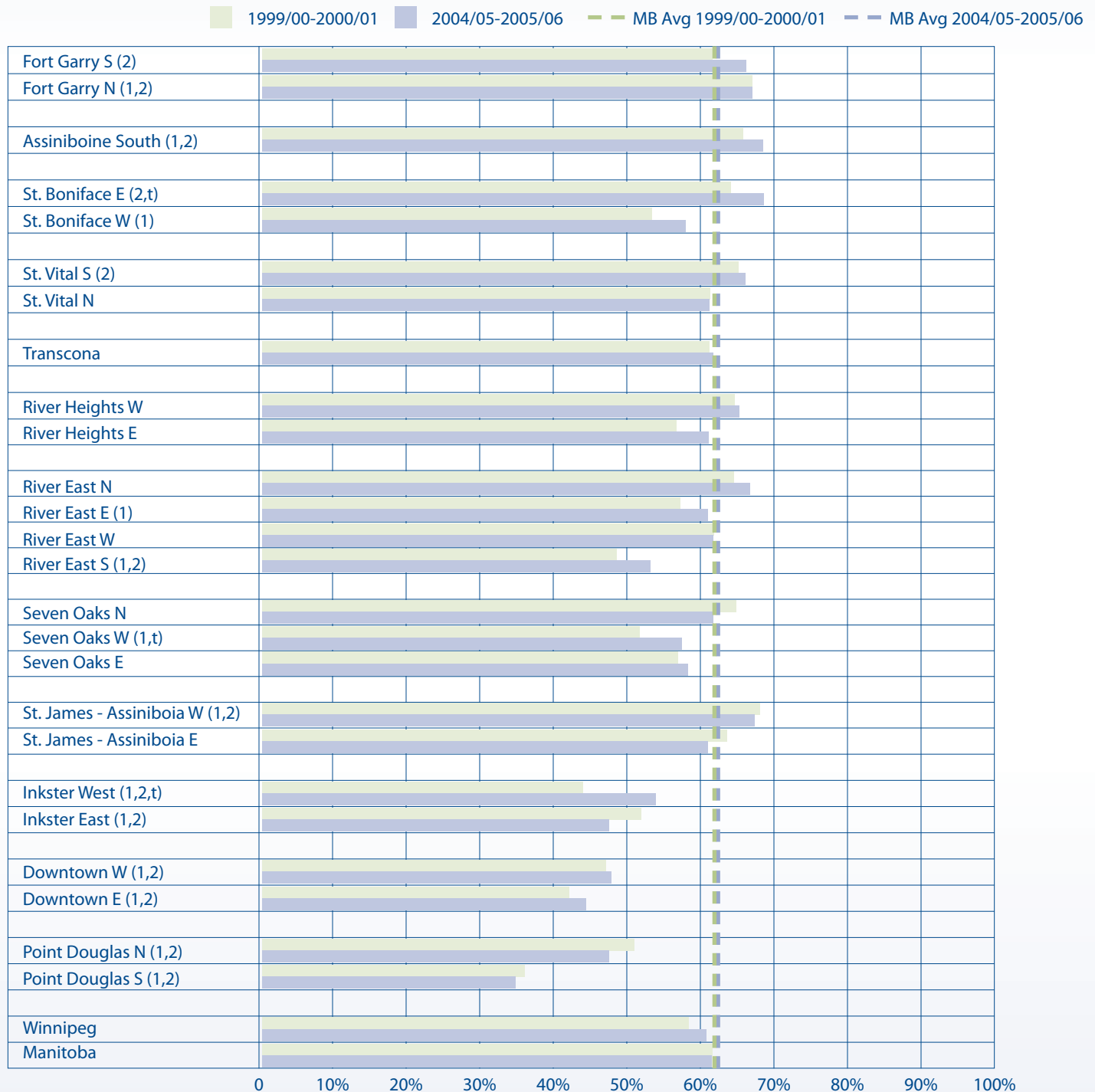
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Breast Cancer Screening (Mammography) Rates by Winnipeg Neighborhood Clusters

Age adjusted percent of women aged 50-69 who received at least one mammogram in two years, 1999/00-2000/01 & 2004/05-2005/06.

Figure 7.7



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

8. HEALTH RISK FACTORS

Winnipeg Regional Health Authority AT A GLANCE

	Current Estimate *	Range of Current Estimates ** (low CA-high CA)
Smoking		
Current smoker	22.1%	11.3%-32.6%
Former Smoker	38.9%	30.2%-46.9%
Non-smoker	39.1%	31.8%-48.3%
	2001, 2003 & 2005	
Second-Hand Smoke Exposure		
Exposed	16.0%	7.7%-32.8%
No exposure	84.0%	67.2%-92.3%
	2003 & 2005	
Body Mass Index (BMI)		
Underweight/Normal	47.5%	38.6%-55.8%
Overweight	34.1%	29.8%-41.5%
Obese	18.4%	11.2%-26.3%
	2001, 2003 & 2005	
Total Activity Level (Work+Leisure+Travel)		
Active	25.3%	15.7%-36.2%
Moderate	35.6%	28.7%-51.2%
Inactive	39.1%	24.5-58.1%
	2001, 2003 & 2005	
Nutrition: Fruit & Vegetable Consumption		
5 + times / day	34.4%	27.8%-40.2%
0 – 4 times / day	65.6%	59.8%-72.2%
	2001 & 2003	

Detailed definitions including data sources and ICD-9-CM diagnostic codes are available in Appendix A

*Rate is age- and sex-adjusted to the Manitoba population in the 1st time period of the rate/event calculation

** CA = Community Areas

~These data are from the Canadian Community Health Survey (CCHS) and are based on questions asked to a random sample of Manitobans during three time-periods: 2001, 2003 and 2005. CCHS data are limited due to issues around sample size and representativeness. Refer to the "How to Read this Report" section for more information.

This section examines a small number of indicators related to the risk of acquiring chronic diseases such as smoking, body weight, physical activity and nutrition. A description of each indicator can be found with each indicator's data table.

Our source of these data is the Canadian Community Health Survey (CCHS) administered to a random sample of Manitobans in 2001, 2003 and 2005. The CCHS provides cross-sectional estimates of health determinants such as life-style risk factors. However, these data are collected by telephone interview and answers can be affected by personal bias and recall error. To overcome sample size issues (and especially to allow for community area (CA) descriptions), data from several years of CCHS administration are combined. As a result, changes over time could not be analyzed and a single (multi-year) time period is reported. Additionally, by combining the cycles, some of the data contributing to the proportions described are nearly a decade old and may no longer reflect current behaviours. More information on the CCHS can be found in the "How to Read this Report" section and details on the CCHS sampling methodology and its limitations can be found on the Statistics Canada website: www.statcan.gc.ca/imdb-bmdi/3226-eng.htm

Smoking We report on the proportion (%) of respondents to the CCHS (2001, 2003, 2005) aged 12 and over who reported being either a current, former or non-smoker. Responses to several questions are grouped accordingly: 'Current Smoker' (includes daily smoker, occasional daily smoker who previously was a daily smoker and always an occasional smoker), 'Former Smoker' (includes former daily smoker and former occasional smoker), and 'Non-smoker' (never smoked).

Smoking tobacco has a number of negative health effects on people of all ages, and remains a leading cause of preventable death. In Winnipeg, 22.1% of respondents over the three survey cycles have indicated that they are current smokers; the Manitoba proportion is 22.7%. The CA with the lowest proportion of current smokers is Fort Garry (11.3%) and the one with the highest proportion is Point Douglas (32.6%). The proportion of former smokers was 38.9% in Winnipeg and 39.3% in Manitoba. The highest proportion of former smokers is found in Assiniboine South (46.9%) and the lowest is found in Downtown (30.2%). The remaining respondents were categorized as non-smokers (Winnipeg, 39.1% and Manitoba 38.0%). The highest proportion of non-smokers is in Fort Garry (48.3%) and the lowest proportion is in Transcona (31.8%).

Exposure to Second-hand Smoke at Home Second-hand smoke is the ambient smoke from a burning cigarette, pipe or cigar, or the smoke exhaled by a smoker. People in indoor spaces where there is smoking, or in close proximity to someone smoking outdoors, inhale second-hand smoke. Exposure to second-hand smoke has known health risks, and there is no known level of exposure which is safe. Children, because of their higher respiratory rate, are even more susceptible to the health impacts of second-hand smoke.

In Winnipeg, 17.5% of respondents have indicated that they are exposed to second-hand smoke at home (Manitoba: 17.3%). Fort Garry has the lowest proportion of the population exposed to second-hand smoke at home (7.7%) and Point Douglas has the highest proportion (32.8%). The neighbourhood clusters of River East S and Point Douglas S stand out as areas with much higher exposure to second-hand smoke at home, along with the highest rates of current smokers (approximately 40%).

Body Mass Index (BMI) is a measure used to classify and compare individuals according to their height and weight. It is calculated as weight (in kilograms) divided by height (in metres) squared. BMIs that are too high or too low are associated with a variety of health risks. BMI for respondents to the CCHS aged 18 years and over was calculated from self-reported height and weight and presented in standard categories as follows: underweight or normal (BMI less than 25), overweight (BMI 25-29) and obese (BMI 30+). In Winnipeg, 47.4% of respondents fall into the "underweight/normal" category (Manitoba 44.2%) which means that the majority of Winnipeg adults are not in the normal BMI category. The proportion of respondents categorized as "overweight" was 34.1% in Winnipeg and 35.0% in Manitoba. The proportion of respondents categorized as "obese" was 18.4% in Winnipeg and 20.8% in Manitoba, and was highest in St. James-Assiniboia (26.3%) and lowest in River Heights (11.2%). It is notable that in 7 of the 12 CAs, the proportions of adults who were overweight or obese is higher than the proportions that were normal or underweight.

Total Activity Level (Work+Leisure+Travel) Physical activity improves health and well-being. It reduces stress, improves cardiovascular functioning, has a positive effect on mood, energy levels and academic performance and helps achieve and maintain a healthy body weight. Research shows that physical inactivity can also contribute to chronic disease, disability and premature death. An index approximating total physical activity was created from responses to various CCHS questions in order to calculate total energy expenditure levels for respondents aged 15-75 years. It is based on physical activity undertaken during both work-time and leisure-time in the respondents' previous three months and is measured in average kilocalories per kilogram body weight per day (kcal/kg/d). Respondents were grouped into three categories: active (≥ 3 kcal/kg/d), moderate (1.5 to <3 kcal/kg/d), or inactive <1.5 kcal/kg/d based on current energy expenditure conventions.

In Winnipeg, only 25.3% of respondents fall into the “active” category (Manitoba 29.5%). The CA with the lowest proportion of “active” persons is in Seven Oaks (15.7%) and the highest proportion is found in Point Douglas (36.2%). The proportion of respondents categorized as “moderately active” was 35.6% in Winnipeg and 34.0% in Manitoba, and ranged from 51.2% in Transcona to 28.7% in Point Douglas. The proportion of respondents categorized as “inactive”, the category most associated with health risks, was 39.1% in Winnipeg and 36.6% in Manitoba. The highest proportion of those categorized as “inactive” is in Seven Oaks (58.1%) and the lowest proportion is in Transcona (24.5%).

Nutrition: Fruit and Vegetable Consumption. Healthy eating is fundamental to good health and is important in reducing the risk of many chronic diseases. No single indicator can represent overall nutritional status, but fruit and vegetable consumption is often used as a proxy for general nutrition. There are several nutrition questions on the CCHS from which the total number of times per day the respondent eats fruits or vegetables is derived. We report on the proportion of the respondents to the CCHS aged 12 and over according to their average frequency of consuming fruit and vegetables: 0–4 times per day or 5 or more times per day.

In Winnipeg, 34.4% of respondents indicated that they consume fruit and vegetables five or more times per day (Manitoba: 33.5%), while 65.6% of Winnipeg respondents reported consuming fruit and vegetables 4 or less times a day (Manitoba: 66.6%). River East has the lowest proportion of residents reporting that they consume fruit and vegetables 5 or more times a day (27.8%) and Fort Garry has the highest proportion (40.2%).

ADDITIONAL INFORMATION²⁰

Canadian Tobacco Use Monitoring Survey (CTUMS) A Health Canada survey that provides continual data on tobacco use and related issues
http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/ctums-esutc_2008-eng.php

National Strategy: Moving Forward 2006 Data on smoking prevalence in Canada is presented as part of this report which is a progress report on the National Strategy to Reduce Tobacco Use in Canada 1999.
<http://www.hc-sc.gc.ca/hc-ps/pubs/tobac-tabac/prtc-relct-2006/index-eng.php>

Winnipeg in motion baseline survey reports: As part of the Winnipeg in motion physical activity promotion initiative, a baseline survey was conducted in 2005 for both adults and children and teens (also published: *Appl Physiol Nutr Metab.* 2009 Apr;34(2):172-81)
<http://www.winnipeginmotion.ca/research/>

²⁰ Listing of these resources does not constitute endorsement or approval of the information contained herein by the WRHA.

Smoking

The proportion (%) of respondents to the CCHS aged 12 and over who reported being either a current, former or non-smoker. The data are derived from the Canadian Community Health Survey (CCHS) and from responses to several questions on smoking habits, and uses the groupings 'Current smoker' (includes daily smoker, occasional daily smoker who previously was a daily smoker and always an occasional smoker), 'Former smoker' (includes former daily smoker and former occasional smoker), and 'Non-Smoker' (never smoked). The age- and sex-adjusted proportion of participants in each response category is shown.

Rates were calculated using data from CCHS cycles 1.1 (2001), 2.1 (2003), and 3.1 (2005).

Table 8.1

Community Area	Percentage		
	Current Smoker	Former Smoker	
Fort Garry	11.3%	40.4%	48.3%
Assiniboine South	14.8%	46.9%	38.4%
St. Boniface	21.9%	39.7%	38.4%
St. Vital	19.5%	39.5%	41.0%
Transcona	27.4%	40.7%	31.8%
River Heights	21.2%	41.5%	37.4%
River East	24.6%	41.1%	34.3%
Seven Oaks	19.1%	34.7%	46.2%
St. James - Assiniboia	27.1%	42.9%	30.0%
Inkster	22.5%	36.4%	41.1%
Downtown	26.1%	30.2%	43.6%
Point Douglas	32.6%	35.0%	32.4%
Winnipeg	22.1%	38.9%	39.1%
Manitoba	22.7%	39.3%	38.0%

Source: Manitoba Centre for Health Policy, 2009

bold - indicates area's rate was statistically different from Manitoba average

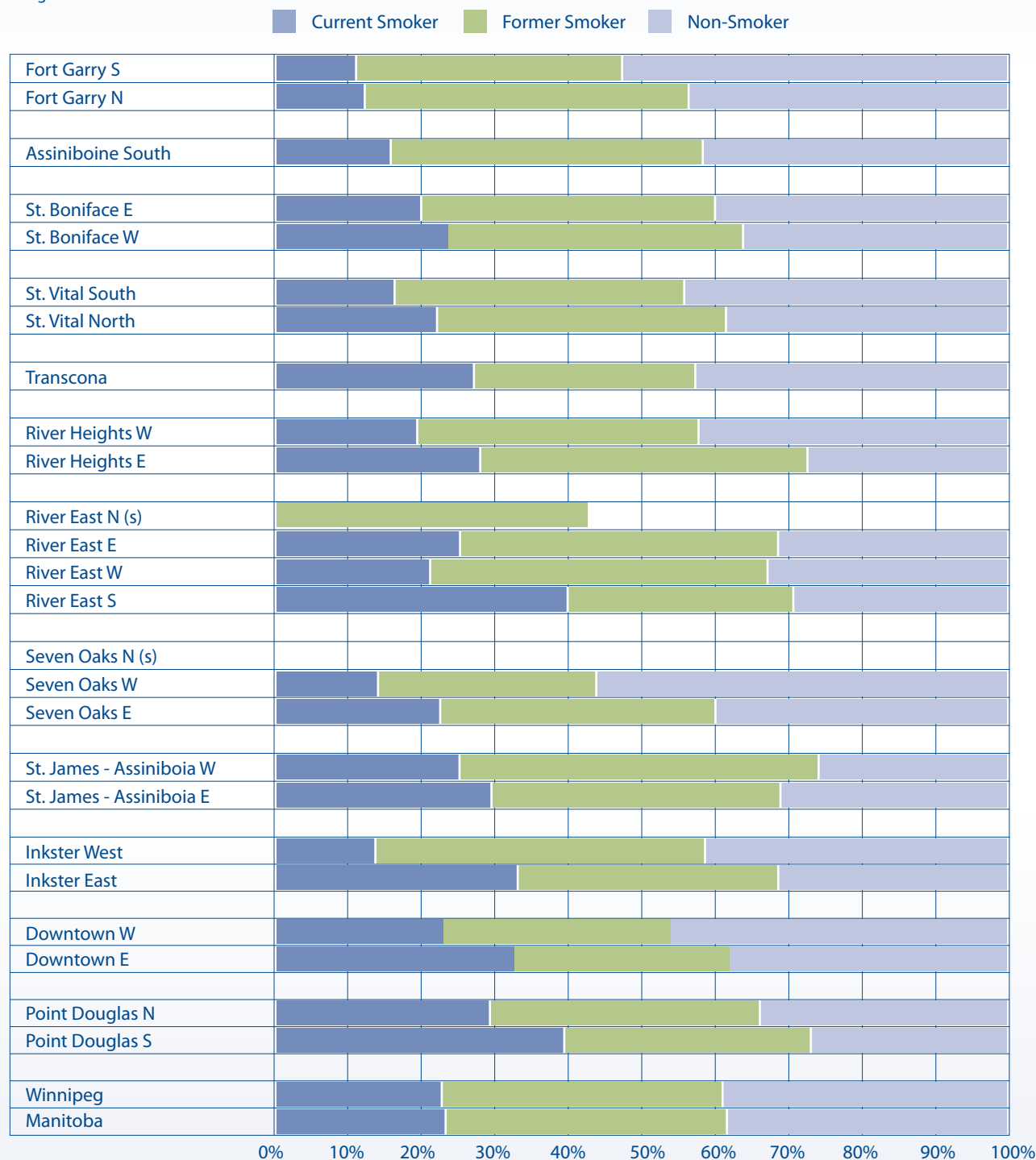
italics - indicates a warning - the area's rate is highly variable and should be interpreted with caution

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".

Smoking by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percent of weighted sample aged 12+ from combined CCHS cycles 1.1 (2001), 2.1 (2003), and 3.1 (2005)

Figure 8.1



Source: Manitoba Centre for Health Policy, 2009

's' indicates that the results were suppressed to ensure confidentiality.

Second-Hand Smoke Exposure

Second-Hand smoke is the ambient smoke from a burning cigarette, pipe or cigar, or the smoke exhaled by a smoker. When you are inside the same enclosed space (e.g., home or car) as a smoker, you may breathe in second-hand smoke which is deleterious to health.

Participants in the Canadian Community Health Survey who did not live alone or were non-smokers were asked the question, "Including both household members and regular visitors, does anyone smoke inside your home, every day or almost every day?" Respondents were grouped into two categories, 'Exposed to Second-Hand Smoke' or 'Not Exposed to Second-Hand Smoke' based on their answer to the question above.

The age- and sex- adjusted proportion of respondents over 12 years of age in each group is shown. Rates were calculated using combined data from CCHS cycles 2.1 (2003) and 3.1 (2005).

Table 8.2

Community Area	Percentage	
	Exposed to Second-Hand Smoke	No Exposure to Second-Hand Smoke
Fort Garry	7.7%	92.3%
Assiniboine South	9.9%	90.1%
St. Boniface	16.2%	83.8%
St. Vital	12.1%	87.9%
Transcona	17.8%	82.2%
River Heights	15.3%	84.7%
River East	21.9%	78.1%
Seven Oaks	12.2%	87.8%
St. James - Assiniboia	22.1%	77.9%
Inkster	20.8%	79.2%
Downtown	20.6%	79.4%
Point Douglas	32.8%	67.2%
Winnipeg	17.5%	82.5%
Manitoba	17.3%	82.6%

Source: Manitoba Centre for Health Policy, 2009

Age- and sex-adjusted percent 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

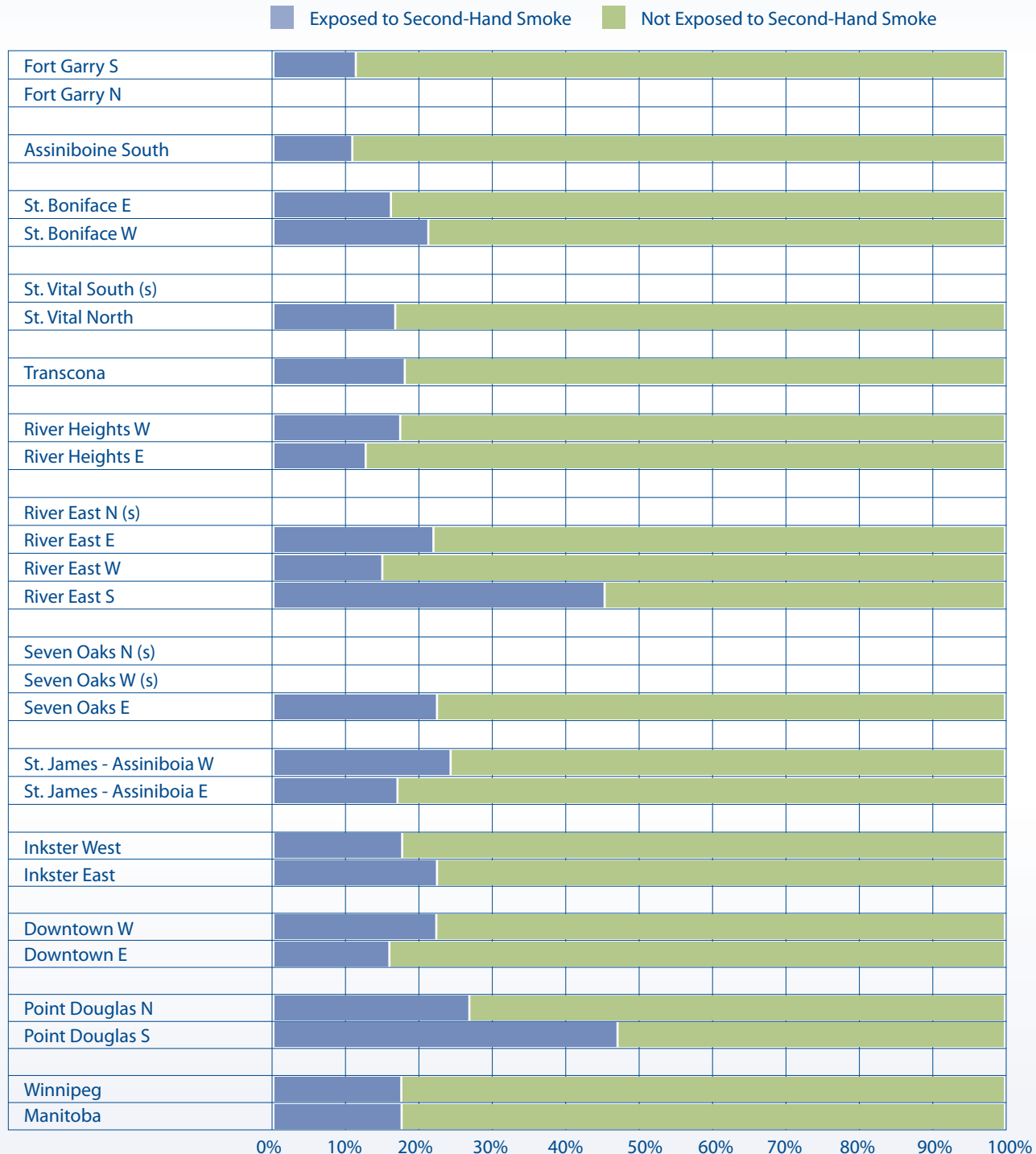
italics - indicates a warning - the area's rate is highly variable and should be interpreted with caution

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".

Second-Hand Smoke Exposure by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percent of weighted sample aged 12+ from combined CCHS cycles 2.1 (2003), and 3.1 (2005)

Figure 8.2



Source: Manitoba Centre for Health Policy, 2009

's' indicates that the results were suppressed to ensure confidentiality.

Body Mass Index (BMI)

Body Mass Index (BMI) is a statistical measure used to classify and compare individuals according to their height and weight. BMI for respondents age 18 or over was calculated from self-reported height and weight (unless measured values were available in cycle 2.2 only) then grouped into three categories: Underweight and Normal (BMI less than 25), Overweight (25-29), and Obese (30+)

The age- and sex-adjusted proportion of respondents age 18 and over in each group is shown. Rates were calculated using combined data from CCHS cycles 1.1 (2001), 2.1 (2003), and 3.1 (2005).

Table 8.3

Community Area	Percentage		
	Underweight / Normal	Overweight	Obese
Fort Garry	52.0%	32.6%	15.3%
Assiniboine South	53.2%	35.0%	11.8%
St. Boniface	46.1%	35.7%	18.2%
St. Vital	39.4%	41.5%	19.1%
Transcona	50.7%	31.5%	17.8%
River Heights	55.8%	33.0%	11.2%
River East	45.2%	33.4%	21.4%
Seven Oaks	49.5%	32.1%	18.4%
St. James - Assiniboia	42.7%	30.9%	26.3%
Inkster	43.5%	37.6%	18.9%
Downtown	53.7%	29.8%	16.5%
Point Douglas	38.6%	39.4%	22.0%
Winnipeg	47.4%	34.1%	18.4%
Manitoba	44.2%	35.0%	20.8%

Source: Manitoba Centre for Health Policy, 2009

Age- and sex-adjusted percent of self-rated health responses in a weighted population sample of residents of Manitoba, aged 18+ years

bold - indicates area's rate was statistically different from Manitoba average

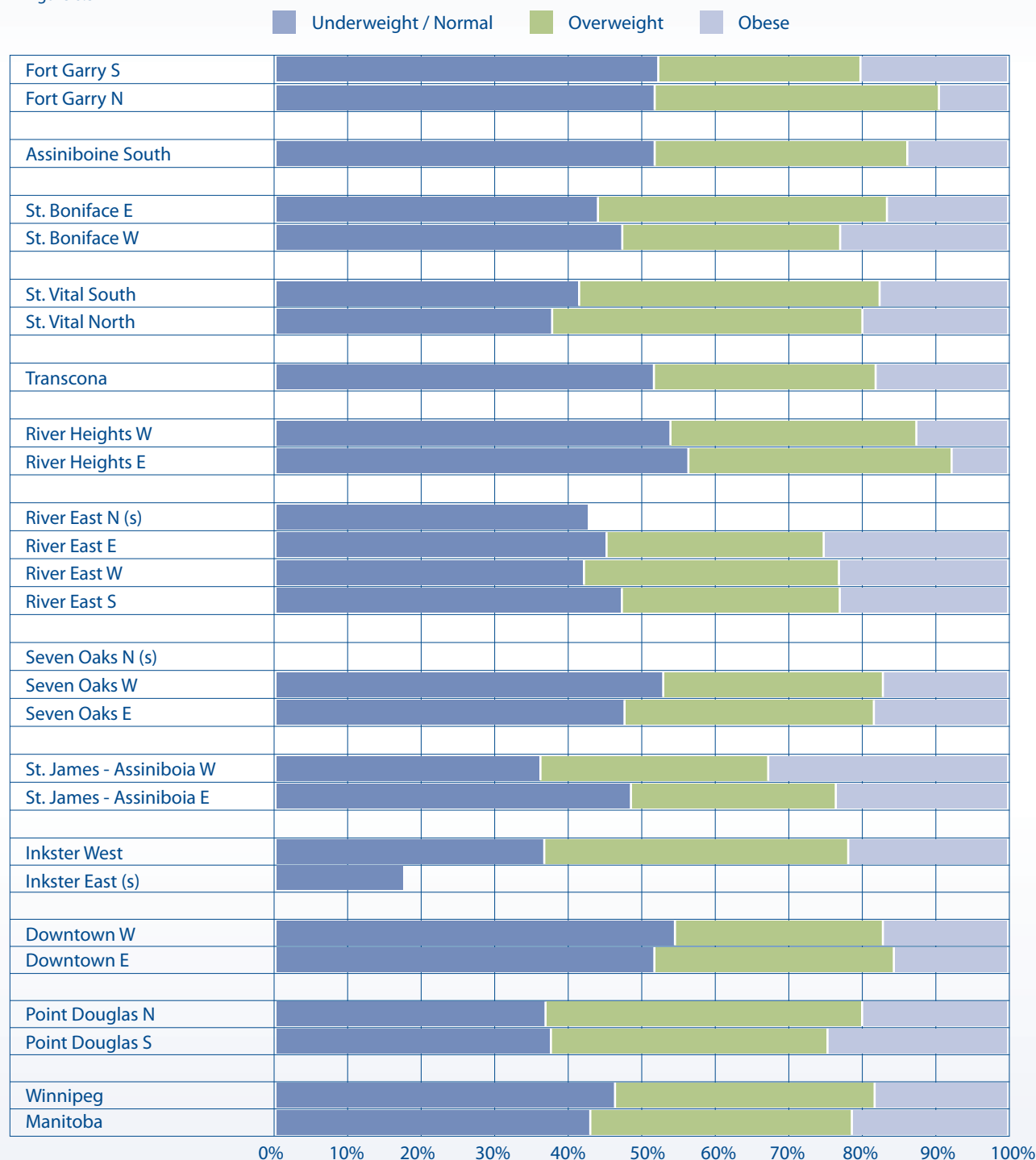
italics - indicates a warning - the area's rate is highly variable and should be interpreted with caution

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".

Body Mass Index (BMI) by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percent of weighted sample aged 18+ from combined CCHS cycles 1.1 (2001), 2.1 (2003), and 3.1 (2005)

Figure 8.3



Source: Manitoba Centre for Health Policy, 2009

's' indicates that the results were suppressed to ensure confidentiality.

Total Activity Level (Work+Leisure+Travel)

An index approximating total physical activity was created from responses to various CCHS questions to calculate total energy expenditure levels for respondents aged 15–75 years. It is based on physical activity undertaken during both work–time and leisure–time activities in the respondents’ previous three months and is measured in average kilocalories per kilogram body weight per day (kcal/kg/d). Respondents were grouped into three categories: Active (≥ 3 kcal/kg/d), Moderate (1.5 to < 3 kcal/kg/d), or Inactive < 1.5 kcal/kg/d based on current energy expenditure conventions.

The age- and sex-adjusted proportion of respondents to the survey in each group is shown. Rates were calculated using combined data from CCHS cycles 1.1, 2.1, and 3.1 (2001–2005).

Table 8.4

Community Area	Percentage		
	Active	Moderate	Inactive
Fort Garry	20.0%	36.6%	43.4%
Assiniboine South	20.0%	37.6%	42.4%
St. Boniface	23.7%	42.7%	33.6%
St. Vital	21.1%	34.9%	44.0%
Transcona	24.3%	51.2%	24.5%
River Heights	22.0%	36.4%	41.6%
River East	28.0%	37.8%	34.2%
Seven Oaks	15.7%	26.2%	58.1%
St. James - Assiniboia	28.4%	38.3%	33.3%
Inkster	29.8%	38.6%	31.6%
Downtown	31.0%	29.2%	39.8%
Point Douglas	36.2%	28.7%	35.2%
Winnipeg	25.3%	35.6%	39.1%
Manitoba	29.5%	34.0%	36.6%

Source: Manitoba Centre for Health Policy, 2009

Age- and sex-adjusted percent of self-rated health responses in a weighted population sample of residents of Manitoba, aged 15–75 years

bold - indicates area's rate was statistically different from Manitoba average

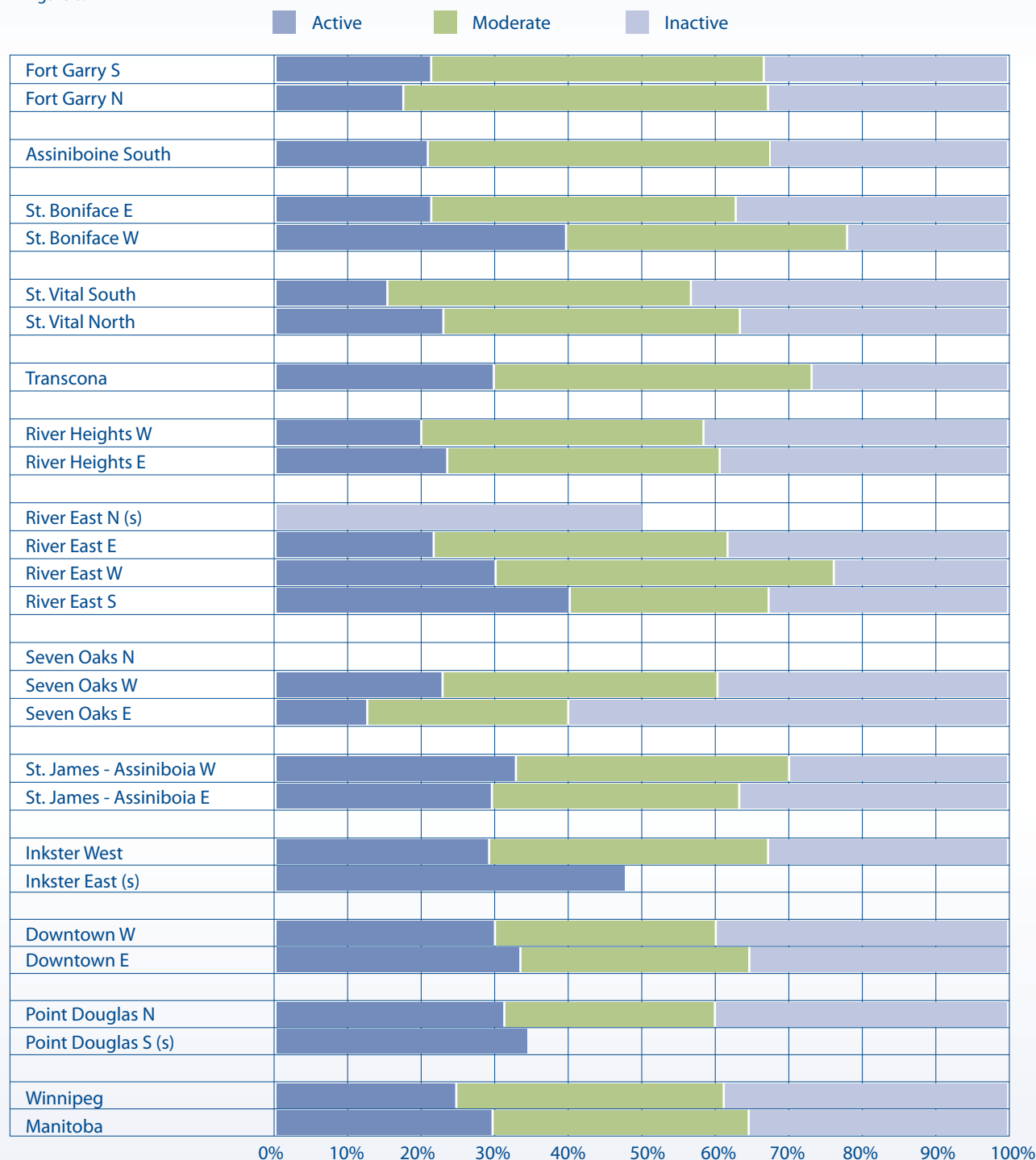
italics - indicates a warning - the area's rate is highly variable and should be interpreted with caution

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”.

Total Activity Level (Work+Leisure+Travel) by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percent of weighted sample aged 15-75 who were physically active, from combined CCHS cycles 1.1 (2001), 2.1 (2003), and 3.1 (2005)

Figure 8.4



Source: Manitoba Centre for Health Policy, 2009

's' indicates that the results were suppressed to ensure confidentiality

Nutrition: Fruit & Vegetable Consumption

The proportion (%) of the respondents to the CCHS aged 12 and over who reported that they consumed on average “0–4 times per day” or “5 or more times per day” servings of fruit and vegetables. The age- and sex-adjusted proportion of respondents to the CCHS in each group is shown. Rates were calculated using combined data from CCHS cycles 1.1 (2001) and 2.1 (2003).

In the CCHS, the total daily consumption of fruits and vegetables is a derived variable that indicates the total number of times per day the respondent eats fruits or vegetables (i.e., not the number of servings eaten).

Table 8.5

Community Area	Percentage	
	5+ Times/Day	0-4 Times/Day
Fort Garry	40.2%	59.8%
Assiniboine South	37.2%	62.8%
St. Boniface	30.1%	69.9%
St. Vital	34.1%	65.9%
Transcona	33.1%	66.9%
River Heights	37.1%	62.9%
River East	27.8%	72.2%
Seven Oaks	32.0%	68.0%
St. James - Assiniboia	33.5%	66.5%
Inkster	38.2%	61.8%
Downtown	36.4%	63.6%
Point Douglas	35.6%	64.4%
Winnipeg	34.4%	65.6%
Manitoba	33.5%	66.6%

Source: Manitoba Centre for Health Policy, 2009

Age- and sex-adjusted percent 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

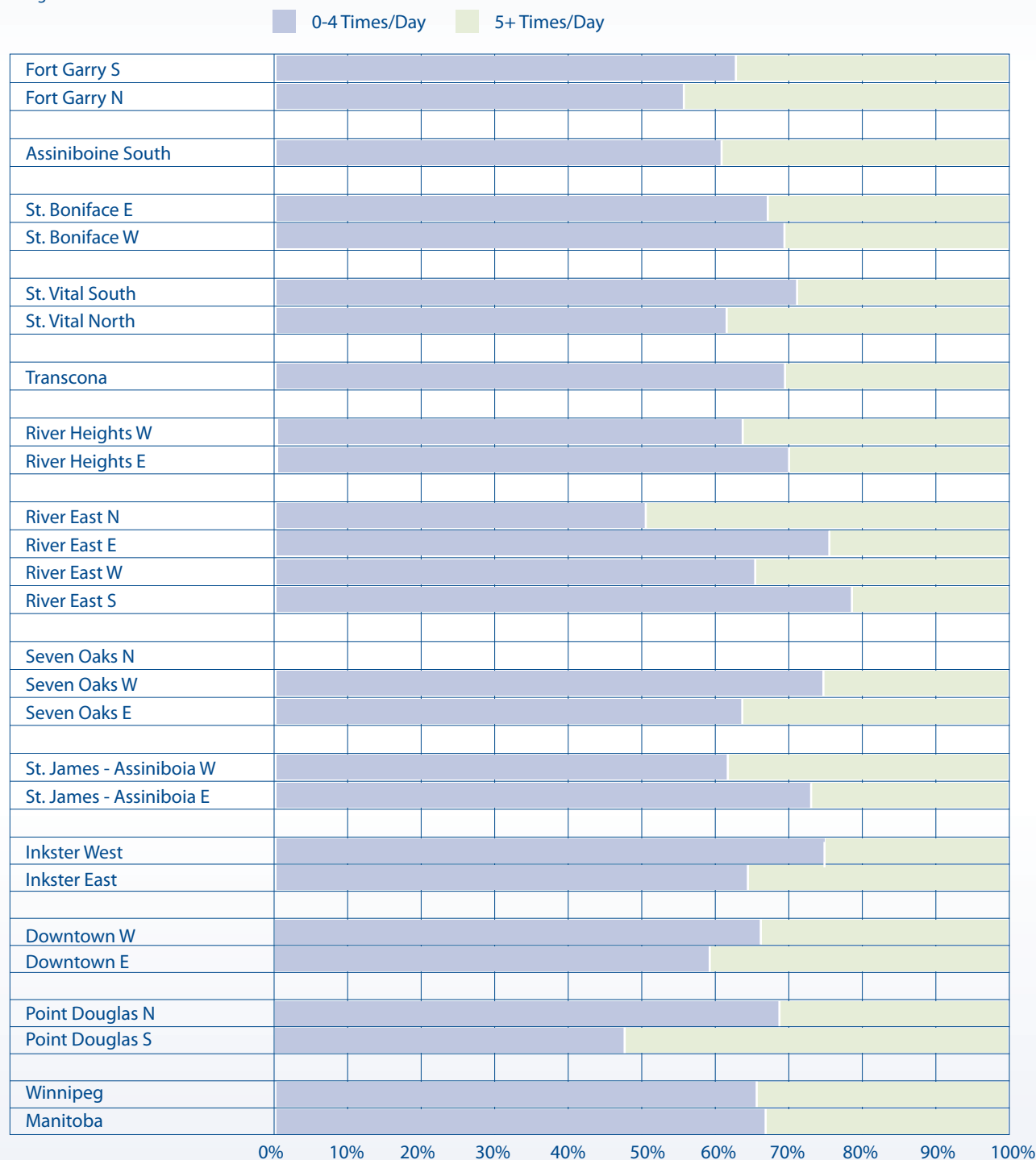
italics - indicates a warning - the area's rate is highly variable and should be interpreted with caution

¹These 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”.

Nutrition: Fruit and Vegetable Consumption by Winnipeg Neighbourhood Cluster

Age- and sex-adjusted percent of weighted sample aged 12+ from combined CCHS cycles 1.1 (2001) and 2.1 (2003)

Figure 8.5



Source: Manitoba Centre for Health Policy, 2009

9. SOCIO-ECONOMIC CONDITIONS

Winnipeg Regional Health Authority AT A GLANCE

	Current Estimates			Range of Current Estimates* (low CA-high CA)
High School Completion	78.7% 2005-2006			52.8% - 89.7%
Highest Level of Education Attained by age group, 2006	15-24 years	25-64 years	65 years & older	
Less than High school completion	40%	15%	38%	N/A
High school completion	41%	26%	25%	
Apprenticeship or trade certificate	3%	10%	11%	
Other, non-university	7%	19%	11%	
University degree	9%	30%	14%	
Readiness for School (Kindergarten Children)	2005-2006		2006-2007	
% 'not ready' in one or more areas of development	26.8%		27.1%	N/A
% 'not ready' in two or more areas of development	13.3%		13.4%	
% 'very ready' in one or more areas of development	58.7%		66.1%	
% 'very ready' in two or more areas of development	37.8%		47.0%	
No School Changes (Grade 3 Students)	77.8% 2002/03-2005/06			63.0% - 85.6%
LICO (low income cut-offs)	From the 2006 Census			
% individuals	42%			31% - 59%
% families	15%			8% - 34%
Median Income	From the 2006 Census			
Households	\$50182			\$30,307 - \$74,992
Individuals: Female	\$21941			\$17,626 - \$27,304
Individuals: Male	\$31615			\$20,323 - \$43,365
Unemployment Rate (Male & Female)	5% Males 5% Females From the 2006 Census			4% - 9% Male 4% - 8% Female
Housing Affordability	From the 2006 Census			
Tenants spending 30% or more of income on shelter	37%			32% - 42%
Owners spending 30% or more of income on shelter	12%			10% - 16%

* CA = Community Areas

This section presents several indicators of the **socio-economic conditions** of Winnipeg residents. Socio-economic conditions generally refer to the interrelated areas of employment, education, income and associated social context that greatly influence health status, and are therefore considered important determinants of health. Specifically, we report on indicators related to income, education, employment, and readiness for school.

High School Completion High school completion is a bridge to further opportunities such as post-secondary education and training and better employment. Two separate cohorts of grade 9 students were followed for six years to determine what percentage completed high school. Students enrolled in grade 9 in 1997/98 were followed until the 2002/03 school year; students enrolled in grade 9 in 2000/01 were followed until the 2005/06 school year. In the most recent period, the proportion of grade 9 students graduating in Winnipeg was 78.7%, and 77.7% for all of Manitoba. The difference among Community Areas (CAs) is substantial. For the most recent year of data, 52.8% of grade 9 students residing in Point Douglas graduated high school, compared to 89.7% of grade 9 students residing in Fort Garry. An increase between the two time periods occurred in the WHR overall (75.1% in 2002/03 to 78.7% in 2005/06) as well as Manitoba (74.3% in 2002/03 to 77.7% in 2005/06). Increases in all but two CAs occurred, but for some CAs, including those with the lowest high school completion, the differences were not significant.

Highest Level of Education by age group. Using 2006 Census data, the highest level of education attained was classified into: (1) Less than high school (no certificate, diploma or degree); (2) High school certificate or equivalent; (3) Apprenticeship or trades certificate or diploma; (4) College or other non-university certificate or diploma; and, (5) University certificate, or equivalent or higher degree. These data are presented for three age groups: 15-24 years, 25-64 years and 65 plus years.

For the age group 15-24 (many of whom are still school-aged) 60% of WHR residents have completed high school or higher. This is higher than Manitoba overall (52%). For WHR residents aged 25-64 years, 85 % have completed high school or higher. Again this is higher than Manitoba overall (79%). High school completion is much lower for adults 65 years and older in the WHR (61%), which is still higher than provincially (54%). Considerable variation between CAs occurs for high school completion for all three age groups. This difference is nearly twofold between the highest and lowest CAs in the 15-24 years age group, and for adults 25-64 years.

For WHR adults 25-64 years of age, 59% have some post- high school education (compared to 54% provincially), with 30% having a university education (24% provincially). A considerable difference in post high school education is evident between CAs. The highest level of university education among adults 25-64 is in Fort Garry and River Heights (47%) and the lowest is in Point Douglas (14%).

Readiness for School This indicator describes the “readiness for school” (Grade 1) of kindergarten children residing in the (WHR). Results from the Early Development Instrument (EDI) provide a measurement of children’s readiness to begin grade one. Presented here are the average EDI scores across the five areas of development measured by EDI (physical health & well-being, social competence, emotional maturity, language & thinking skills, and communication skills & general knowledge) for two time periods (2005/06 and 2006/07). All average EDI scores for five areas of development increased between the two time periods. WHR average EDI scores appear very similar to the provincial averages.

For each of the five EDI development scales, children with EDI scores in the bottom 10 percentiles of the scale are considered “not ready for school”, whereas those in the top 30 percentiles are considered “very ready.” Over 1 in 4 WHR kindergarten students were identified as “not ready for school” in one or more developmental areas. In the most recent time period, the percentage of WHR kindergarten children not ready for school in two or more areas of development was 13.4%, similar to that of Manitoba overall (13.9%). The percentage of WHR kindergarten children very ready for school in two or more areas of development is 47.0% (Manitoba in 2006/07, 45.5%). It appears that the proportion of kindergarten students not ready for school in the both the WHR and Manitoba has remained relatively stable over the two time periods, whereas the proportion very ready has increased, more notably in the WHR than Manitoba.

No School changes This indicator presents the proportion of two cohorts of grade three students who did not change schools during a 4 year follow up period. Changing schools frequently has been associated with academic challenges and school withdrawal.²² In the most recent cohort (followed until 2005/06) 77.8% of students did not change schools, which is unchanged from the previous time period (77.6% in 2000/01), and appears slightly lower than the Manitoba proportion (79.8%). There is considerable variation between CA proportions, ranging from a low of approximately 63% (Downtown and Point Douglas) to a high of approximately 85% (Fort Garry, St. Boniface and Transcona). This means that, in this cohort, over a third of children in Downtown and Point Douglas changed elementary schools within a four year period. Note that this analysis is based on relatively small numbers in each CA.

Low income cut-offs (LICOs) The low income cut-off is an income adequacy threshold that takes into account living situations, family size and the population size of the community. LICOs are established for different living situations: individuals (“unattached individual”-a person who either lives alone or shares a dwelling unit, but is unrelated to the other occupants by blood, marriage, adoption or common-law relationship and families (“economic family” defined as all occupants of a dwelling unit who are related by blood, marriage or adoption

²² Guevremont A, Roos NP, Brownell M. Predictors and consequences of grade retention: Examining data from Manitoba Canada. Can J School Psychol 2007;22(1):50-67; Jimerson SR, Anderson GE, Whipple AD. Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. Psychol Schools 2002;39:441-457.

including couples living together in common-law relationships). For example, LICOs are the “income levels at which families or persons not in economic families spend 20% more than average [i.e. 70% plus] of their before tax income on food, shelter and clothing.”²³ LICOs reflects the proportion of the population who are substantially financially worse off than most.

In the most recent census (2006), 42% of individuals (38% in Manitoba); and 15% of families (12% in Manitoba) were living below the LICO. There are large differences in these proportions among CAs: 59% of individuals in Point Douglas live below the LICO, whereas 31% of those living in Assiniboine South do; and 34% of families in Point Douglas live below the LICO whereas 8% of families living in Assiniboine South do.

Median Income of Individuals & Households Median household income is the dollar amount that divides households into two halves such that the incomes of the first half of households are below the median, while those of the second half are above the median. Median household income is calculated for all household units in the Census of Canada, whether or not they reported income. Median individual income is calculated using the pre-tax total income for persons aged 15 and over who reported income in the Census.

In the WHR, median income for individuals is reported separately for males and females. In the 2006 census year, the median income for males in Winnipeg was \$31,615 and for females was \$21,941. The median income ranges from \$20,323 for males and \$17,626 for females in the Downtown areas to \$43,365 for males and \$27,304 for females in Assiniboine South. The median household income in Winnipeg in 2006 was \$50,182 (\$47,875 in Manitoba); the lowest median income was in the Downtown area (\$30,307) and highest was in Assiniboine South (\$74,992).

Unemployment Rate This indicator measures the proportion of the labour force aged 15 and over who did not have a job during the reference week. The labour force consists of people who are currently employed and people who are unemployed but were available to work in the reference week and had looked for work in the past 4 weeks. The unemployment rate in Winnipeg in 2006 for males was 5% (in Manitoba 6%) and for females was 5% (in Manitoba 11%). The lowest rate of unemployment for males (4%) is found in Fort Garry, St. Boniface and River Heights, and the highest rate (9%) in the Downtown and Point Douglas areas. The lowest rate of unemployment for females (4%) is found in Assiniboine South, St. Boniface, St. Vital and St. James-Assiniboia, and the highest rate of unemployment (8%) in the Downtown and Point Douglas areas.

Housing Affordability When the monthly costs for shelter or housing exceed 30% of household income, then the housing is considered unaffordable for that household. We report on the percentage of the WHR residents in the 2006 census who indicated that they spend 30% or more of total household income on shelter costs. These proportions are divided into those who rent (tenants) and those who own their homes.

In Winnipeg, 37% of residents who are tenants have housing costs exceeding 30%; this same proportion is 35% in Manitoba overall. For owners, 12% have housing costs which exceed 30% (in Manitoba 11%). The lowest proportion of tenants whose costs exceed 30% is found in Inkster (32%) and the highest proportion is found in Fort Garry (42%). The lowest proportion of owners whose costs exceed 30% is found in Inkster and St. James-Assiniboia (10%) and the highest proportion is found in Point Douglas (16%).

ADDITIONAL INFORMATION²⁴

Many of the indicators in this section are derived from 2001 and 2006 Census data. Please refer to the following website(s) for further information on the following indicators: highest level of education attained, LICO, median income of individuals and households, unemployment rate and housing affordability. 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).

Two indicators (School changes and High school completion) are derived from Manitoba government data and reported in “Manitoba Child Health Atlas” (2008) by the Manitoba Centre for Health Policy. 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.

One of the indicators: “readiness for school” is derived from data collected by kindergarten teachers after s/he has been acquainted with a child for at least three months and reported on by Health Child Manitoba. A compilation of these data can be found at: http://www.gov.mb.ca/healthychild/edi/edi_mb_report.pdf

²³ Statistics Canada. (2006). Census Data Dictionary, www12.statcan.ca/english/census06/reference/dictionary/fam020.cfm

²⁴ Listing of these resources does not constitute endorsement or approval of the information contained herein by the WRHA.

High School Completion

High school completion is seen to be a bridge to further opportunities such as post-secondary education and training and employment. Although it does not guarantee employment, its lack remains a significant predictor of lower earnings, higher rates of unemployment, poorer health and a higher reliance on social assistance.

Two separate cohorts of grade 9 students were followed for six years to determine what percentage of them completed high school. Students enrolled in grade 9 in 1997/98 were followed until the 2002/03 school year; students enrolled in grade 9 in 2000/01 were followed until the 2005/06 school year. Sex-adjusted percent of students completing high school within 6 years of enrolling in grade 9 are reported.

Table 9.1

High School Completion Rates					
Community Area	Graduating FY 2002/03		Graduating FY 2005/06		% Change
	Students Completing Grade 12	Adjusted Rate (%)	Students Completing Grade 12	Adjusted Rate (%)	
Fort Garry (1,2)	681	87.8%	699	89.7%	2.4%
Assiniboine South (1,2)	404	83.8%	453	87.7%	4.6%
St. Boniface (1,t)	414	73.1%	464	84.9%	16.2%
St. Vital (1,2,t)	591	80.9%	681	88.4%	9.4%
Transcona (1)	325	71.1%	322	68.8%	-3.5%
River Heights (t)	351	74.0%	379	81.4%	9.8%
River East (2)	901	77.8%	865	79.5%	2.3%
Seven Oaks	546	78.1%	577	80.5%	3.0%
St. James - Assiniboia (2)	492	80.5%	510	79.8%	-0.7%
Inkster (t)	313	69.7%	319	77.4%	11.3%
Downtown (1,2)	338	57.0%	358	59.5%	5.2%
Point Douglas (1,2)	197	49.2%	242	52.8%	7.3%
Winnipeg (t)	5553	75.1%	5869	78.7%	4.9%
Manitoba (t)	10423	74.3%	10980	77.7%	4.7%

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 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

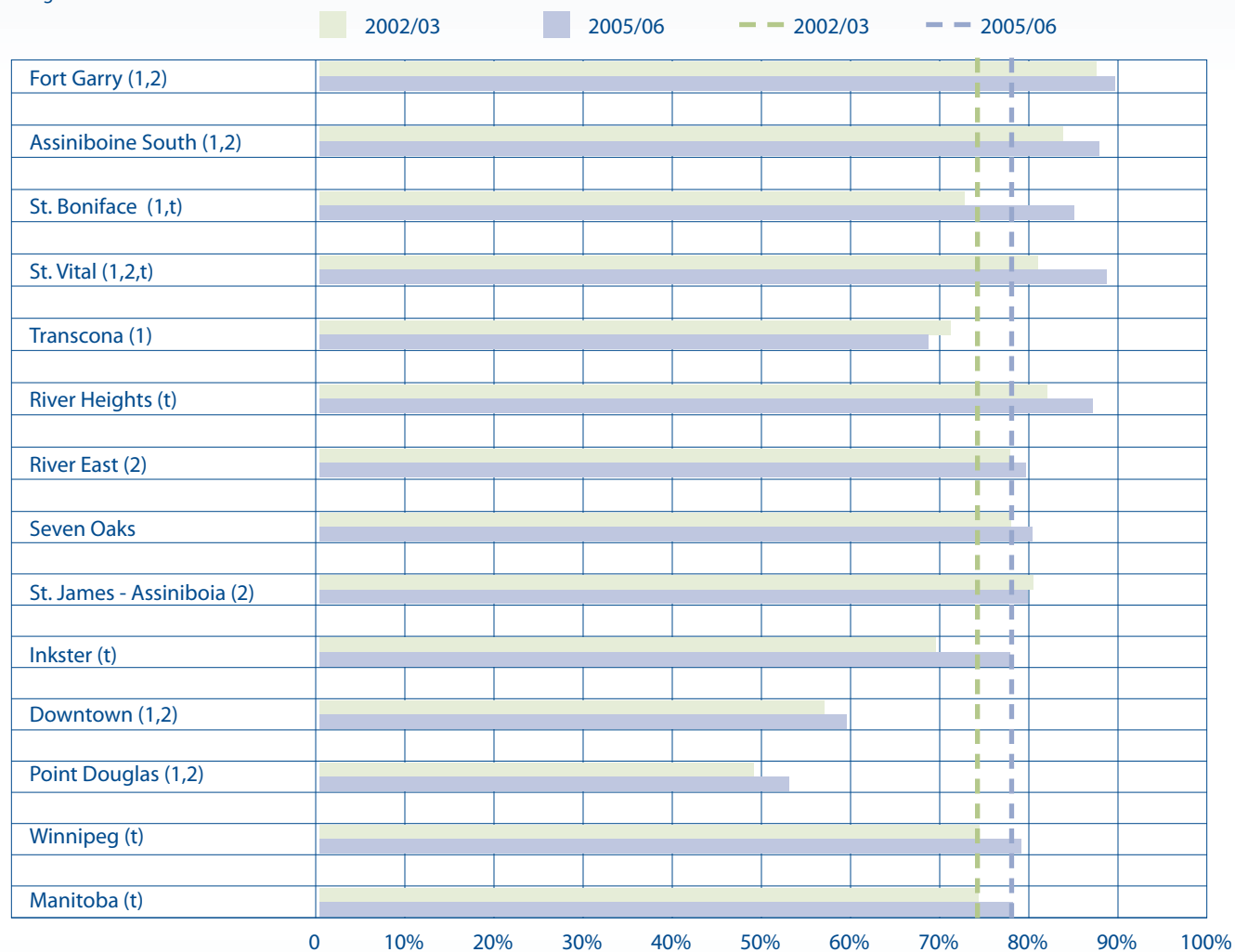
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

High School Completion Rates by Winnipeg Community Area

Sex-adjusted percent of students completing high school within 6 years of enrolling in grade 9

Figure 9.1



Source: Manitoba Centre for Health Policy, 2008

'1' indicates area's rate was statistically different from Manitoba average in first time period
 '2' indicates area's rate was statistically different from Manitoba average in second time period
 't' indicates change over time was statistically significant for that area

Education Attainment

Highest level of schooling attained by residents of Winnipeg (by Community Area) according to 2006 Census data. The level of education attained was classified into the following five levels:

1. Less than high school (no certificate, diploma or degree)
2. High school certificate or equivalent
3. Apprenticeship or trades certificate or diploma (including 'centres de formation professionnelle')
4. College, CEGEP or other non-university certificate or diploma
5. University certificate, diploma or degree: university certificate or diploma below bachelor level, bachelor's degree; university certificate or diploma above bachelor level; degree in medicine, dentistry, veterinary medicine or optometry; master's degree; earned doctorate

Table 9.2

Education Attained by Residents 15 to 24 Years of Age by Community Area, 2006					
Community Area	Less than High School	High school	Apprentice/ Trade Certificate	Other non-university	University
Fort Garry	31%	48%	2%	5%	14%
Assiniboine South	39%	42%	2%	5%	12%
St. Boniface	38%	42%	2%	8%	9%
St. Vital	40%	41%	3%	6%	10%
Transcona	48%	38%	3%	6%	5%
River Heights	33%	45%	2%	7%	13%
River East	44%	40%	3%	6%	6%
Seven Oaks	41%	39%	3%	7%	10%
St. James - Assiniboia	38%	42%	4%	9%	8%
Inkster	45%	38%	3%	9%	5%
Downtown	41%	39%	4%	8%	9%
Point Douglas	58%	32%	2%	4%	3%
Winnipeg	40%	41%	3%	7%	9%
Manitoba	48%	36%	3%	6%	7%

Source: Statistics Canada Census, 2006

Table 9.3

Education Attained by Residents 25 to 64 Years of Age by Community Area, 2006					
Community Area	Less than High School	High school	Apprentice/ Trade Certificate	Other non-university	University
Fort Garry	8%	20%	7%	18%	47%
Assiniboine South	8%	23%	8%	20%	41%
St. Boniface	12%	25%	9%	21%	33%
St. Vital	11%	26%	10%	22%	31%
Transcona	18%	32%	14%	21%	15%
River Heights	9%	19%	7%	17%	47%
River East	17%	28%	12%	20%	23%
Seven Oaks	17%	26%	12%	20%	24%
St. James - Assiniboia	12%	28%	11%	24%	25%
Inkster	21%	32%	12%	17%	17%
Downtown	21%	26%	11%	15%	27%
Point Douglas	29%	28%	13%	16%	14%
Winnipeg	15%	26%	10%	19%	30%
Manitoba	20%	25%	11%	19%	24%

Source: Statistics Canada Census, 2006

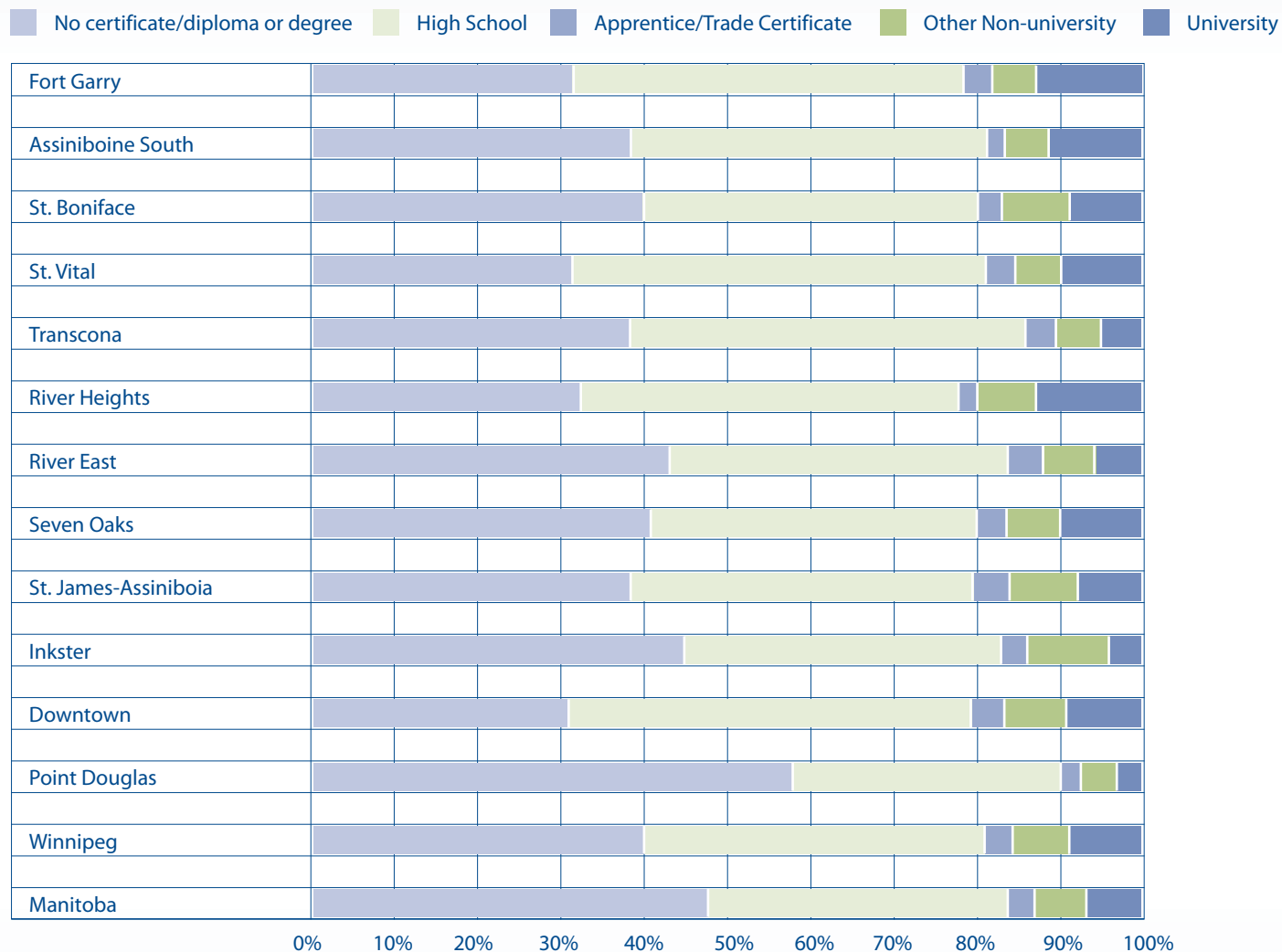
Table 9.4

Education Attained by Residents age 65 Years and Older by Community Area, 2006					
Community Area	Less than High School	High school	Apprentice/ Trade Certificate	Other non-university	University
Fort Garry	27%	24%	9%	14%	27%
Assiniboine South	21%	32%	8%	13%	26%
St. Boniface	37%	20%	13%	12%	17%
St. Vital	37%	26%	13%	10%	14%
Transcona	43%	28%	15%	9%	4%
River Heights	26%	27%	10%	11%	26%
River East	42%	26%	13%	10%	8%
Seven Oaks	48%	24%	11%	9%	8%
St. James - Assiniboia	31%	28%	12%	15%	14%
Inkster	59%	19%	11%	7%	4%
Downtown	47%	24%	10%	9%	11%
Point Douglas	63%	17%	9%	6%	6%
Winnipeg	38%	25%	11%	11%	14%
Manitoba	46%	21%	11%	10%	12%

Source: Statistics Canada Census, 2006

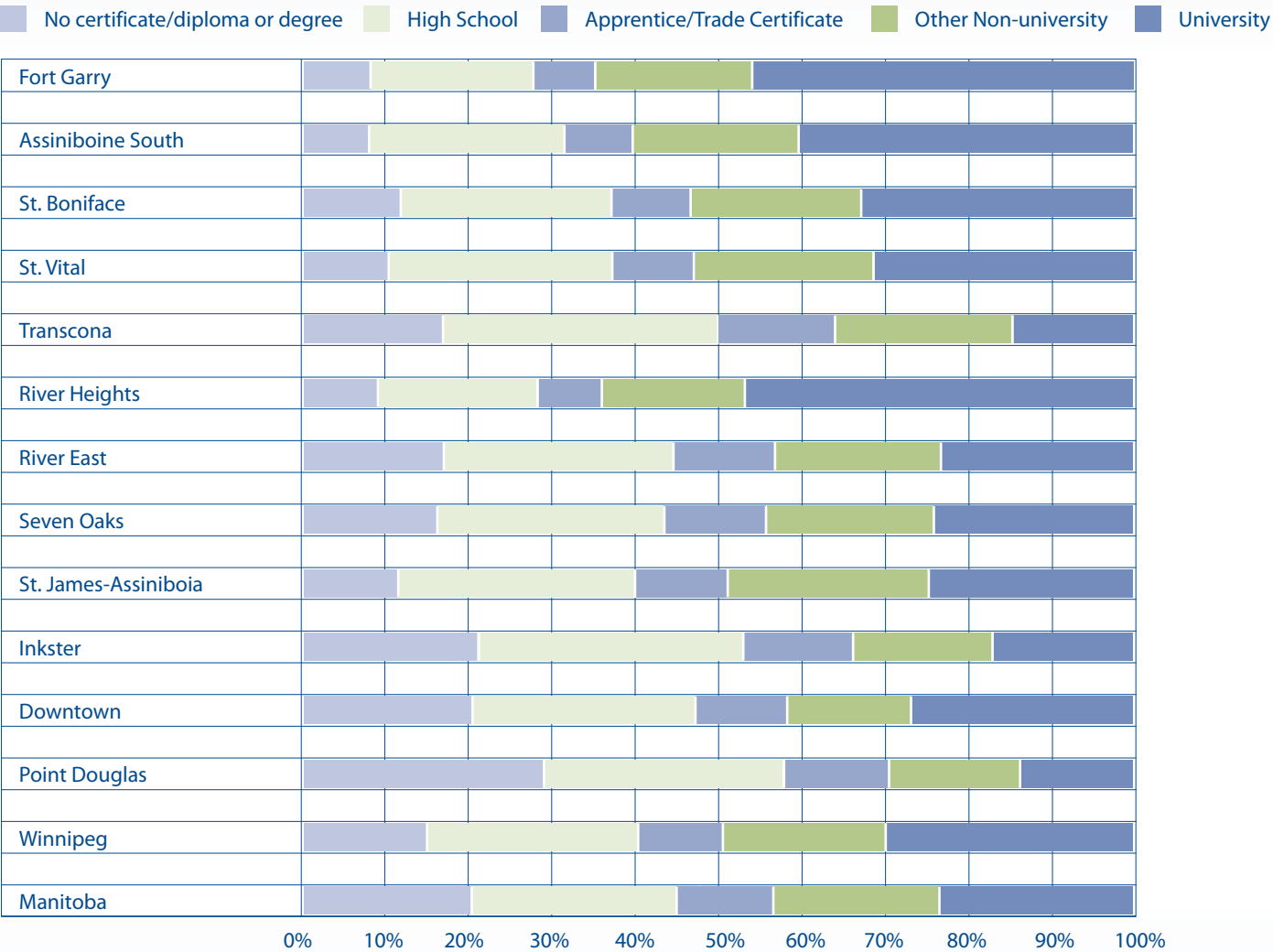
Highest Level of Education Attained at the 2006 Census in the WHR: Persons 15 to 24 Years of Age

Figure 9.2



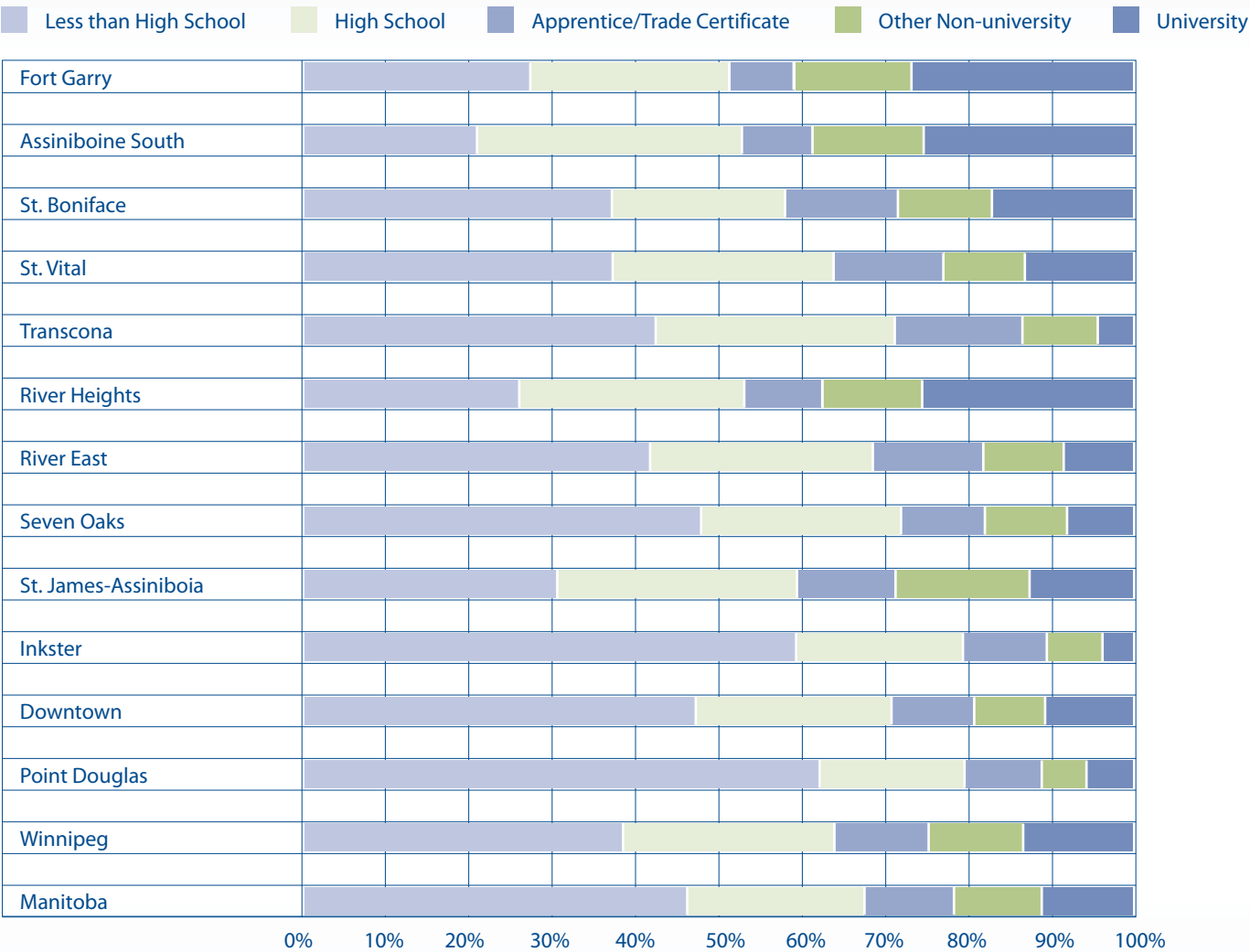
Highest Level of Education Attained at the 2006 Census in the WHR: Persons 25 to 64 Years of Age

Figure 9.3



Highest Level of Education Attained at the 2006 Census in the WHR: Persons 65+ Years of Age

Figure 9.4



Readiness for School

This indicator describes the “readiness for school” of kindergarten children residing in the Winnipeg Health Region (WHR). Results from the Early Development Instrument (EDI) provide a measurement of children’s readiness to begin grade one. As children’s readiness for school is influenced by their early years, EDI results are a reflection of the strengths and needs of children’s communities. Average EDI scores are provided at the regional (WHR) and Community Area levels for the following areas of development:

- Physical health & well-being
- Language & thinking skills
- Social competence
- Communication skills & general knowledge
- Emotional maturity

The percentage of children ‘not ready’ (bottom 10 percentile of EDI scores) for school and ‘very ready for school’ (top 30 percentile of EDI scores) as determined from the Early Development Instrument (EDI) administered to all kindergarten children in Manitoba.

Table 9.5

Readiness for School					
RHA Name	School year	% ‘not ready’ in one or more areas of development	% ‘not ready’ in two or more areas of development	% ‘very ready’ in one or more areas of development	% ‘very ready’ in two or more areas of development
Winnipeg	2005/06	26.8%	13.3%	58.7%	37.8%
	2006/07	27.1%	13.4%	66.1%	47.0%
Manitoba	2005/06	28.3%	14.6%	62.4%	43.3%
	2006/07	27.7%	13.9%	64.8%	45.5%

Source: Healthy Child Manitoba Office 2009

Table 9.6

Average EDI Scores						
RHA Name	School year	Physical health & well-being	Social competence	Emotional maturity	Language & thinking skills	Communication skills & general knowledge
Winnipeg	2005/06	8.69	8.28	7.93	8.06	7.58
	2006/07	8.77	8.38	8.01	8.22	7.77
Manitoba	2005/06	8.75	8.32	7.94	8.11	7.57
	2006/07	8.78	8.36	7.97	8.21	7.64

Source: Healthy Child Manitoba Office 2009

School Changes

Students who change schools frequently have been observed to have higher rates of school failure and high school withdrawal. The disruptions caused by frequent changes are particularly difficult for the student's social relationships. Frequent school changes have also been associated with markers of poor school performance such as lone-parent families and low socioeconomic status.

For this indicator, two different cohorts of Grade 3 students were followed for four years to determine how many changes were experienced over the time period. The first cohort entered grade 3 in the 1997/98 school year and were followed until the end of the 2000/01 school year; the second cohort entered grade 3 in 2002/03 and were followed until 2005/06. Students who moved away from Manitoba were excluded, and changes that were expected (e.g., moving from primary to middle school) were not counted as school changes. Percent of Grade 3 Students with no school changes in 4 years are reported (sex-adjusted).

Table 9.7

Grade 3 Students with No School Change					
Community Area	FY 1997/98-2000/01		FY 2002/03-2005/06		% Change
	Grade 3 Students	Adjusted Rate (%)	Grade 3 Students	Adjusted Rate (%)	
Fort Garry (1,2)	153.8	84.4%	155.0	85.2%	1.0%
Assiniboine South	92.5	78.7%	83.8	78.5%	-0.3%
St. Boniface (2)	118.8	82.0%	125.3	84.5%	3.0%
St. Vital	167.0	81.2%	152.3	80.1%	-1.3%
Transcona (2)	103.5	81.5%	95.0	85.6%	5.0%
River Heights	100.5	75.8%	98.0	76.3%	0.5%
River East	222.0	78.9%	231.8	79.2%	0.4%
Seven Oaks	133.3	77.7%	135.8	80.2%	3.2%
St. James - Assiniboia (1,2)	132.8	84.4%	140.0	84.0%	-0.5%
Inkster (2)	85.3	78.8%	88.3	74.3%	-5.6%
Downtown (1,2)	116.5	65.7%	123.5	63.0%	-4.1%
Point Douglas (1,2)	82.0	60.0%	87.0	63.2%	5.3%
Winnipeg (1,2)	1507.8	77.6%	1515.5	77.8%	0.2%
Manitoba	2787.3	79.5%	2750.3	79.8%	0.4%

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 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

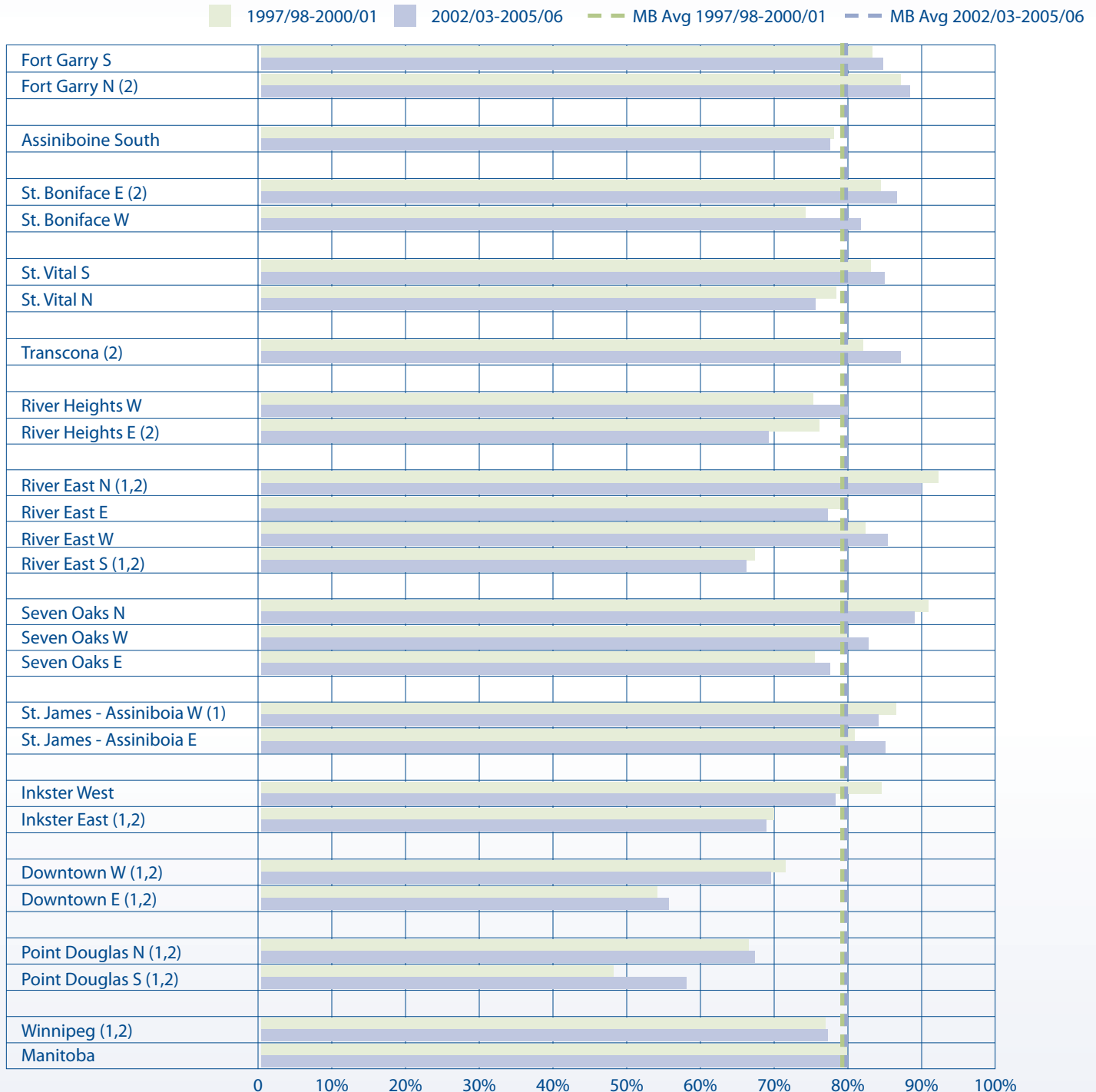
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

Grade 3 Students with No School Changes in 4 Years by Winnipeg Neighbourhood Cluster

Adjusted by sex: Percent of Grade 3 students that did not transfer or change schools in 4 years follow up.

Figure 9.5



Source: Manitoba Centre for Health Policy, 2008

'1' indicates area's rate was statistically different from Manitoba average in first time period
 '2' indicates area's rate was statistically different from Manitoba average in second time period
 't' indicates change over time was statistically significant for that area

LICO (Low income cut-offs)

Low income cut-offs (LICOs) are intended to convey the income level at which a family may be in difficult circumstances because it has to spend a greater portion of its income on the basics (food, clothing and shelter) than does the average family of similar size.

LICOs reflects the proportion of the population who are substantially worse off than the average economic family (all occupants of a dwelling unit who are related by blood, marriage or adoption including couples living together in common-law relationships), unattached individual (a person who either lives alone or shares a dwelling unit, but is unrelated to the other occupants by blood, marriage, adoption or common-law relationship) or private household (refers to a person or a group of persons who occupy a private dwelling and do not have a usual place of residence elsewhere in Canada).

This indicator reports the proportion of persons in each category of "household" with 2001 and 2006 incomes below the Statistics Canada low-income cut-off (LICO) as determined from census data.

Table 9.8

Low Income Cut-off Proportions by Type of Household						
	2001			2006		
Community Area	% Unattached individuals	% Private households	% Economic families	% Unattached individuals	% Private households	% Economic families
Fort Garry	41%	14%	10%	46%	16%	11%
Assiniboine South	30%	10%	7%	31%	10%	8%
St. Boniface	43%	16%	12%	39%	14%	10%
St. Vital	36%	15%	11%	39%	15%	11%
Transcona	35%	11%	9%	33%	13%	10%
River Heights	38%	20%	14%	37%	19%	12%
River East	41%	21%	17%	38%	18%	14%
Seven Oaks	42%	17%	14%	37%	16%	13%
St. James - Assiniboia	36%	15%	11%	32%	14%	10%
Inkster	51%	22%	20%	46%	23%	21%
Downtown	59%	40%	31%	57%	40%	33%
Point Douglas	64%	41%	35%	59%	40%	34%
Winnipeg	15%	44%	20%	42%	20%	15%
Manitoba	13%	40%	18%	38%	17%	12%

Source: Statistics Canada Census, 2001, 2006

Median Income of Individuals & Households

Median income is another indicator used to provide data about geographic areas like Winnipeg Health Region (WHR). Median income is the dollar amount that marks the midpoint of a distribution of individuals or households ranked by size of income. It divides individuals or households into two equal segments with the first half of individuals or households earning less than the median individual or household income and the other half earning more. It is generally considered to be a better indicator than the average individual or household income as it is not dramatically affected by unusually high or low values. Median individual income is calculated using the personal income (pre-tax, post-transfer) for persons aged 15 and over who report income in the Canadian census. Median household income is calculated using the sum of the personal incomes of all members of the household. Two census years of data are reported, 2001 and 2006.

Table 9.9

Median Income of Households		
Community Area	2001	2006
Fort Garry	\$56544	\$63059
Assiniboine South	\$64793	\$74992
St. Boniface	\$47802	\$58840
St. Vital	\$49682	\$55363
Transcona	\$52454	\$59199
River Heights	\$41627	\$47646
River East	\$43576	\$49616
Seven Oaks	\$46898	\$54460
St. James - Assiniboia	\$47562	\$52153
Inkster	\$44553	\$49799
Downtown	\$25628	\$30307
Point Douglas	\$26749	\$33831
Winnipeg	\$43837	\$50182
Manitoba	\$41661	\$47875

Source: Statistics Canada Census, 2001, 2006

Table 9.10

Median Income of Individuals				
Community Area	2001		2006	
	Male	Female	Male	Female
Fort Garry	\$33527	\$19748	\$36156	\$22743
Assiniboine South	\$38580	\$21942	\$43365	\$27304
St. Boniface	\$30362	\$19252	\$36565	\$24883
St. Vital	\$31093	\$20229	\$35217	\$23703
Transcona	\$32011	\$18528	\$35329	\$23149
River Heights	\$29675	\$21389	\$33381	\$24547
River East	\$28073	\$17535	\$32646	\$21567
Seven Oaks	\$27608	\$18032	\$31419	\$22140
St. James-Assiniboia	\$32299	\$19449	\$36025	\$23824
Inkster	\$24829	\$16613	\$27848	\$19744
Downtown	\$18905	\$14987	\$20323	\$17626
Point Douglas	\$18688	\$14229	\$21629	\$17660
Winnipeg	\$28410	\$18215	\$31615	\$21941
Manitoba	\$26265	\$16602	\$29919	\$20169

Source: Statistics Canada Census, 2001, 2006

Unemployment Rates

Proportion (%) of the labour force aged 15 and older who did not have a job during the reference period. The unemployment rate is a traditional measure of the economy. Also, unemployed people tend to experience more health problems.

The labour force consists of people who are currently employed and people who are unemployed but were available to work in the reference week and had looked for work in the 4 weeks previous to the reference period. Unemployment rates in the WHR are reported for the last census periods in 2006..

Table 9.11

Unemployment Rates, 2006 Census		
	2006	
Community Area	Male	Female
Fort Garry	4%	5%
Assiniboine South	5%	4%
St. Boniface	4%	4%
St. Vital	5%	4%
Transcona	5%	6%
River Heights	4%	5%
River East	5%	5%
Seven Oaks	5%	5%
St. James - Assiniboia	5%	4%
Inkster	5%	6%
Downtown	9%	8%
Point Douglas	9%	8%
Winnipeg	5%	5%
Manitoba	6%	11%

Source: Statistics Canada Census, 2006

Housing Affordability

Proportion of households (renters or tenants and owners) spending 30% or more of total household income on shelter. Shelter expenses include payments for electricity, oil, gas, coal, wood or other fuels, water and other municipal services, monthly mortgage payments, property taxes, condominium fees and rent. As a general rule, households are considered to have affordability problems if more than 30% of household income is spent on housing costs. At that level of spending, it is likely that inadequate funds will be available for other necessities such as food, clothing, and transportation. Housing affordability problems affect renters or tenants more than owners.

Table 9.12

Housing Affordability				
	2001		2006	
Community Area	Tenants	Owners	Tenants	Owners
	spending 30% or more of income on shelter			
Fort Garry	46%	17%	42%	12%
Assiniboine South	43%	14%	39%	11%
St. Boniface	36%	12%	36%	11%
St. Vital	36%	10%	39%	11%
Transcona	36%	12%	37%	11%
River Heights	38%	11%	35%	12%
River East	34%	13%	34%	11%
Seven Oaks	34%	10%	33%	13%
St. James - Assiniboia	36%	11%	35%	10%
Inkster	36%	10%	32%	10%
Downtown	34%	12%	41%	15%
Point Douglas	34%	11%	40%	16%
Winnipeg	38%	12%	37%	12%
Manitoba	37%	11%	35%	11%

Source: Statistics Canada Census, 2001, 2006