



Winnipeg Regional Health Authority

# COMMUNITY

HEALTH ASSESSMENT 2009  
2010

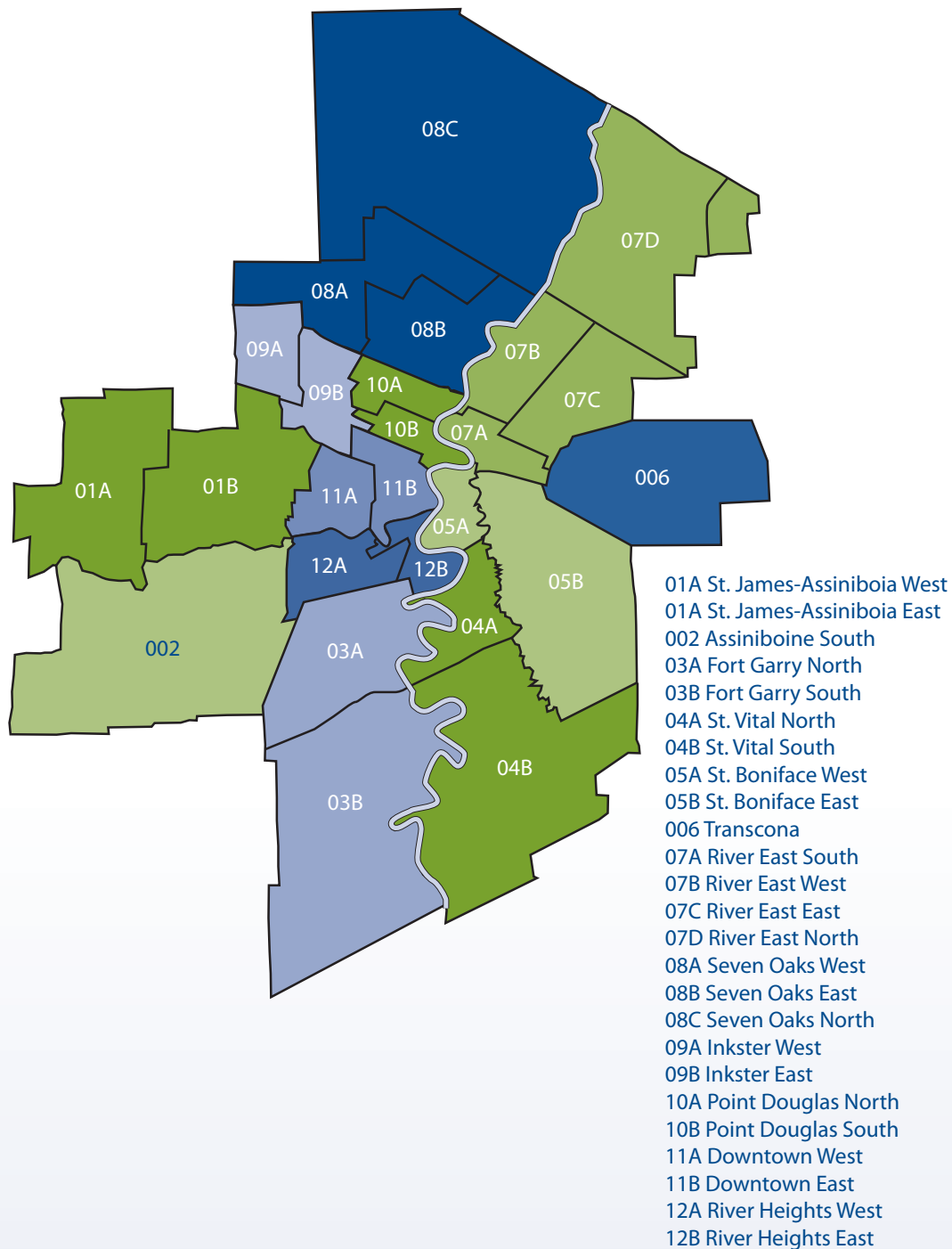


Winnipeg Regional  
Health Authority  
Caring for Health

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

# WINNIPEG GEOGRAPHY & POPULATION

## Neighbourhood Clusters



# WINNIPEG HEALTH REGION (WHR)

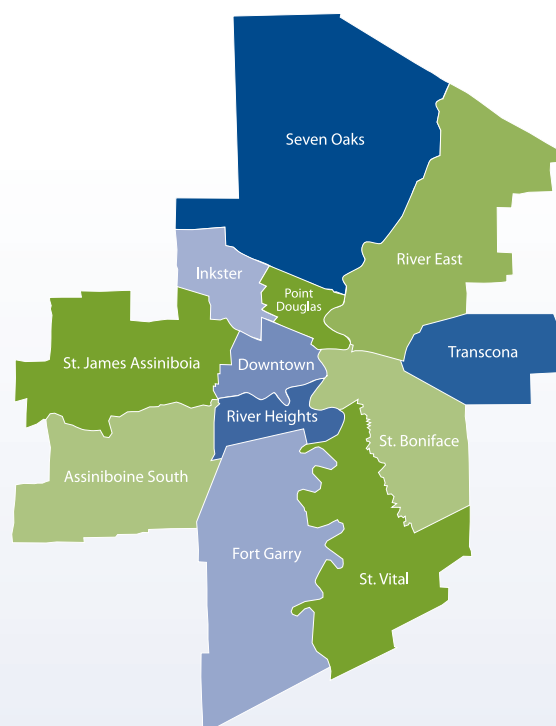
## Population by Community Areas

	Population (Census)		
	1996	2001	2006
Fort Garry	59866	62388	66399
Assiniboine South	36149	36869	36740
St. Boniface	45345	47359	51802
St. Vital	60769	60526	61997
Transcona	33574	33097	33233
River Heights	57513	56384	55688
River East	90557	92391	93041
Seven Oaks	57088	57804	60593
St. James - Assiniboia	60833	59543	58478
Inkster	31372	31275	31953
Downtown	74406	75645	75217
Point Douglas	41230	40447	41897
Winnipeg HR	648702	653728	667038

## MAP OF WHR'S COMMUNITY AREAS AND NEIGHBORHOOD CLUSTERS

The Community Health Assessment 2009/2010 reports on 107 indicators of the region's health status, determinants of health and well-being, health system performance and demographics. Most of the indicators are reported by Community Area (12 in total) and charted by Neighborhood Cluster (25 in total).

### Winnipeg Health Region: Community Areas



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## MESSAGE FROM ARLENE WILGOSH

President & Chief Executive Officer  
Winnipeg Regional Health Authority

The Community Health Assessment serves as an important information resource for the many organizations and programs associated with health, wellness and community development. It plays a key role in helping us engage with the public in a shared effort to improve the health for everyone in the Winnipeg Health Region.

The Winnipeg Regional Health Authority has taken much care in preparing this report. It provides a snapshot in time of where we need to go. Our community facilitators, as well as numerous community stakeholders, use this information as part of their ongoing public engagement and community development activities. By sharing and using this information, they are better able to determine strategies and priorities aimed at building stronger communities.

As we move forward, we will be actively soliciting community input from community stakeholders who share our commitment to ensuring that our priorities are based on sound analysis, constructive feedback and open dialogue.

The conversation starts here.

# ASSESSING THE HEALTH OF OUR COMMUNITY

## A message from the Medical Officers of Health

Assessing the health of a community is a fundamental part of improving health. It is the way we gather “diagnostic” information about our population to be able to make an informed “treatment plan” to improve population health - in a similar way a physician would for an individual. This Community Health Assessment report is part of an ongoing process of population health assessment. It contributes to our understanding of our strengths and challenges assisting to inform solutions and directions. However, it is not an answer book. By itself, it cannot tell us how to set priorities or where to focus our attention. Rather, it is a starting point, like a pencil sketch outline, from which we can invite community conversations and identify issues that need further exploration to fill in more of the picture.

### **Overall, people in Winnipeg enjoy good health.**

So what are some of the things this report does tell us? Overall, people in Winnipeg enjoy good health. Life expectancy continues to increase, heart disease mortality is declining, and the incidence of cancer is trending downward. We have more types of vaccines to prevent serious infections and the majority of people living in the Winnipeg Health Region (WHR) describe their health as good, very good or excellent.

However there are some concerning findings as well. Our premature mortality rate (an indicator of early death) is not decreasing, and our life expectancy is below the national average. The number of people being treated for diabetes is increasing at a rapid pace and having diabetes increases the risk of other chronic diseases. Many people are experiencing mental health problems, and injury deaths, including suicide, are not decreasing even though many are preventable. Rates of sexually transmitted infections (STIs) among our youth and young adults are high. Most people in the WHR do not get the optimum amount of physical activity, more adults have a Body Mass Index (BMI) in the overweight or obese range than the normal range, a very low proportion of people eat the recommended amount of fruits and vegetables, our smoking rates are above the national average, and a concerning number of pregnant mothers smoke. Childhood immunization rates are stable or decreasing despite the increase in protective vaccines available.

Most concerning of all are the differences in health and risk factors across our community. Significant gaps between the health of those living in more affluent areas of our city and those living in lower income areas are evident in most indicators. Poverty underlies these unacceptable disparities in health and threatens the health and wellbeing of many, particularly our children. In some areas of Winnipeg parents face challenges that put their children's health at risk at rates up to five times that of parents in other areas.

### **Significant gaps between the health of those living in more affluent areas of our city and those living in lower income areas are evident in most indicators.**

These findings resonate with what we already know about health in the WHR. Compared to other Canadian cities, Winnipeg has been found to have much wider gaps in health status between affluent and less affluent areas. Related to the impact of poverty, housing problems and a variety of social and behavioral risk factors, tuberculosis (TB) is a continuing health threat in Winnipeg, and STIs, including HIV, continue to spread. Many of our citizens who face the highest risks to their health also face the most barriers in accessing preventive and health care services. Those who experience barriers due to language, culture or low income, persons experiencing homelessness, people living with mental health issues (including addictions), and newcomers (settling in increasing numbers) are among those facing higher risks of injury, infections, mental health problems and chronic diseases.

All children should have the chance to grow to their full potential in health and achievement, and this is not presently the case for all children in Winnipeg. The early years of childhood are becoming increasingly recognized as having profound influence on the long-term health and development of individuals. That many Winnipeg children lack optimum conditions to flourish - such as safe environments, adequate housing, protection from hazards, and food security - is not acceptable.

### **How we design and use our buildings, roads, transit system, cycling routes, housing and public places affects our level of physical activity, body weights, stress, mental health and community cohesion.**

There are newer threats to keep our eyes on as well. Environmental issues are fundamental to health. The relationship between our natural physical environment and health has been well recognized, but recently, the impact of our man-made “built” environment is receiving more attention. How we design and use our buildings, roads, transit system, cycling routes, housing and public places affects our level of physical activity, body weights, stress, mental health and community cohesion. Due to climate change and other factors, public health emergencies and disasters, including severe weather events, are increasingly common. With world travel being very accessible, diseases can spread around the world faster than ever before. Outbreaks, such as influenza pandemics, will continue to occur.

So where do we go from here? We need to continue to assess the health of our population. That includes listening to stakeholders and community members, so that lived experience can add to the picture. It also means identifying key areas that require further in-depth reports and research. These are all next steps in the ongoing health assessment process. But in the meantime, we also need to act now to improve health.

An increasing focus on addressing poverty in Winnipeg is already underway and more momentum is needed. Additional efforts towards supporting families and children, particularly during the formative early years, are critical to improving the health of the next generation. We need to recognize how our social and environmental norms are herding us towards increasingly sedentary lives even during childhood, with the associated chronic disease risks that follow. Reclaiming cooking healthy food and eating together as a family is also urgently needed. Mental health and well-being need to be prioritized as foundational elements of health. And we all need to share in creating solutions to improve our own health – ranging from individual and family lifestyle decisions, to local community efforts, to corporate and policy action that can create healthier living conditions.

**We need to continue to assess the health of our population...and we need to act now to improve health across the WHR.**

We have identified many challenges to health in the Winnipeg Health Region. But Winnipeg has many strengths with which to address these challenges. We have a sense of community belonging and a tradition of helping each other. We value diversity and inclusiveness, and celebrate our heritage. We care about our children. Winnipeg is a large enough urban centre to have significant expertise from many sectors, but yet is small enough to foster familiarity and collaboration. It is within our grasp, if we collectively put sufficient will, effort and strategy to bear, to considerably improve health in the Winnipeg Health Region overall, and close the health disparity gap.

#### Medical Officers of Health, Winnipeg Regional Health Authority

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# Community Health Assessment AT A GLANCE (Selected Indicators) by Community Area, Winnipeg RHA and Manitoba Overall

Selected Indicators	Data Years	Fort Garry	Assiniboine South	St. Boniface	St. Vital	Transcona	River Heights	River East	Seven Oaks	St. James-Assiniboia	Inkster	Downtown	Point Douglas	Winnipeg RHA	Manitoba OVERALL
<b>Health Status (page 27)</b>															
Life Expectancy (Female) in years	2001-2005	84.1	82.3	83.5	83.3	82.4	82.8	82.2	81.5	81.4	81.8	79.6	75.7	81.8	81.5
Life Expectancy (Male) in years	2001-2005	79.8	79.4	78.8	78.7	77.5	77.6	77.7	77.0	77.4	76.4	72.1	71.5	76.9	76.3
Premature Mortality Per 1000 residents	2001-2005	2.38	2.33	2.71	2.66	2.82	3.01	2.94	3.17	3.10	3.35	4.92	5.52	3.19	3.29
Infant Mortality Rate/1000 live births	2001-2005	3.4	4.9	5.5	2.6	4.0	3.9	4.2	4.2	3.0	6.6	7.2	9.5	5.0	5.3
Health Status: rated Excellent (%)	2001/03/05	25.1	29.7	23.6	20.1	25.5	29.2	20.6	22.8	21.6	29.3	22.7	18.2	23.3	21.9
Physical Functioning Less than perfect (%)	39 14/51	35.9	42.0	43.1	43.9	47.9	39.5	46.3	43.1	49.8	44.7	46.0	45.8	44.0	44.4
Mental Health % reporting a low score	39 14/51	26.5	18.8	23.4	24.7	29.1	25.9	27.6	19.4	23.7	30.6	31.0	40.5	26.7	25.4
<b>Early Childhood &amp; Maternal Health (page 48)</b>															
Teen Birth Rate per 1000 aged 15-19	FY2 2001-05	7.55	6.66	12.55	12.26	12.22	15.27	19.54	14.56	16.03	35.64	58.15	79.80	24.03	30.13
Pre-term Births % live births < 37 weeks	FY 2001-05	7.0	8.3	8.2	6.7	9.2	7.4	7.1	7.3	7.2	8.3	10.0	9.4	8.0	7.7
Maternal Alcohol Use % Families 1st Screen	2003-2006	4.0	9.5	16.7	9.9	13.4	3.1	10.4	8.7	5.5	20.8	16.0	22.3	11.8	12.9
Maternal Smoking % Families 1st Screen	2003-2006	7.4	10.7	13.1	13.4	19.1	10.6	22.0	15.8	13.4	29.3	31.4	46.4	20.7	21.0
Financial difficulties % Families 1st Screen	2003-2006	8.3	7.9	9.8	10.5	9.6	8.1	17.5	12.0	9.8	27.0	40.0	49.2	19.5	17.7
Mothers < Gr 12 Ed % Families 1st Screen	2003-2006	4.5	6.8	7.7	7.9	10.0	5.7	17.4	12.4	9.9	28.2	36.8	48.8	18.1	21.6
<b>Chronic Diseases (page 70)</b>															
Diabetes <sup>3,4</sup> % residents aged 19+	FY 2003-06	7.0	5.9	7.3	7.2	8.6	6.7	7.7	9.3	7.4	10.7	10.3	11.3	8.2	8.7
Hypertension <sup>3</sup> % residents aged 19+	FY 2005	21.9	21.3	22.2	22.3	24.0	21.7	22.9	24.7	22.9	26.1	23.3	24.8	22.9	23.7
Stroke Incidence <sup>3</sup> Per 1000 aged 40+	FY 2001-05	2.95	2.44	2.08	2.28	2.95	2.53	3.16	2.76	3.00	2.57	2.88	2.99	2.79	3.05
Arthritis <sup>3</sup> % residents aged 19+	FY 2004-05	18.0	20.4	18.6	19.5	19.7	19.4	18.8	20.0	19.9	19.6	22.4	24.9	19.9	20.2
Asthma in Children <sup>3</sup> % aged 5-19	FY 2004-05	17.5	15.3	14.6	15.1	14.6	16.6	16.0	18.5	15.8	19.0	15.8	18.0	16.4	13.9

<sup>1</sup> From Canadian Community Health Survey (CCHS); multiple years of data combined. 2 FY=fiscal year (e.g., 2001-02=01 Apr 2001-31 Mar 2002) 3 Definition is based on treatment prevalence, i.e., chronic disease estimates (with the exception of cancer) are based on who gets treatment for the disease not those who have the disease. 4 Proportion (%) is based on total cases found over a 5-year period. 5 Mood disorders includes the constellation of disorders associated with depression and the use of antidepressants/mood stabilizer prescription drugs.

Selected Indicators	Data Years	Fort Garry	Assiniboine South	St. Boniface	St. Vital	Transcona	River Heights	River East	Seven Oaks	St. James-Assiniboia	Inkster	Downtown	Point Douglas	Winnipeg RHA	Manitoba OVERALL
<b>Mental Health (page 97)</b>															
Mood Disorders <sup>3,4</sup> % residents aged 10+	FY 2001-05	17.0	20.6	19.9	19.4	20.2	22.2	19.9	19.9	20.8	15.8	20.3	22.5	20.3	19.1
Schizophrenia <sup>3,4</sup> % residents aged 10+	FY 2001-05	0.7	0.7	1.1	0.8	0.7	1.4	1.0	0.9	1.0	0.9	2.7	1.9	1.2	1.1
Teenager Use of SSRI Antidepressants	FY 2005	14.9	22.3	17.3	14.9	14.5	24.3	15.8	13.5	17.5	9.0	13.4	12.2	15.5	14.5
<b>Injuries (page 116)</b>															
Injury Hospitalization 5/10,000 (aged 0-19)	FY 2001-05	20.9	28.1	23.4	27.0	23.1	27.6	28.9	30.7	28.2	35.4	59.8	64.4	33.2	57.8
Suicide Rates per 100,000 (aged 10+)	FY 2001-05	5.0	5.5	12.5	10.1	11.0	13.6	14.6	14.0	13.8	17.2	31.9	27.6	15.0	16.3
<b>Preventive Health Interventions (page 128)</b>															
Adult Influenza Immunization (% aged 65+)	FY 2005	69.2	72.3	68.2	70.9	69.4	67.6	68.9	67.8	73.5	59.2	61.3	61.6	67.9	66.4
Childhood Immunization % 2-year olds	2002-04	74.7	77.1	79.6	79.2	75.7	74.7	75.7	77.8	74.8	69.4	64.4	58.5	73.0	69.6
Cervical Cancer Screen % women aged 18-69	FY 2003-05	77.5	77.4	77.3	78.3	77.7	75.7	73.4	71.3	76.2	64.6	61.8	61.3	73.2	69.2
Breast Cancer Screen % women aged 50-69	FY 2004-05	65.7	68.1	64.8	64.2	61.5	63.5	60.9	59.6	65.9	51.2	45.8	43.6	60.7	61.7
<b>Health Risk Factors (page 147)</b>															
Smoking (current) % CCHS respondents	2001/03/051	11.3	14.8	21.9	19.5	27.4	21.2	24.6	19.1	27.1	22.5	26.1	32.6	22.1	22.7
Second-Hand Smoke % Exposed (CCHS)	39 14/51	7.7	9.9	16.2	12.1	17.8	15.3	21.9	12.2	22.1	20.8	20.6	32.8	16.0	17.4
Body Mass Index % Obese (CCHS)	2001/03/051	15.4	11.8	18.2	19.1	17.8	11.2	21.4	18.4	26.3	18.9	16.5	22.0	18.4	20.8
Total Activity Level % Active (CCHS)	2001/03/051	20.0	20.0	23.7	21.1	24.3	22.0	28.0	15.7	28.4	29.8	31.0	36.2	25.3	29.5
Nutrition: Fruit & Veggies having 5+ times/day	39 14/51	40.2	37.2	30.1	34.1	33.1	37.1	27.8	32.0	33.5	38.2	36.4	35.6	34.4	33.5
<b>Socio-economic Conditions (page 161)</b>															
Education (ages 25-64) % with no certificate	2006 Census	8	8	12	11	18	9	17	17	12	21	21	29	15	20
School Changes % Gr 3 with no changes	FY2002-05	85.2	78.5	84.5	80.1	85.6	76.3	79.2	80.2	84.0	74.3	63.0	63.2	77.8	79.8
High-School Completion (%)	FY 2005	89.7	87.7	84.9	88.4	68.8	81.4	79.5	80.5	79.8	77.4	59.5	52.8	78.7	77.7
LICO % at (Individuals)	2006 Census	46	31	39	39	33	37	38	37	32	46	57	59	42	38
LICO % at (Household)		16	10	14	15	13	19	18	16	14	23	40	40	20	17
Median Income (\$s): Individuals (Males)	2006 Census	36,156	43,365	36,565	35,217	35,329	33,381	32,646	31,419	36,025	27,848	20,323	21,629	31,615	29,919
Individuals (Females)		22,743	27,304	24,883	23,703	23,149	24,547	21,567	22,140	23,824	19,744	17,626	21,941	21,941	20,169
Households		63,059	74,992	58,840	55,363	59,199	47,646	49,616	54,460	52,153	49,799	30,307	33,831	50,182	47,875



# HOW TO READ THIS REPORT

## Winnipeg Regional Health Authority Community Health Assessment 2009/2010

It is impossible to fully describe all aspects of the health of a population, particularly a large, diverse, multifaceted urban community. However, a variety of indicators are available that, when taken together, can start to sketch out the picture of a population's health.

This report collates and presents the “core” indicators for the Winnipeg Health Region. **Core indicators** are those identified by Manitoba Health and other members of the Community Health Assessment Network (CHAN) as essential information for describing regional health status. Also, core indicators are based on data available at the regional level to facilitate comparisons.

As such, this report represents a **starting point** in describing the health of residents living in the Winnipeg Health Region. It will not answer all the questions a reader may have; in fact, it will likely stimulate more questions than it provides answers. But it forms a platform of descriptive statistics on which to begin an iterative, engaged, consultative process that will further our understanding of health in the Winnipeg Health Region.

### INDICATORS

As stated above, part of the process of a community health assessment is to present statistics on a set of core indicators. Indicators describe or measure particular characteristics, events and factors that are important for health planning, decision making and evaluation. We have grouped our mandatory core indicators (over 100) into four major sections:

- A. Health Status
- B. Determinants of Health and Well-being
- C. Health System Performance
- D. Demographics

The first two sections form the majority of this report, with the remaining sections providing useful reference information. Many subsections exist; for example, the section on “Health Status” includes six sub-sections on such diverse subjects as: early childhood and maternal health, chronic diseases and injuries among others. Each sub-section is comprised of several “core” indicators.

### SOURCES OF INDICATOR DATA

It is important to note that most of the **indicators are derived from two primary sources**: Manitoba Health's administrative databases and the Canadian Community Health Survey. Further, most of the indicators can be found in two Manitoba Centre for Health Policy (MCHP) Reports which were compiled using Manitoba Health's administrative databases (RHA Atlas, 2009 and Child Health Atlas Update, 2008). These reports are available at: <http://umanitoba.ca/faculties/medicine/units/mchp/> (choose “Publications”). In the case of the RHA Atlas (MCHP 2009), some indicators were based on data derived from the Canadian Community Health Survey (CCHS) and analyzed by MCHP. Other secondary sources of indicator data are used and referenced accordingly. Data from the Canadian Institute of Health Information, Manitoba's Bureau of Statistics, Manitoba Health and Healthy Living (as RHA Profiles 2008), Healthy Child Manitoba are examples of other sources.

#### CCHS Data Source

CCHS is a cross-sectional survey that collects information, using telephone interviews, from a random sample of Canadians every two years on topics related to health status, healthcare utilization and health determinants. It relies upon a large sample of respondents from across the country (about 7500 persons are surveyed in Manitoba every two years) and is designed to provide reliable estimates at the health region level.

Whereas administrative databases are used to report on rates derived from almost the entire population, CCHS relies on sampled data. Indicators derived from the CCHS have several limitations: first, interviewers ask questions of participants and answers can be affected by personal bias and recall error. Second, certain population groups may be under-represented. For instance, Winnipeg residents without regular (land line) telephone service and those living in an institution are not included in the survey. In addition, certain groups may be more inclined than others to participate in the survey. Finally, every two years, approximately 7500 Manitobans are administered the survey and data are combined from several years (e.g., CCHS 1.1: 2001, CCHS 2.1: 2003 and CCHS 3.1: 2005) to increase the sample size and the statistical



precision of the results. In this report, because the waves of the CCHS were combined, change over time cannot be analyzed and instead represent a single (multi-year) time period.

### Administrative Data bases

Similarly, data derived from administrative databases have their own limitations. Diagnostic codes that reflect the reason for a billable service and not necessarily a confirmed condition will over count some conditions. Also, some physicians must submit 'shadow bills' for services rendered and this is not always done particularly in areas with limited access to physicians. With less billing information through shadow billing, there is less information available for analysis and fewer conditions identified resulting in an underestimation of treatment prevalence. Further, coding errors and lack of specificity in some diagnostic codes (e.g., some codes cover multiple conditions, meaning that one cannot differentiate among conditions within a code) will further compromise the accuracy and completeness of administrative data used to identify medical conditions and use of the health care system. All of these limitations make it difficult to interpret and compare some indicators.

## SUB-SECTION OUTLINE

Each sub-section starts with an **"AT A GLANCE table"**. This one-pager is a summary of current and past indicator values for the sub-section's indicators. Included in the table is the "Range of Current Estimates" for each indicator which reports high and low values that define the range of the indicator across Community Areas (CAs).

Following the summary table, the reader will find **commentary** on the overall sub-section and the descriptive statistics for each indicator comprising it. For brevity, the text highlights the important findings of the Winnipeg Health Region's (WHR) Community Health Assessment (CHA), but no attempt was made to provide detailed explanations of the observed patterns. We also did not focus on comparing the WHR indicators to other Regional Health Authorities (RHAs) because of the significant socio-economic, geographic and other differences between the WHR and the much smaller rural RHAs. Comparisons with other Canadian urban centers and more in-depth analyses are planned for future reports.

After the text-commentary, the **indicators** comprising the sub-section are described, where possible, in two ways: using a table of data by CA and a chart by Winnipeg Neighbourhood Cluster (NC). An explicit definition for each indicator is at the beginning of each indicator to assist with interpretation. Where applicable, the source of the data, the time periods of analysis and how the rates have been adjusted are listed as footnotes. In addition, all tables and charts include the overall Winnipeg RHA and Manitoba figures.

### Tables

Note that the indicator data table includes numerator data (case, numbers, etc.) by CA and the accompanying population-based rate (where applicable, the 'adjusted' rate or proportion). These are listed for two time-periods which vary depending on the indicator and the data available to measure it. For example, these could be periods of one year as in the "Adult Influenza Immunization" indicator (Fiscal year FY, 2000/01) or five years in the case of the "Ischemic Heart Disease" indicator (FY 1996/97-2000/01). Where multi-year time periods appear, the numbers presented are cumulative numbers for the specified time period. Most core indicators are based on data to 31 March 2006. Please see the following figure for an example of most tables' format.

In addition, there is a "% Change" column, which reflects the percentage change in the numerator (number, cases, etc.) for the CA between the two time periods. We have used this convention as a means of showing the actual numbers of persons affected in a CA and how the numbers have increased or decreased. The statistical significance of the change between the two time periods is reported behind each CA label as a **'t'** where appropriate and is based on the adjusted rate.<sup>2</sup> Two other labels of statistical significance are attached: **'1'** indicates that in the first time period, the area's rate was statistically different from the Manitoba average at that time; **'2'** indicates that in the second time period, the area's rate was statistically different from the Manitoba average at that time. Occasionally, an **'s'** is referred to and it indicates that the results were suppressed to ensure confidentiality.

<sup>2</sup> See explanation of significance testing in the MCHP RHA Atlas, 2009 page 14: <http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html>. Occasionally, another designation of significance is used: e.g., "Incr" for increasing and "Dcr" for decreasing when considering Families First screening form data.

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%

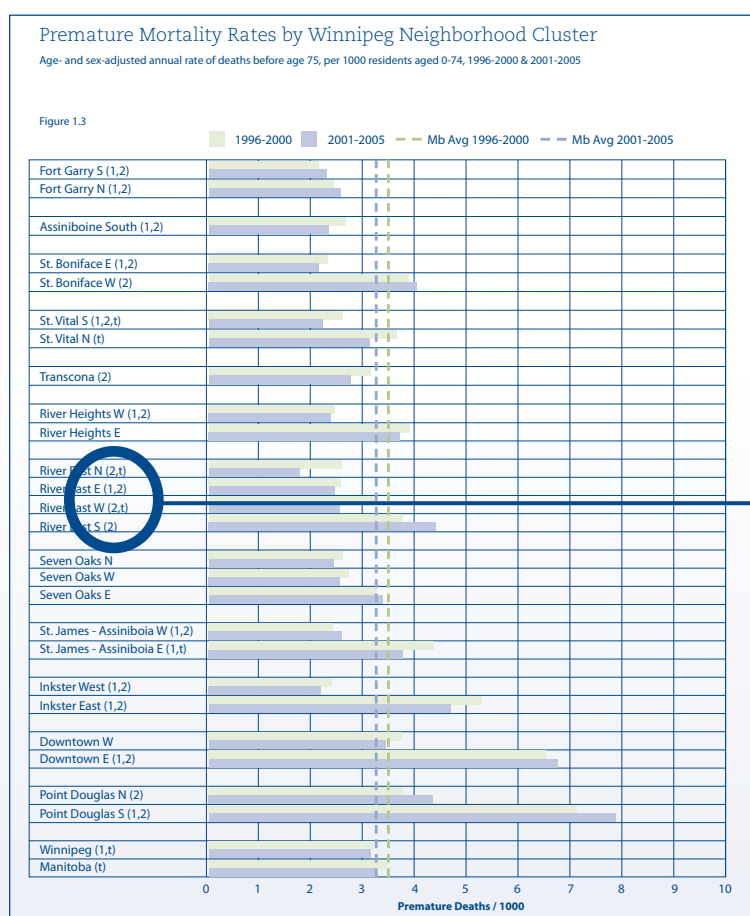
Based on the change in the numerator between time periods.

Based on adjusted rates and statistical modelling. Possible values:

'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

## Graphs

The table (with CA indicator values) is followed in most cases by a graph of the same indicator by Winnipeg Neighbourhood Cluster (NC). NCs are the next level of geographic breakdown in the WHR; there are 25 NCs that comprise the 12 CAs. Assessments of the statistical significance are again indicated behind the NCs' name. The data underlying these graphs are available, separately from this report. It is important when comparing one NC to another to note that the differences stated are age- and sex-adjusted using the Manitoba population in the first time period as the standard population.



Based on adjusted rates and statistical modelling. Possible values:

'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

### Order of Community Areas/Neighbourhood Clusters in Tables & Graphs

Graphs and tables throughout this report show the Community Areas (CAs)/Neighborhood Clusters (NC) in the order of their premature mortality rates (PMR). For the purpose of calculating the PMR, a death before the age of 75 years is considered to be premature, so the **PMR** indicates the average annual rate of deaths occurring before age 75, per 1000 area residents under 75. PMRs were adjusted to account for differences in the age and sex composition between areas. Because of small populations in some areas, the PMRs used to order the areas were averaged over a 10-year period from 1996-2005.

### Understanding the meaning of the indicators

To better understand the meaning of the indicators related to the occurrence of diseases or conditions (e.g., the indicators listed in the chronic disease chapter), it is important to understand the difference between disease prevalence and incidence:

#### What is the difference between prevalence & incidence?

**Prevalence** is the proportion of the population that are cases at a point in time (point prevalence) or over a defined period of time (period prevalence). All the prevalence estimates used in this report are estimates of period prevalence.

**Incidence** is the number of NEW cases diagnosed within a defined period of time divided by the size of the population at the beginning of that period.

### Treatment Prevalence

In certain chapters, e.g., the one on chronic diseases, “treatment prevalence” estimates are used instead of disease prevalence or disease incidence rates. Because these estimates were derived using health administrative databases, **only** those persons who have received health services or treatment for the disease (by visiting a doctor, being admitted to a hospital or having a prescription dispensed) are counted, 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. Sometimes, changes in physician billing or disease coding practices (e.g., when a new tariff is created) could also cause treatment prevalence to change even if the disease prevalence has not changed. For these reason, sometimes it is not possible to be certain about the meaning of changes in treatment prevalence over time.

### More about Rates and Proportions

Most figures shown in the tables section of an indicator use adjusted rates or proportions. Since age and sex are often key determinants of health status and health service use, the results you see are rates or proportions ‘adjusted’ to account for age and sex differences among CAs.

Reporting adjusted rates (versus crude rates) allows us to make valid comparisons across areas that have different population compositions. The actual number of events (disease or condition) observed in each area is also reported where possible. The percentage change shown in the tables is based on changes in the actual numbers to facilitate planning of health care services.



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)
<b>Life Expectancy</b>	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
<b>Premature Mortality Rate*</b>		3.19/1000 (2001-2005)	3.36/1000 (1996-2000)	2.33/1000 – 5.52/1000
<b>Potential Years of Life Lost (PYLL)*</b>		45.2/1000 (2001-2005)	48.8/1000 (1996-2000)	28.4 – 97.0 yrs
<b>Infant Mortality</b> (per 1000 live births)		5.0/1000 (2001-2005)	5.2/1000 (1996-2000)	2.6/1000 – 9.5/1000
<b>Top 5 Causes of Mortality</b>	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
<b>Health Status**</b> (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%
<b>Physical Functioning**</b> (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%
<b>Mental Health Status**</b> (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: **self-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.<sup>3</sup>

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 mortality 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.

<sup>3</sup> <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<sup>4</sup>

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](http://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](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](http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=82-221-X&lang=eng) (Statistics Canada).

<sup>4</sup> 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

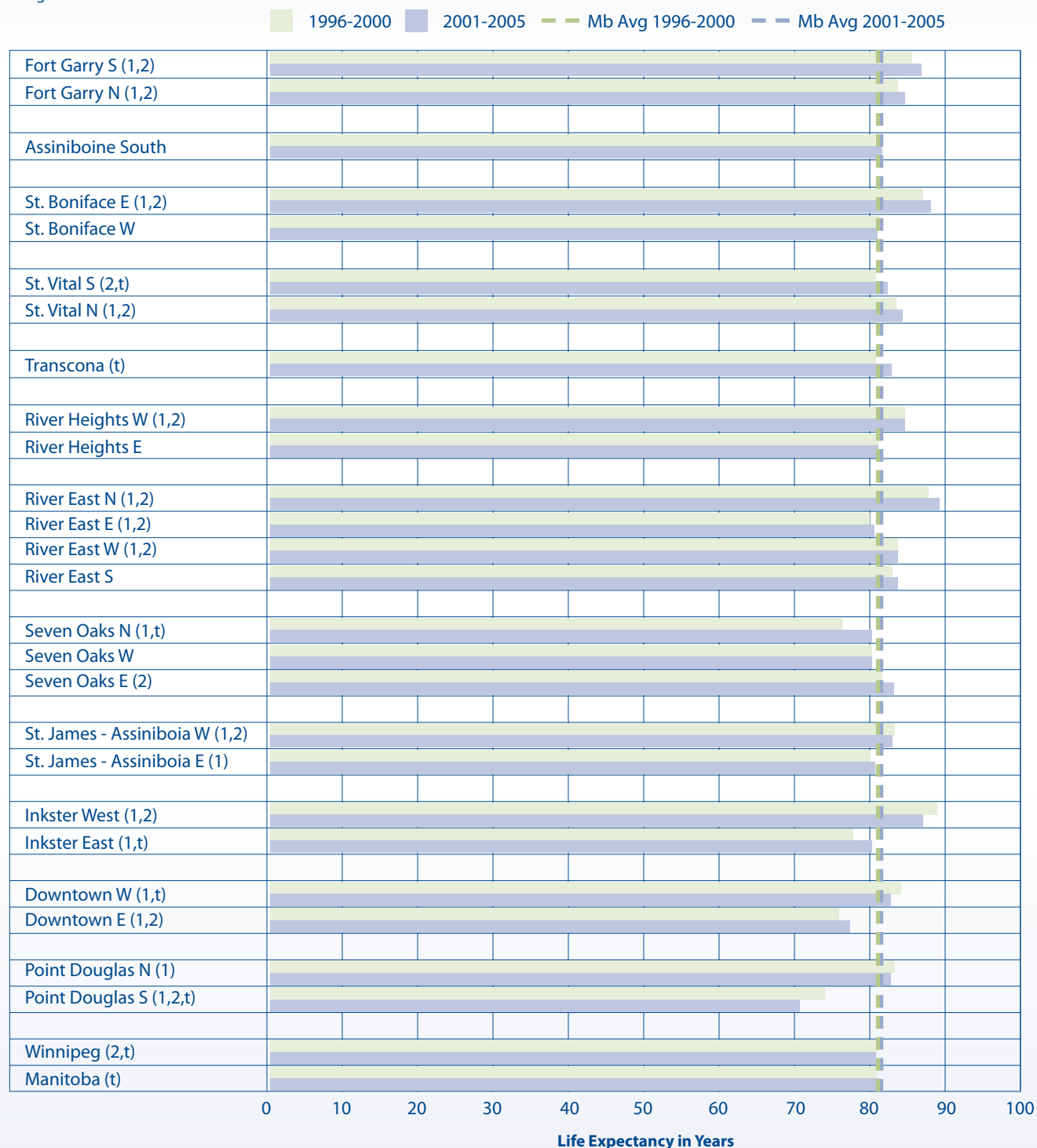
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

'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

## 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

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

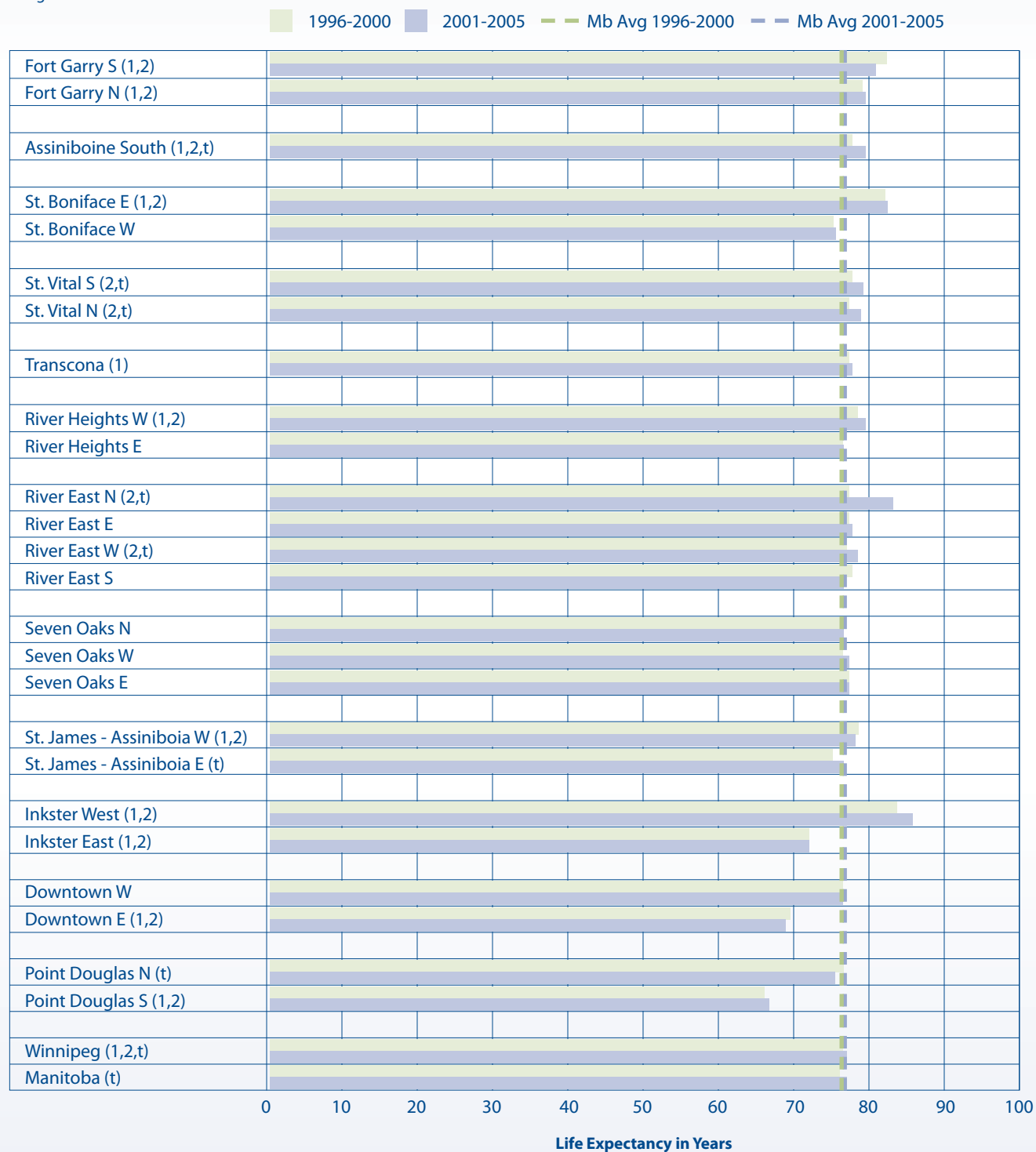
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# 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

'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

## 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.

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

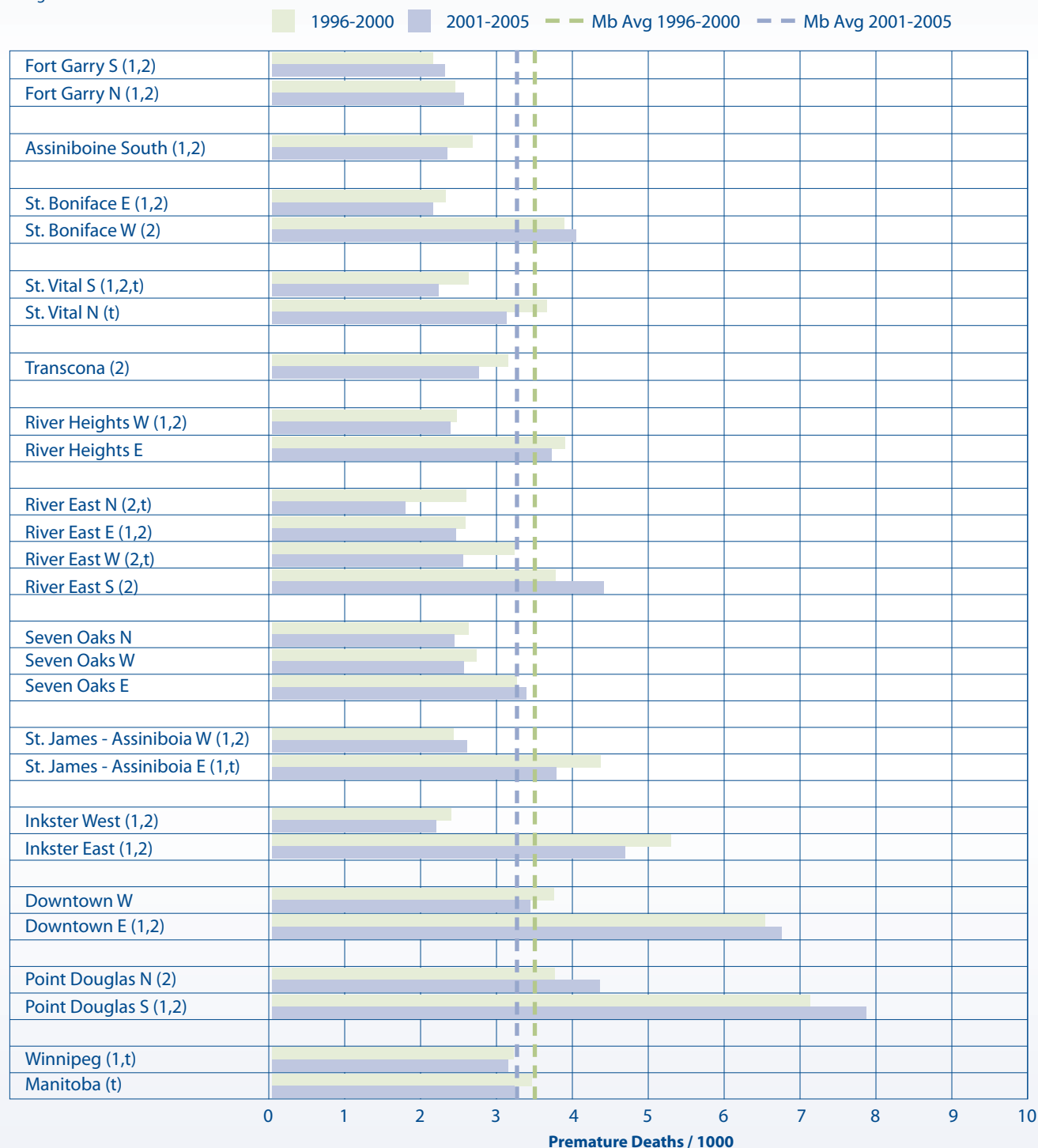
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## 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

'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

## 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.

'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

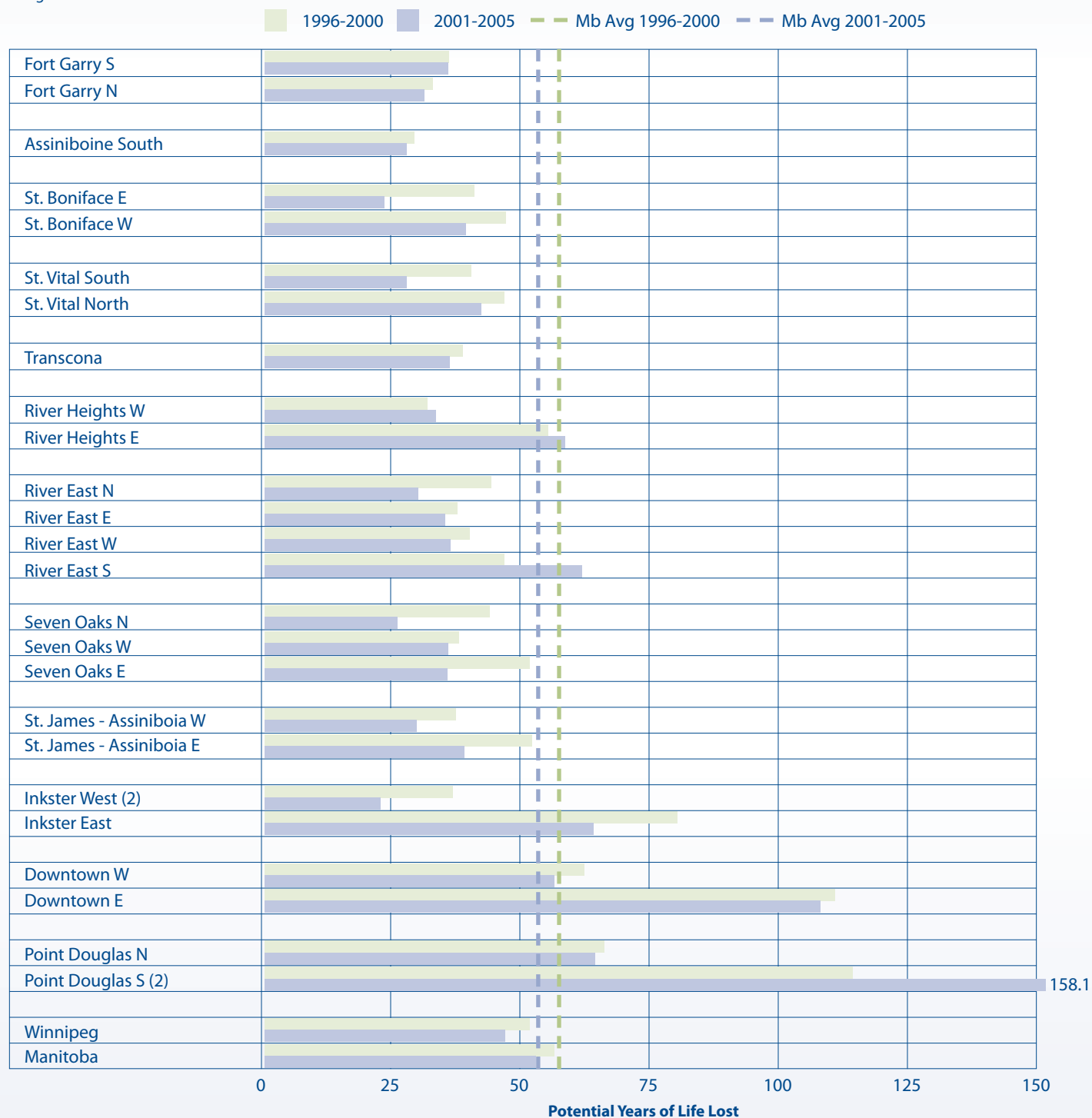
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant



# 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

'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

## 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

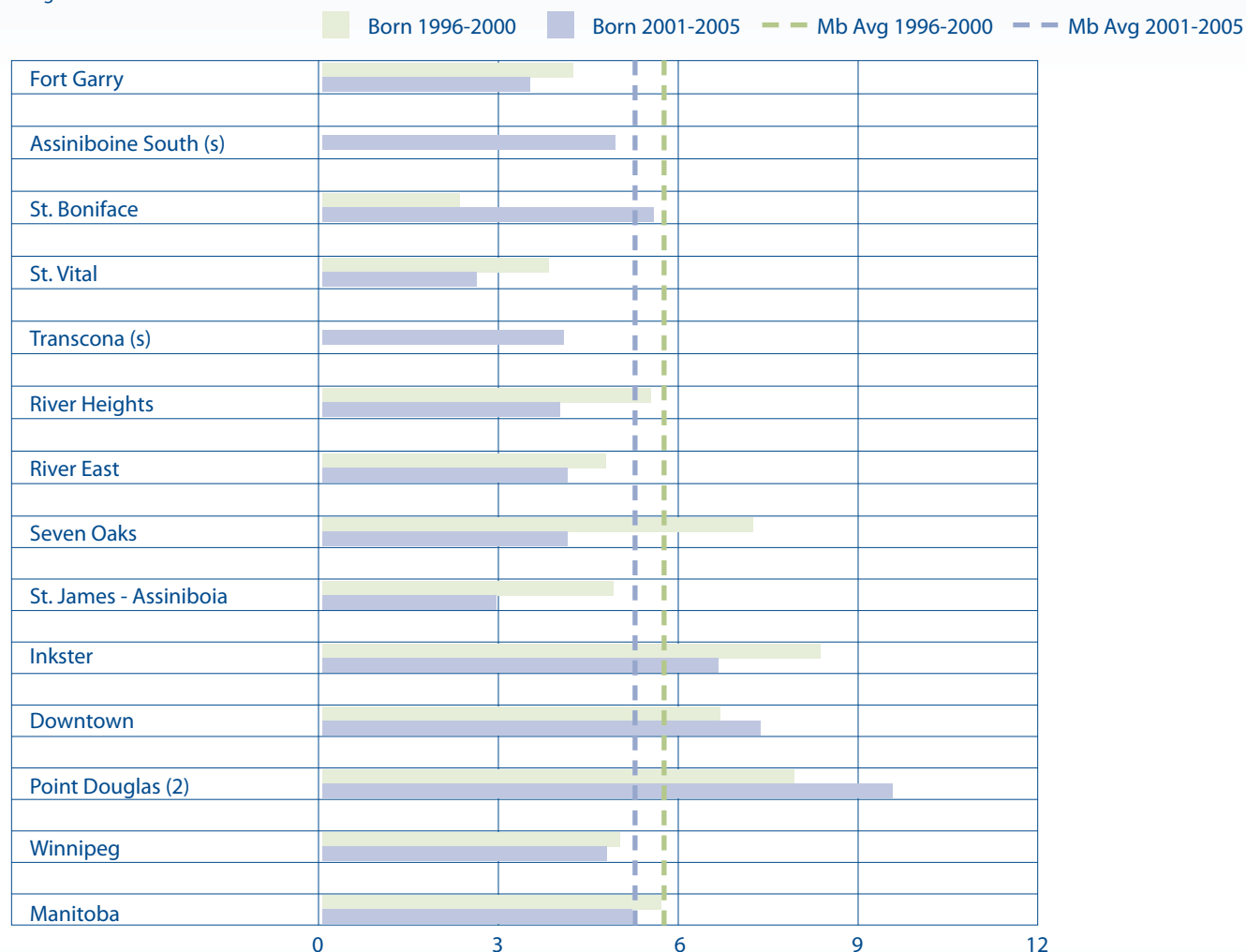
\*Caution is warranted in comparing Community Area (CA) rates for infant mortality between 5-year time periods. The actual number of deaths in infants is low in the Winnipeg Health Region. This means that the number of deaths in some CAs can be very small (5 or less) over five years and that one or two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

'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  
 '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

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

## 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	<b>29.2%</b>	37.5%	25.2%	<b>8.0%</b>
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%	<b>30.6%</b>	29.2%	10.8%
Downtown	22.7%	35.4%	25.6%	<b>16.3%</b>
Point Douglas	18.2%	37.3%	29.0%	15.5%
Winnipeg	23.3%	38.5%	<b>26.5%</b>	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

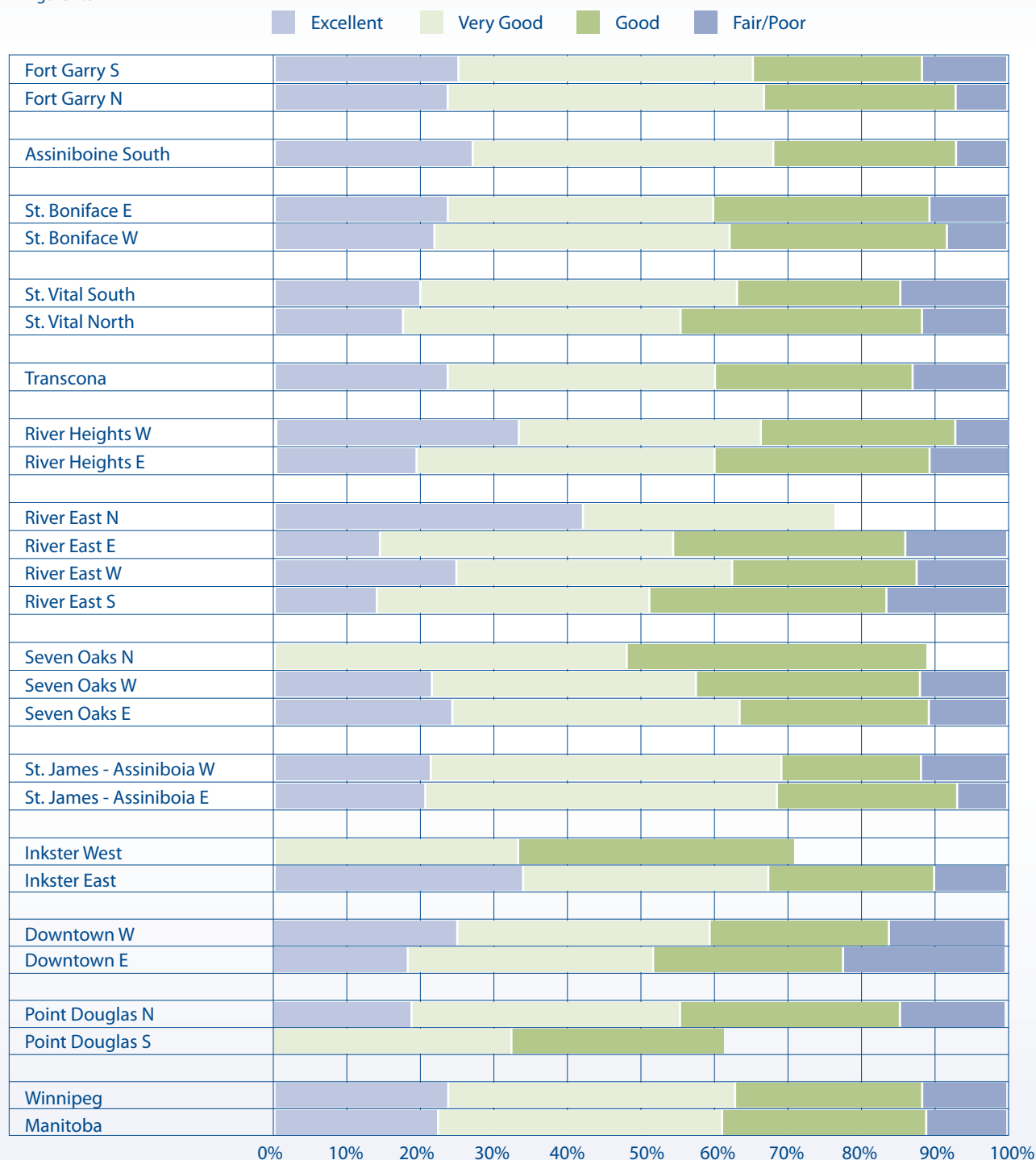
**italics** - indicates a warning - the area's rate is highly variable and should be interpreted with caution

\*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.

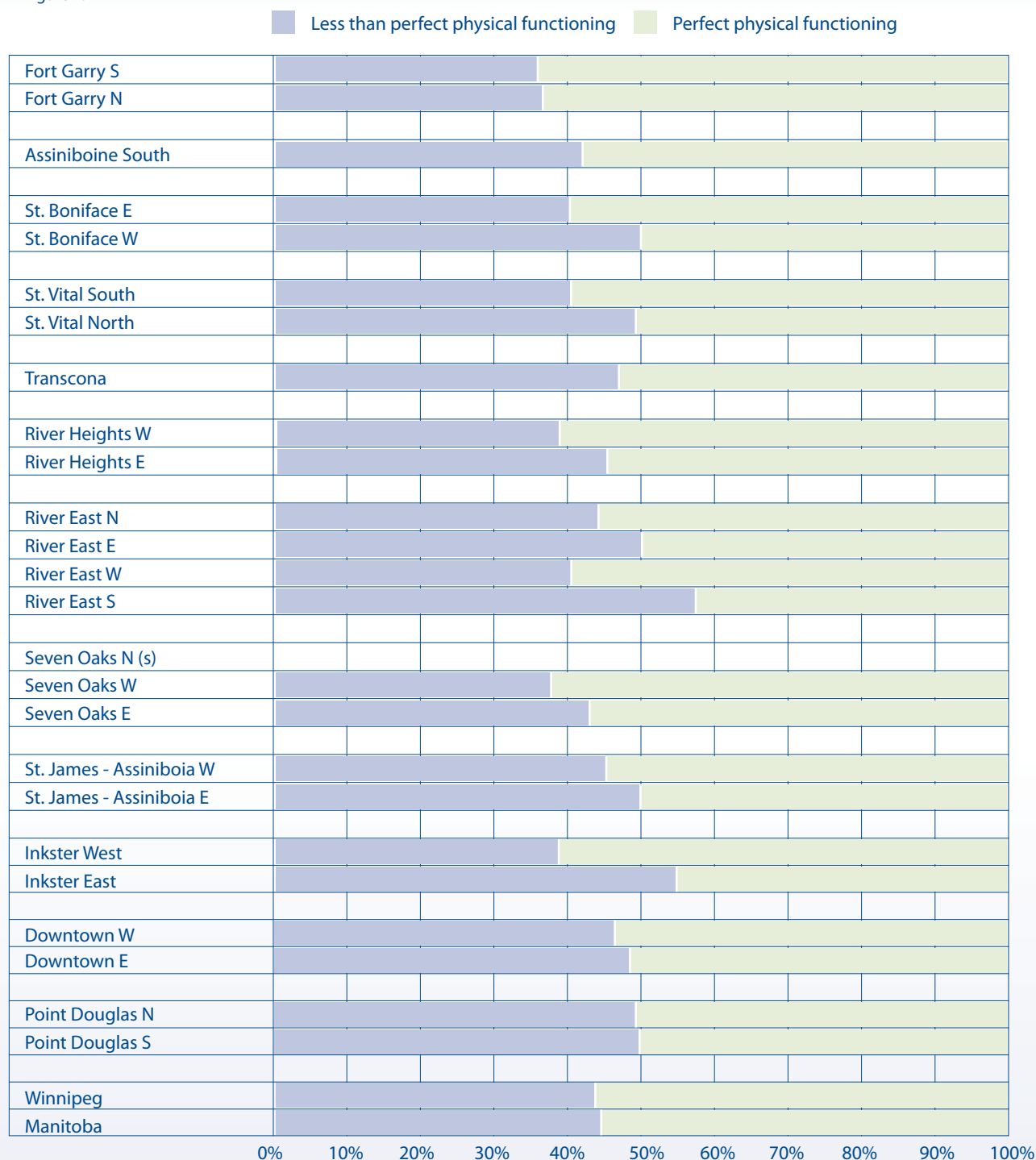


## Physical Functioning (Physical Health) by Winnipeg Neighbourhood Cluster

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%	<b>25.5%</b>	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	<b>40.5%</b>	31.6%	28.0%
Winnipeg	<b>26.7%</b>	34.8%	<b>38.5%</b>
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

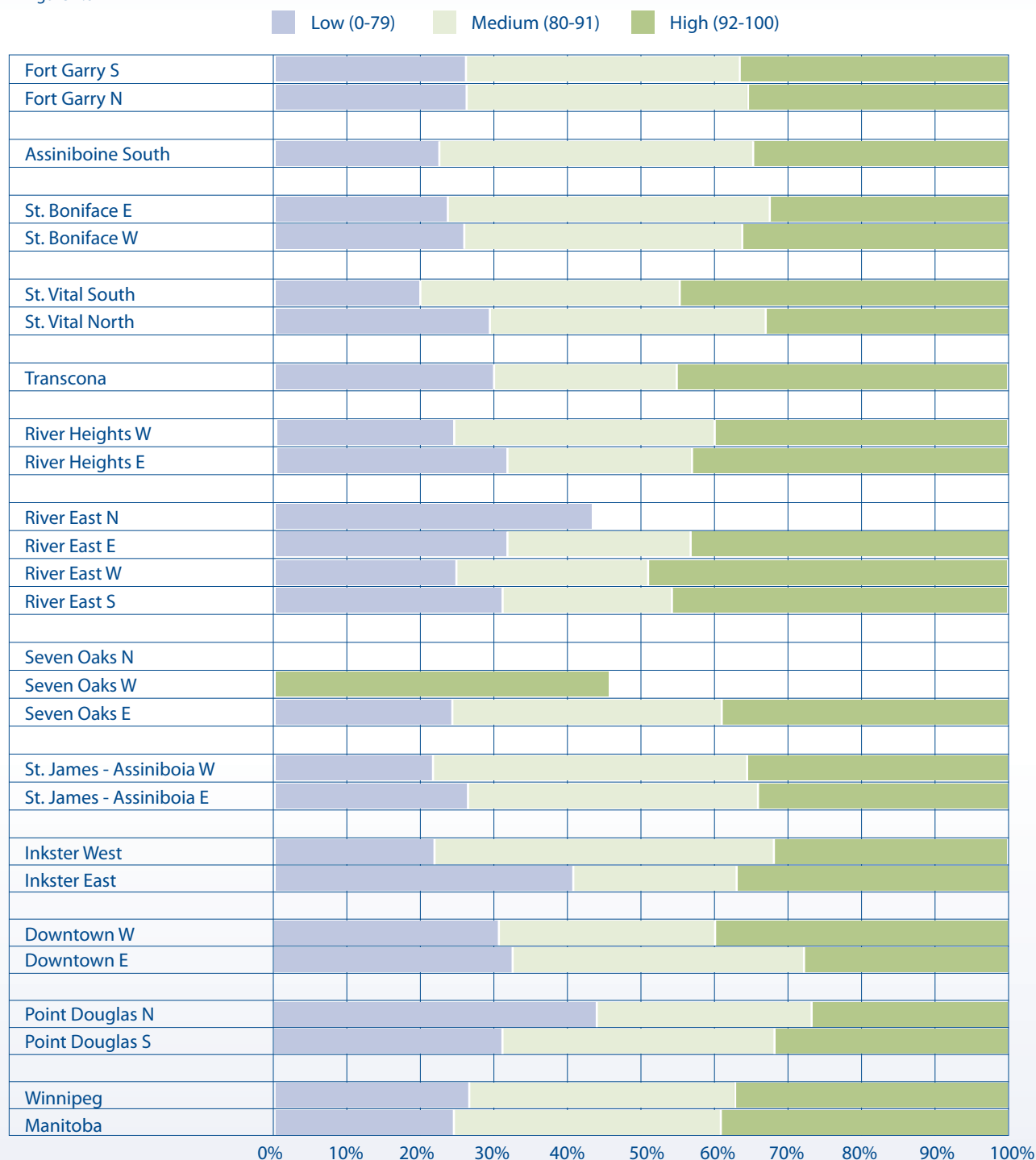
[1] These data are drawn from the responses of those Manitobans randomly chosen to participate in the Canadian Community Health Survey (CCHS). The limitations to these data are included under the section, "How to read this report". The SF-36 is the 36-item Short Form survey developed for the Medical 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)
<b>Teen Births*</b> (Per 1000 females age 15-19 years)	<b>24.0/1000</b> 2001/02-2005/06	<b>30.0/1000</b> 1996/97-2000/01	<b>6.7 - 79.8/1000</b>
<b>Pre-term Births*</b> (Of live births born in under 37 weeks)	<b>8.0%</b> 1996/97-2000/01	<b>7.6%</b> 2001/02-2005/06	<b>6.7 – 10.0%</b>
<b>Maternal Alcohol Use**</b>	<b>12.1%</b> 2006	<b>11.8 %</b> 2003	<b>2.6 - 24.8%</b>
<b>Maternal Smoking**</b>	<b>20.5%</b> 2006	<b>20.8%</b> 2003	<b>6.6 – 42.8%</b>
<b>Maternal depression &amp; anxiety disorders (Combined)**</b>	<b>15.8%</b> 2006	<b>13.4%</b> 2003	<b>12.2 – 19.5%</b>
<b>Newborns born to families with Financial Difficulties**</b>	<b>19.2%</b> 2006	<b>19.7%</b> 2003	<b>6.6 – 47.4%</b>
<b>Newborns born to mothers with Less than Grade 12 Education**</b>	<b>18.4</b> 2006	<b>18.5</b> 2003	<b>4.1 – 45.0%</b>
<b>Positive Families First Screen**</b>	<b>24.8%</b> 2006	<b>23.4%</b> 2003	<b>11.6 – 53.9%</b>
<b>Enrollment in the Families First Program**</b> (percentage of positive screens)	<b>20.1%</b> 2006	<b>21.9%</b> 2005	<b>N/A</b>

\*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.<sup>5</sup>

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).<sup>6</sup>

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.<sup>2</sup> 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.<sup>7</sup>

<sup>5</sup> 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.

<sup>6</sup> Canadian Perinatal Health Report (PHAC 2008): <http://www.phac-aspc.gc.ca/publicat/2008/cphr-rsps/index-eng.php>.

<sup>7</sup> 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.<sup>8</sup>

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.<sup>9</sup> 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).<sup>10</sup>

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.

<sup>8</sup> 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.

<sup>9</sup> 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.

<sup>10</sup> Canadian Perinatal Health Report (PHAC 2008): <http://www.phac-aspc.gc.ca/publicat/2008/cphr-rsps/index-eng.php>.



## ADDITIONAL INFORMATION<sup>11</sup>

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](http://www.gov.mb.ca/healthychild/familiesfirst/ff_eval2010.pdf)  
(Manitoba Government Department: Family Services and Consumer Affairs)

<sup>11</sup> 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

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Live Births in 5 years	Adjusted Rate per 1000 females	Live Births in 5 years	Adjusted Rate per 1000 females	
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

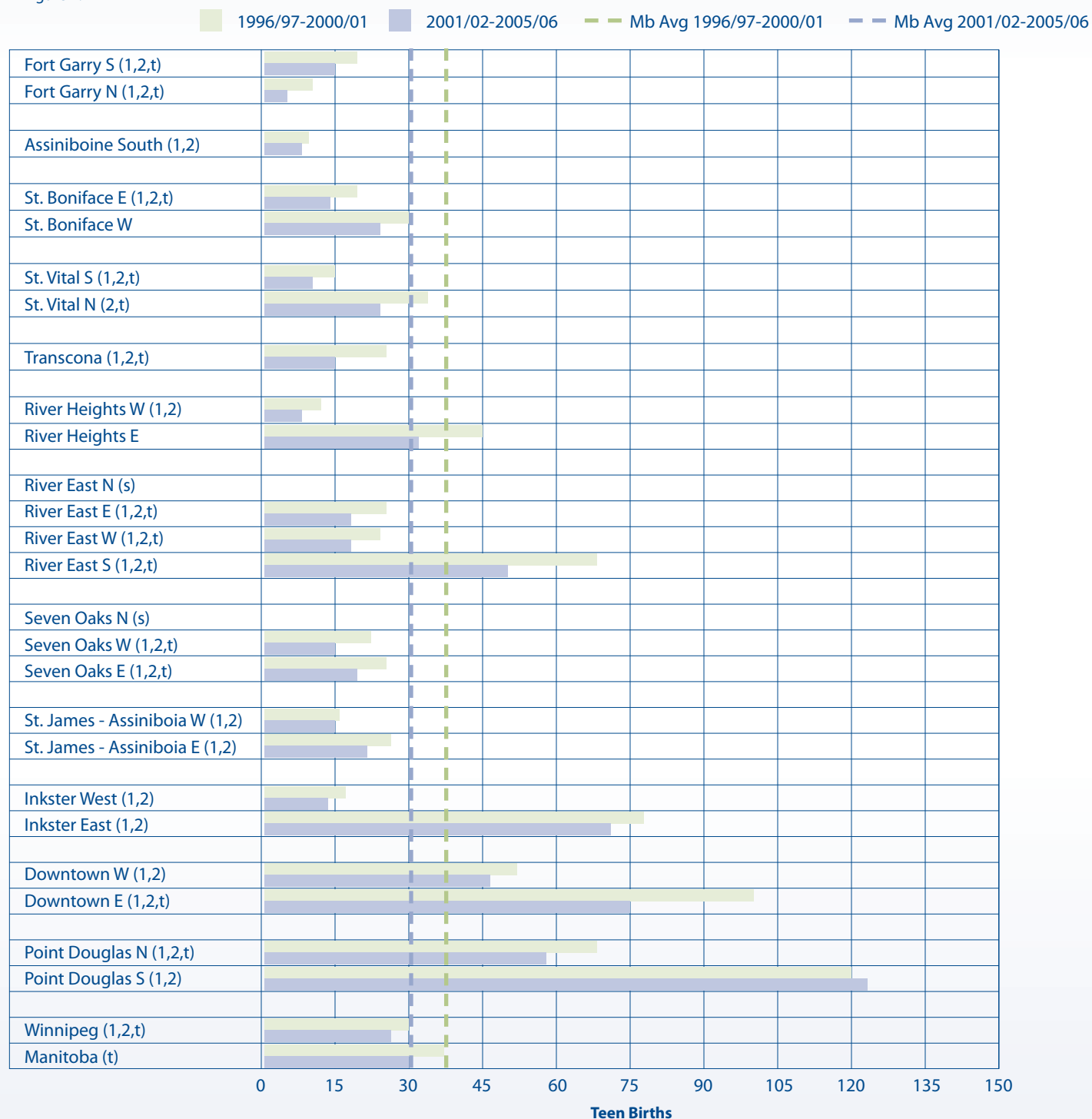
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

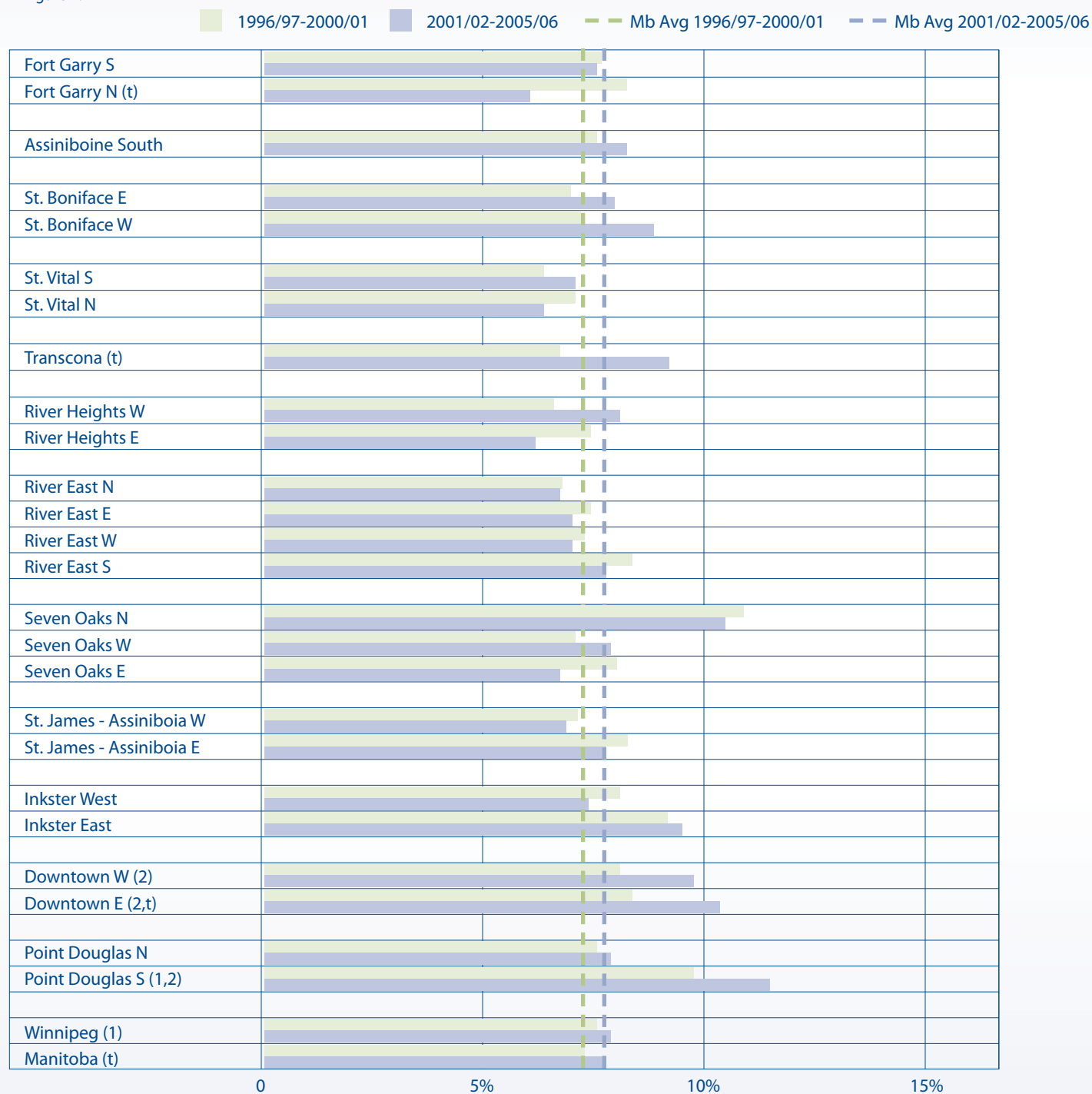
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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									
Community Area	2003		2004		2005		2006		Trend* (sig)
	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	
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  $\leq 0.05$ , then the comparison is statistically significant

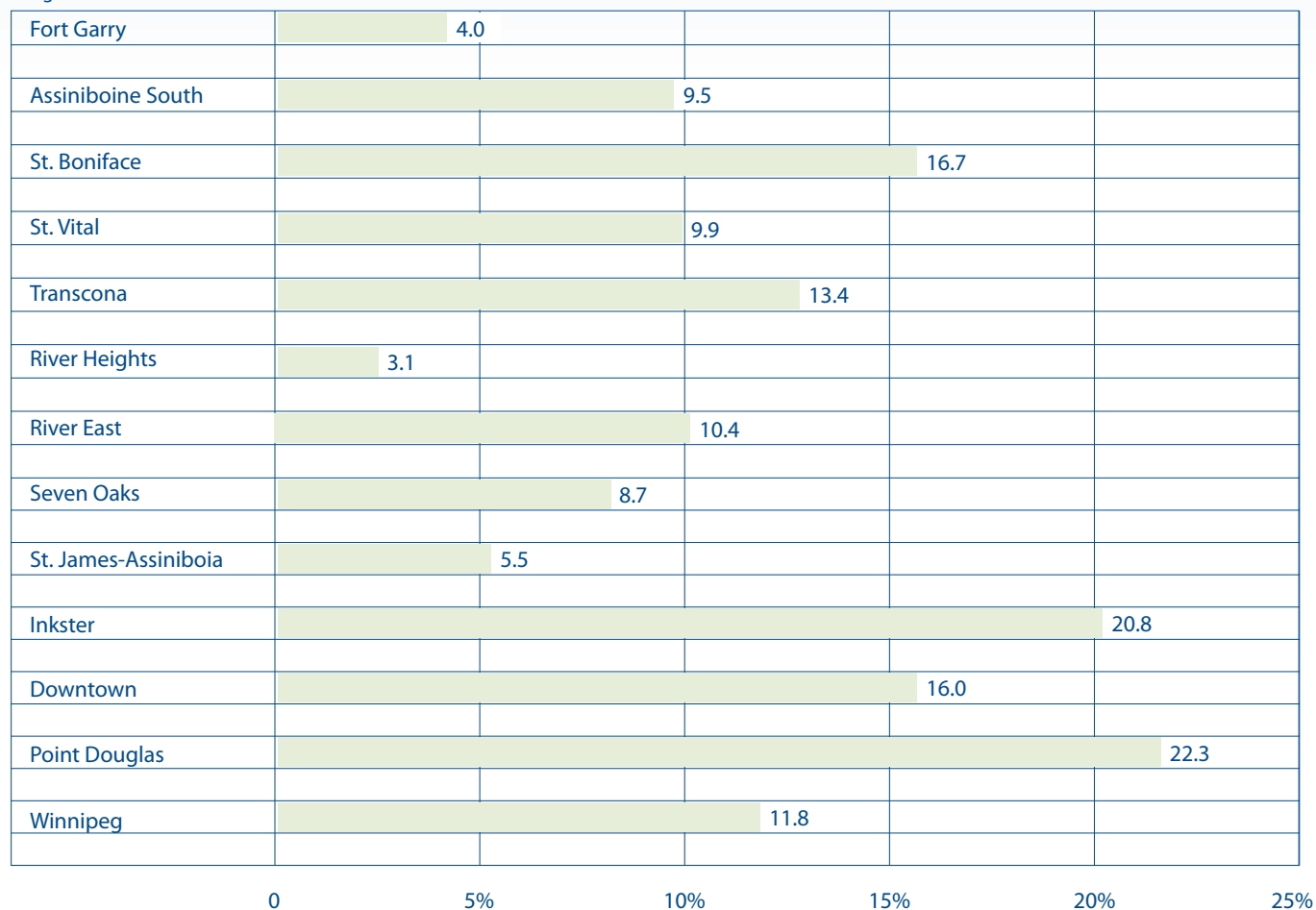
# Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "maternal alcohol use".

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%)

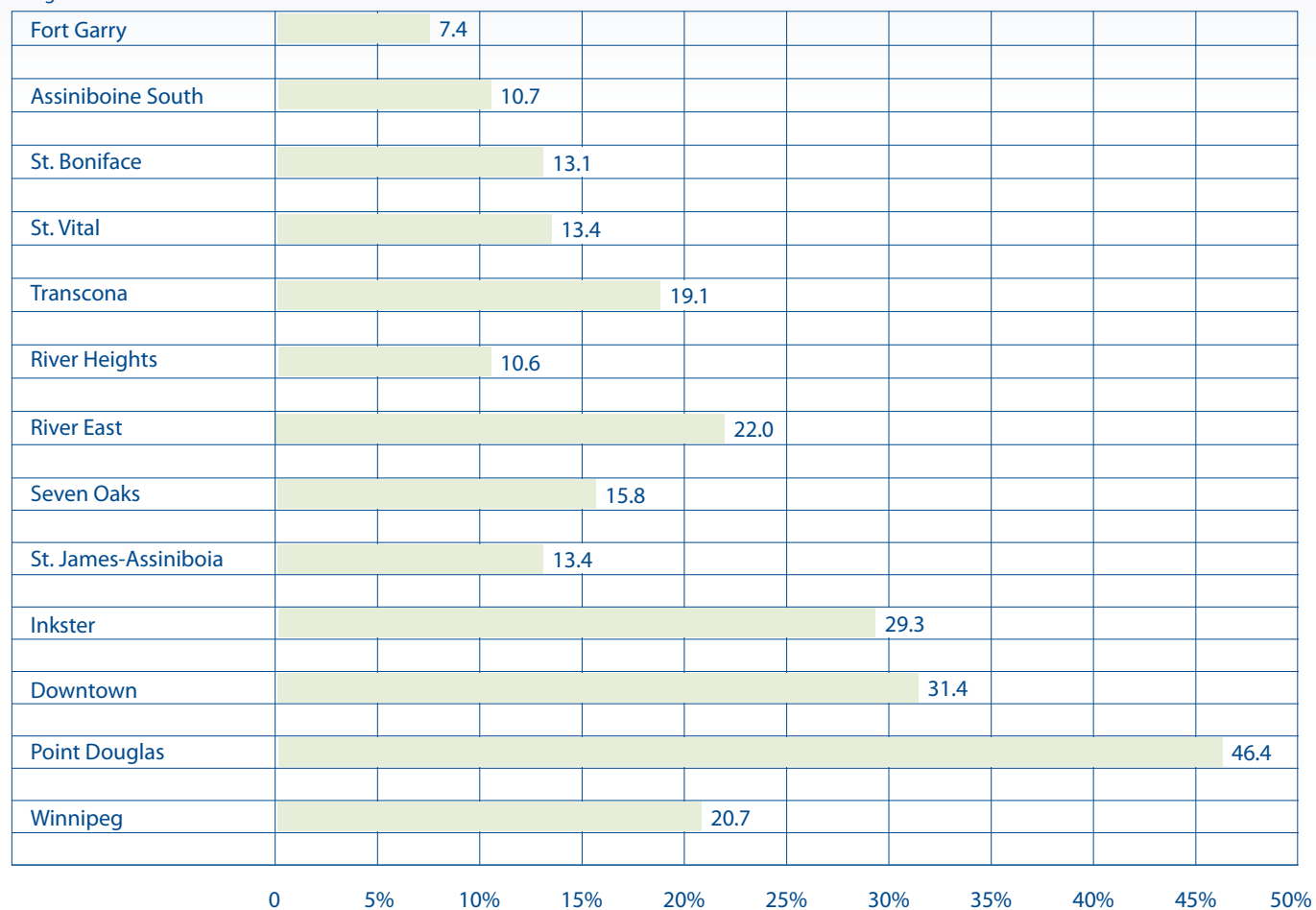
Source: Healthy Child Manitoba, 2008

# 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)									
Community Area	2003		2004		2005		2006		Trend* (sig)
	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	
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  $\leq 0.05$ , then the comparison is statistically significant

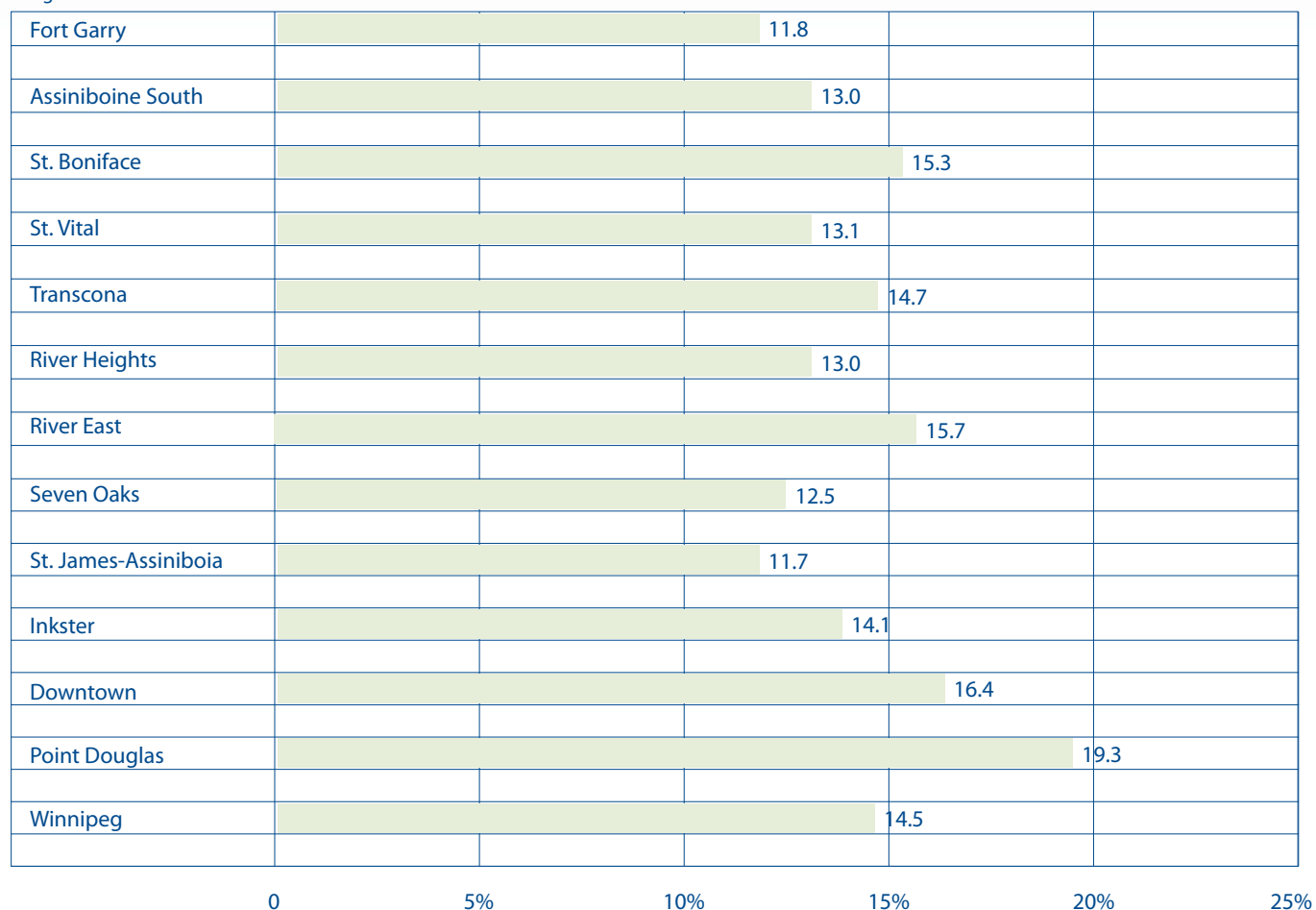
# Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "maternal depression & anxiety disorders combined".

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									
Community Area	2003		2004		2005		2006		Trend* (sig)
	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	
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

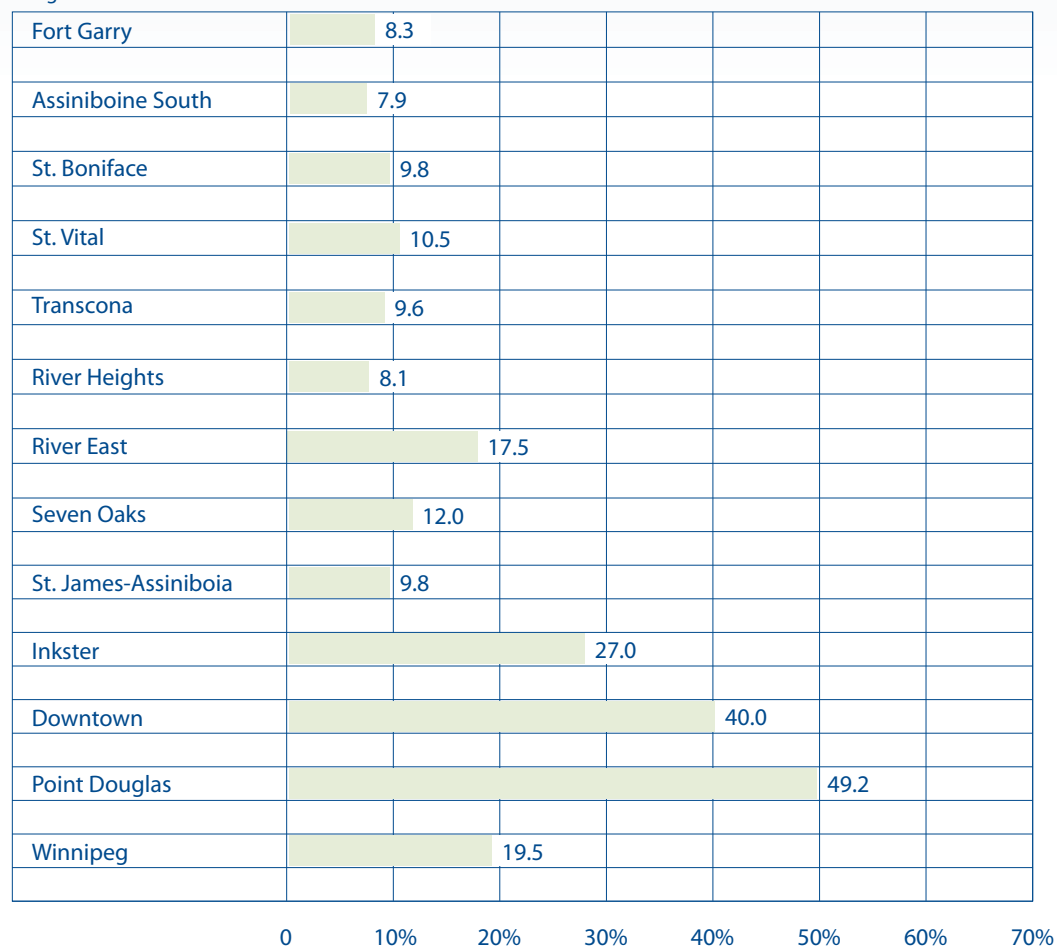
p-value comparisons of linear trend for results from 2003 to 2006. If a p-value is  $\leq 0.05$ , then the comparison is statistically significant  
 # Valid Resp. or valid responses is the number of screening forms which had a response to the question reported on, in this case "newborns to families 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									
Community Area	2003		2004		2005		2006		Trend* (sig)
	Valid Resp. #	Count	Valid Resp. #	Count	Valid Resp. #	Count	Valid Resp. #	Count	
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%)	

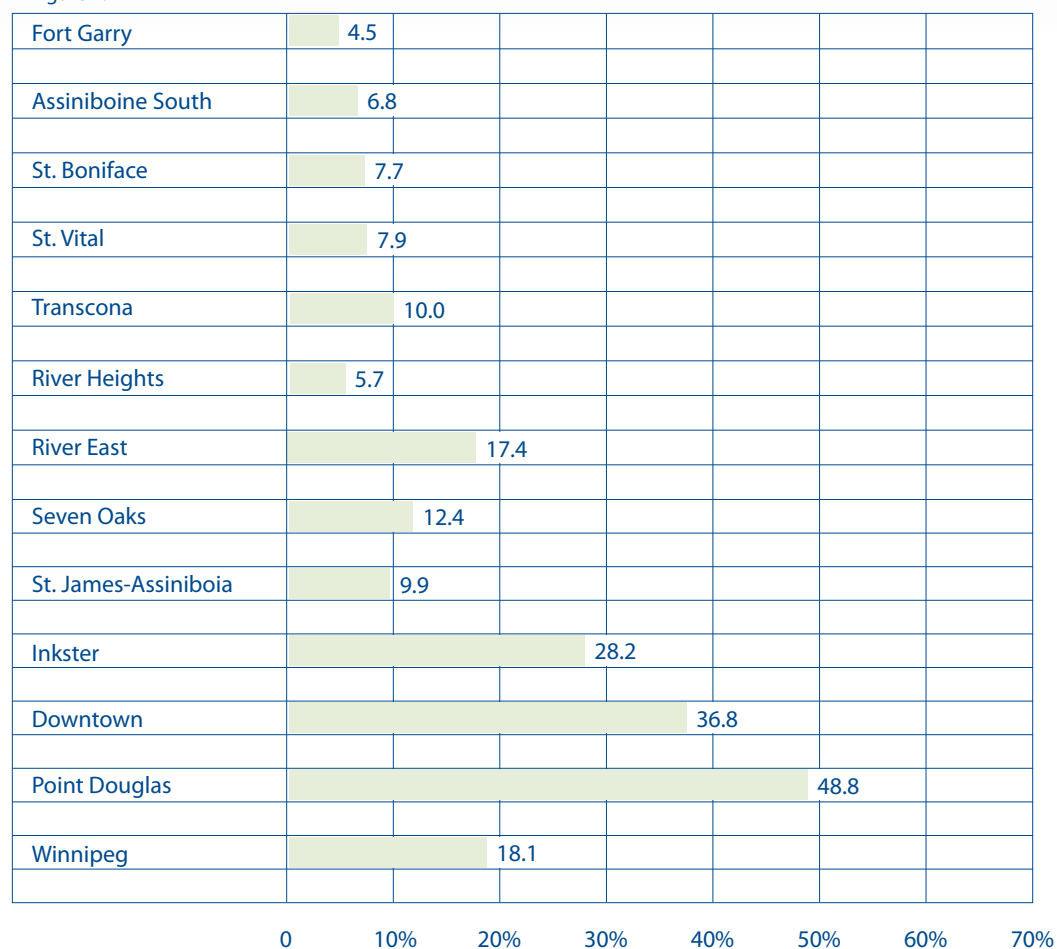
Source: Healthy Child Manitoba, 2008

p-value comparisons of linear trend for results from 2003 to 2006. If a p-value is  $\leq 0.05$ , 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									
Community Area	2003		2004		2005		2006		Trend* (sig)
	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	Valid Resp. #	Count (%)	
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%)	

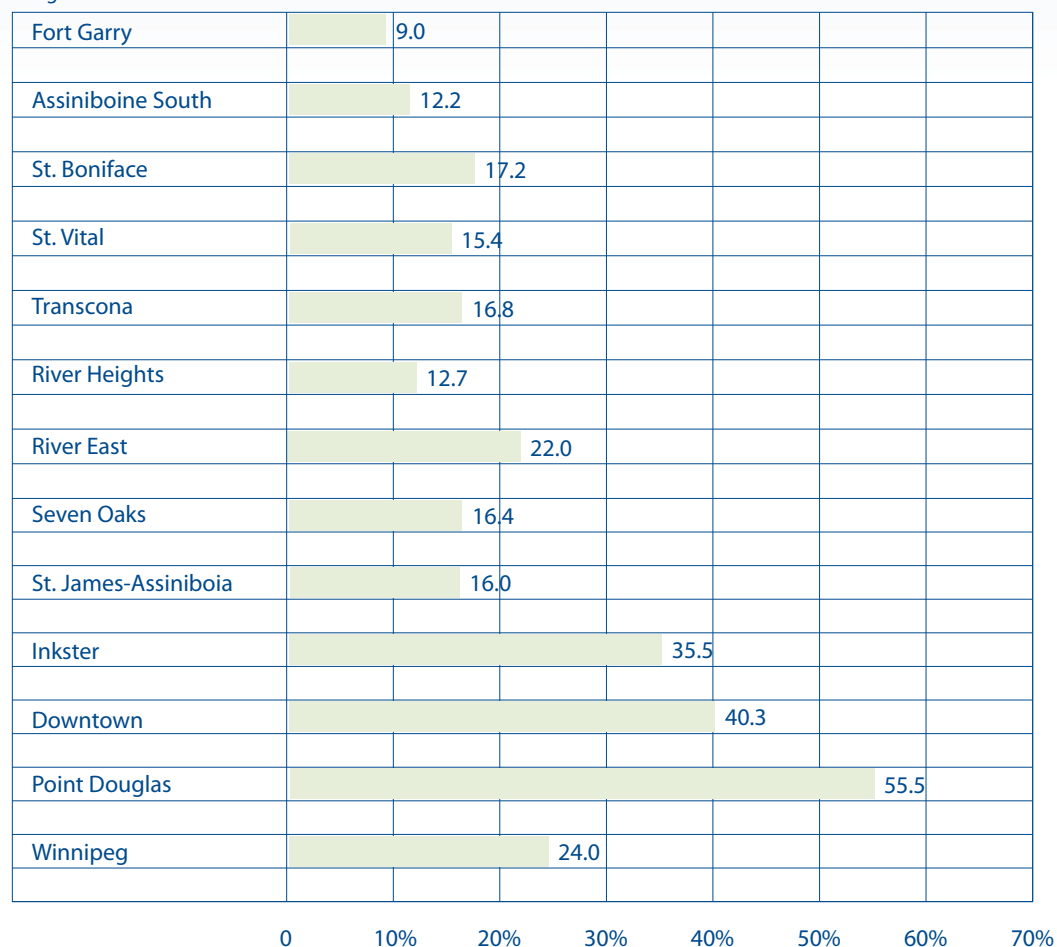
Source: Healthy Child Manitoba, 2008

\*p-value comparisons of linear trend for results from 2003 to 2006. If a p-value is  $\leq 0.05$ , 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 7.5% Female 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.<sup>12</sup>

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%).

<sup>12</sup> 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.<sup>13</sup>

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-arthritis/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](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](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](http://www.cancer.ca/Canada-wide/About%20cancer/Cancer%20statistics/Stats%20at%20a%20glance.aspx?sc_lang=en)

<sup>13</sup> 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](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.

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

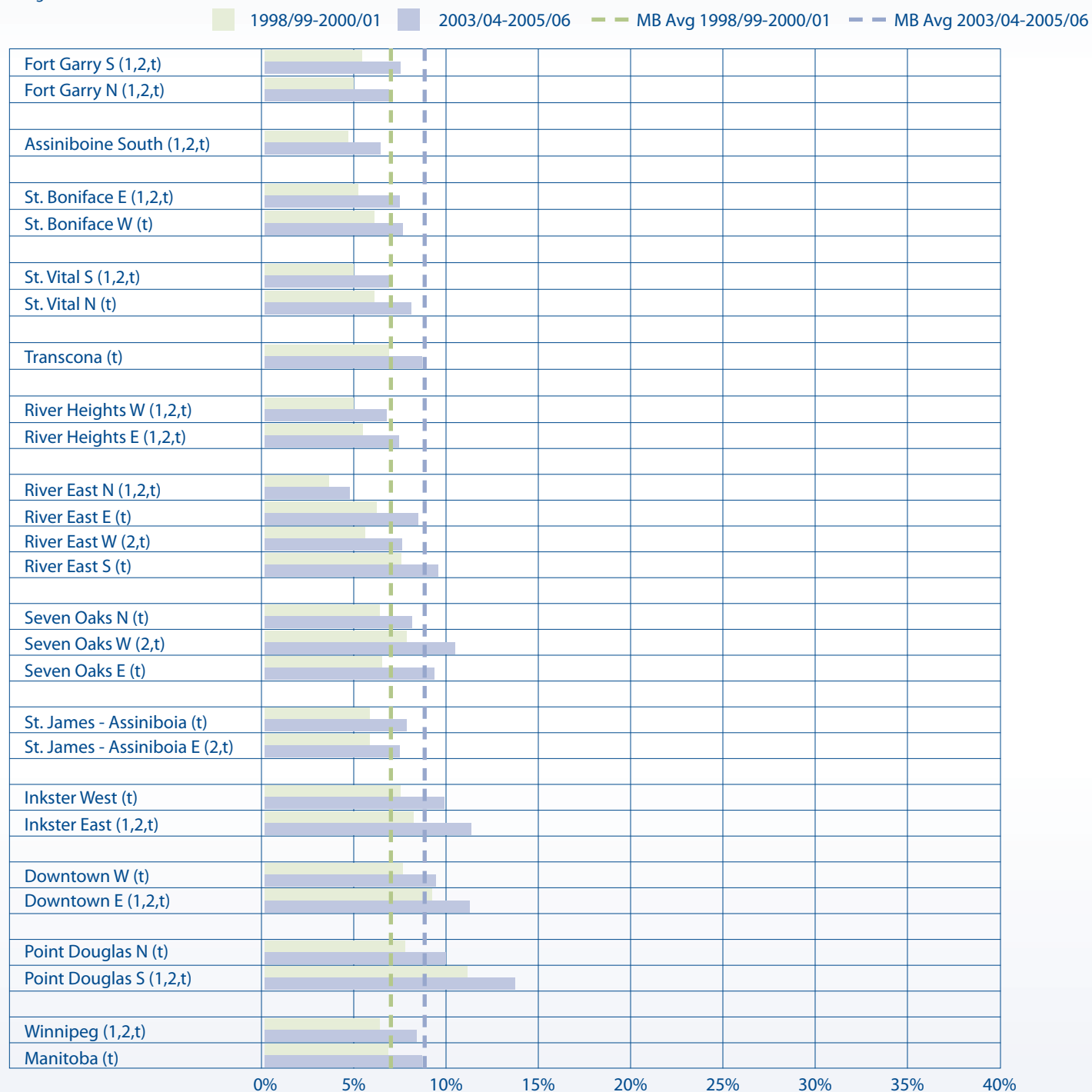
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# 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

'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 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.

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

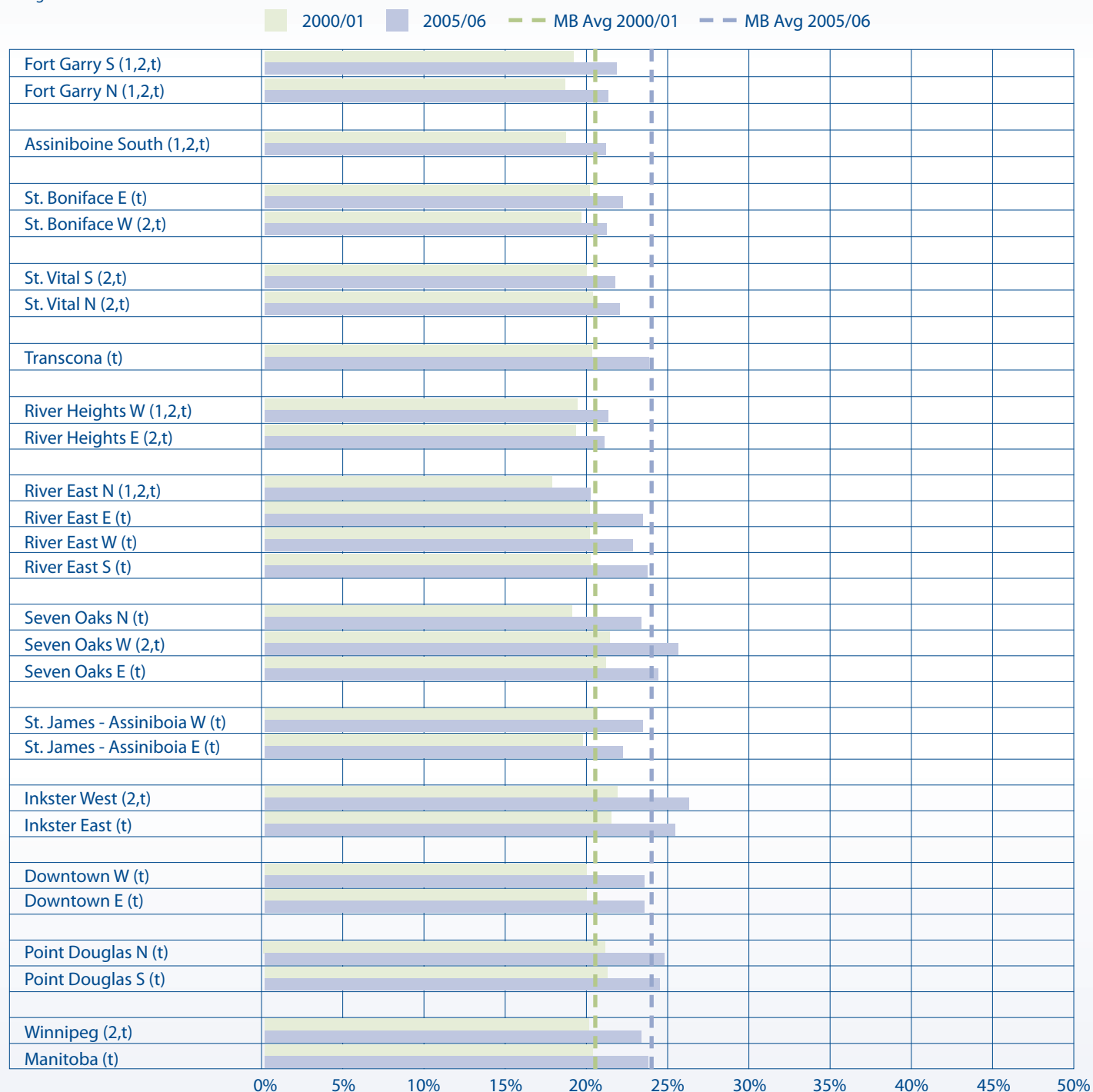
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# 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

'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

## 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.

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

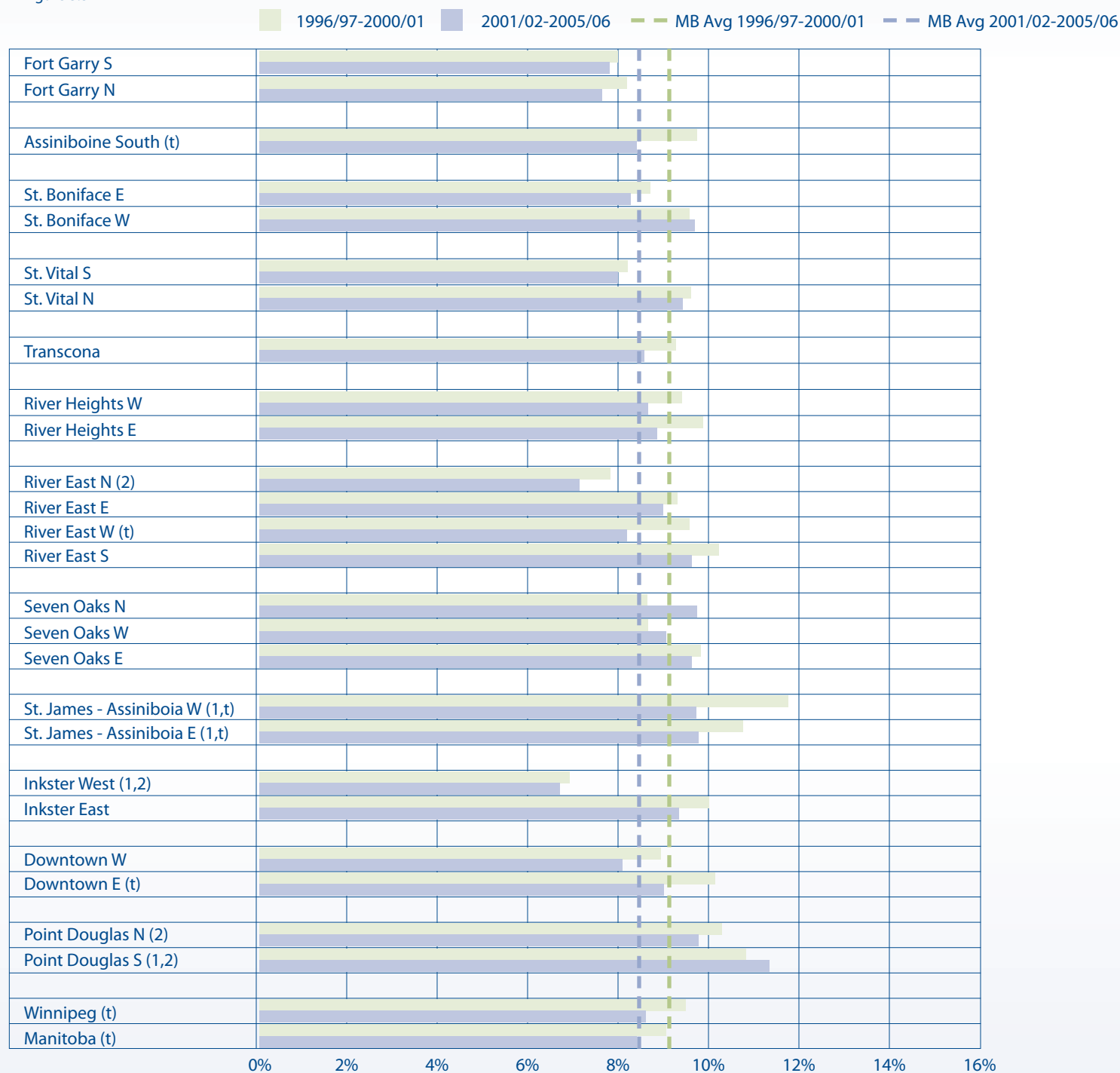
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# 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  
 '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

## 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.

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

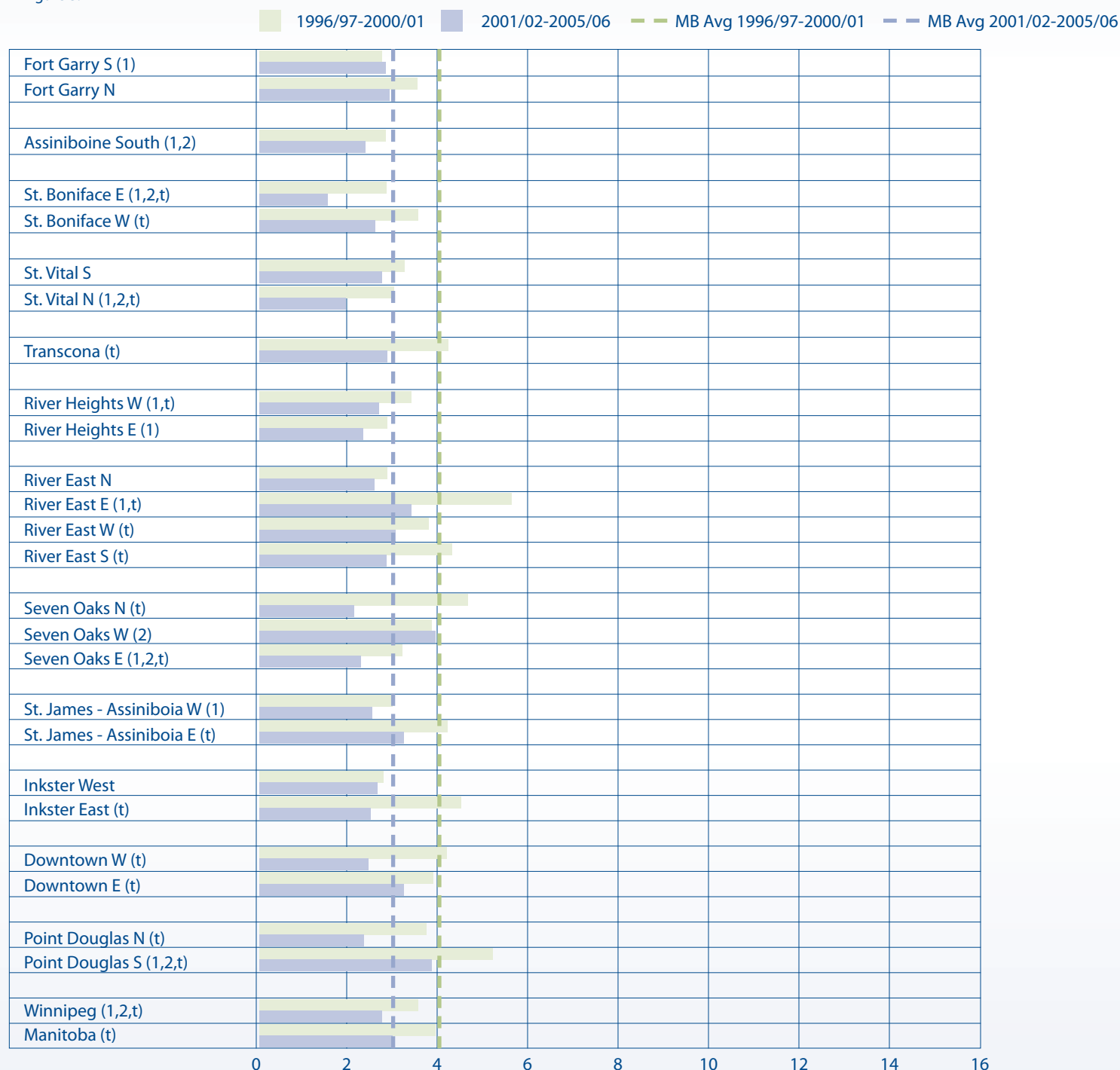
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## 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

'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



## 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.

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

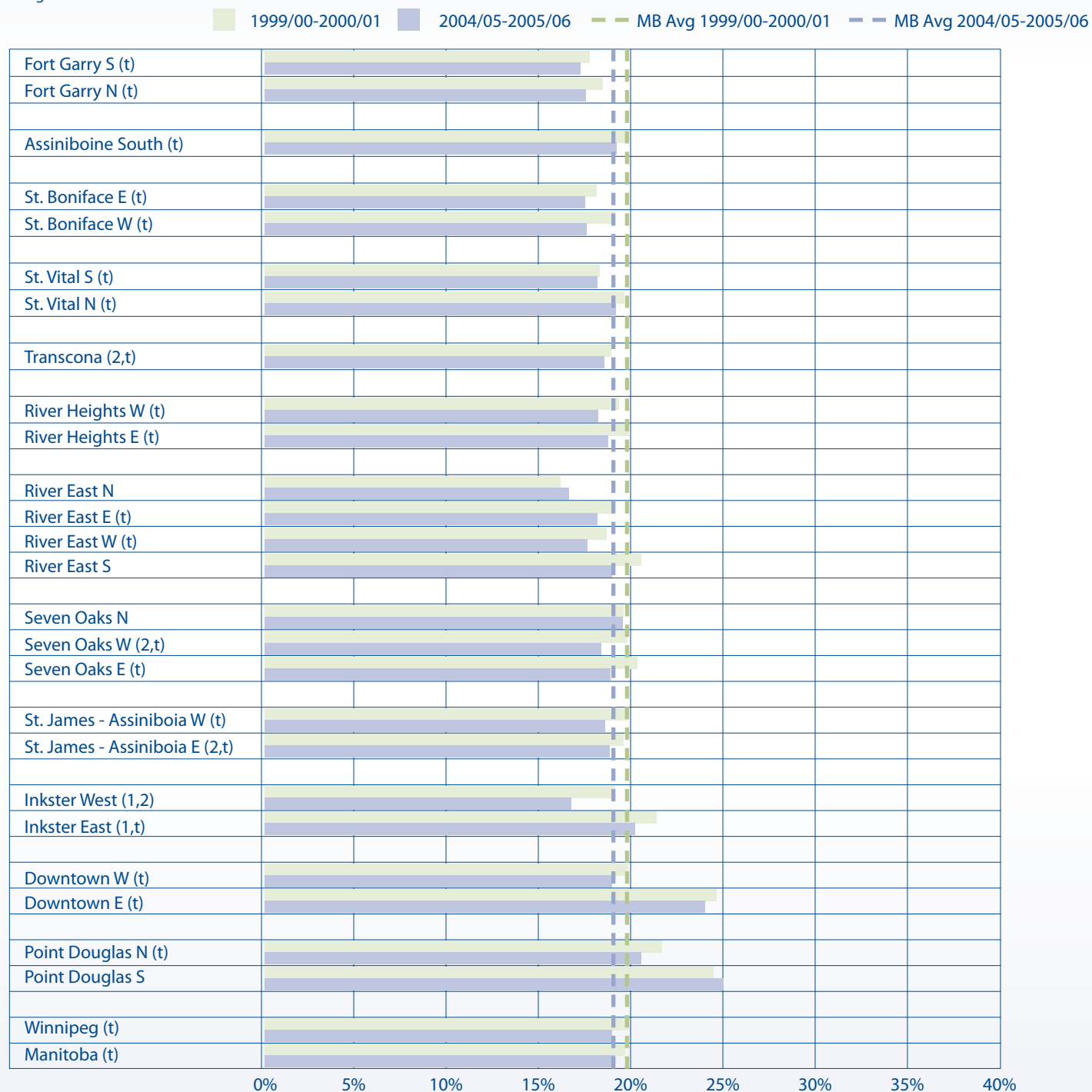
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## 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

'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

## 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.

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

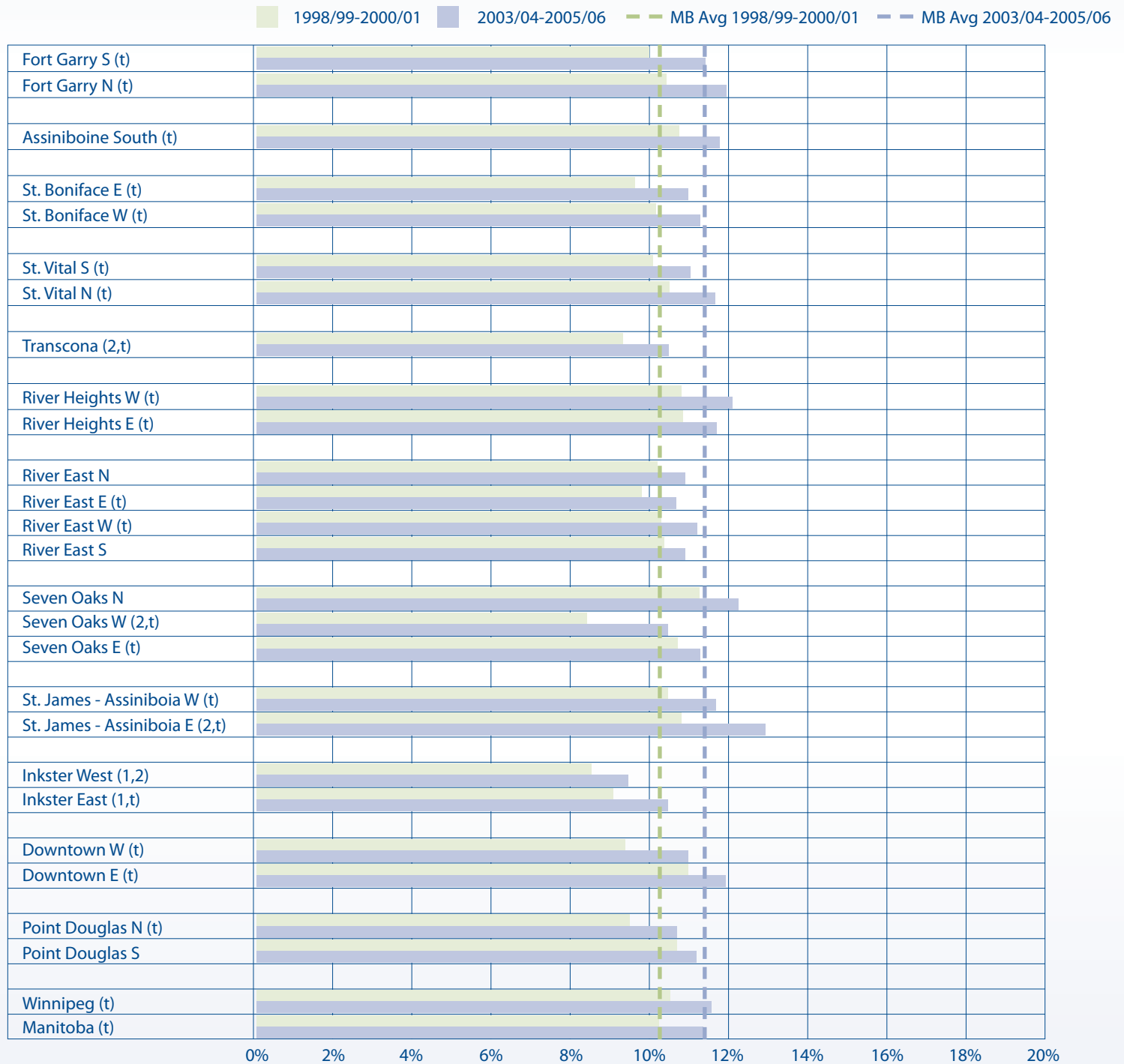
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# 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

'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

## 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.

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

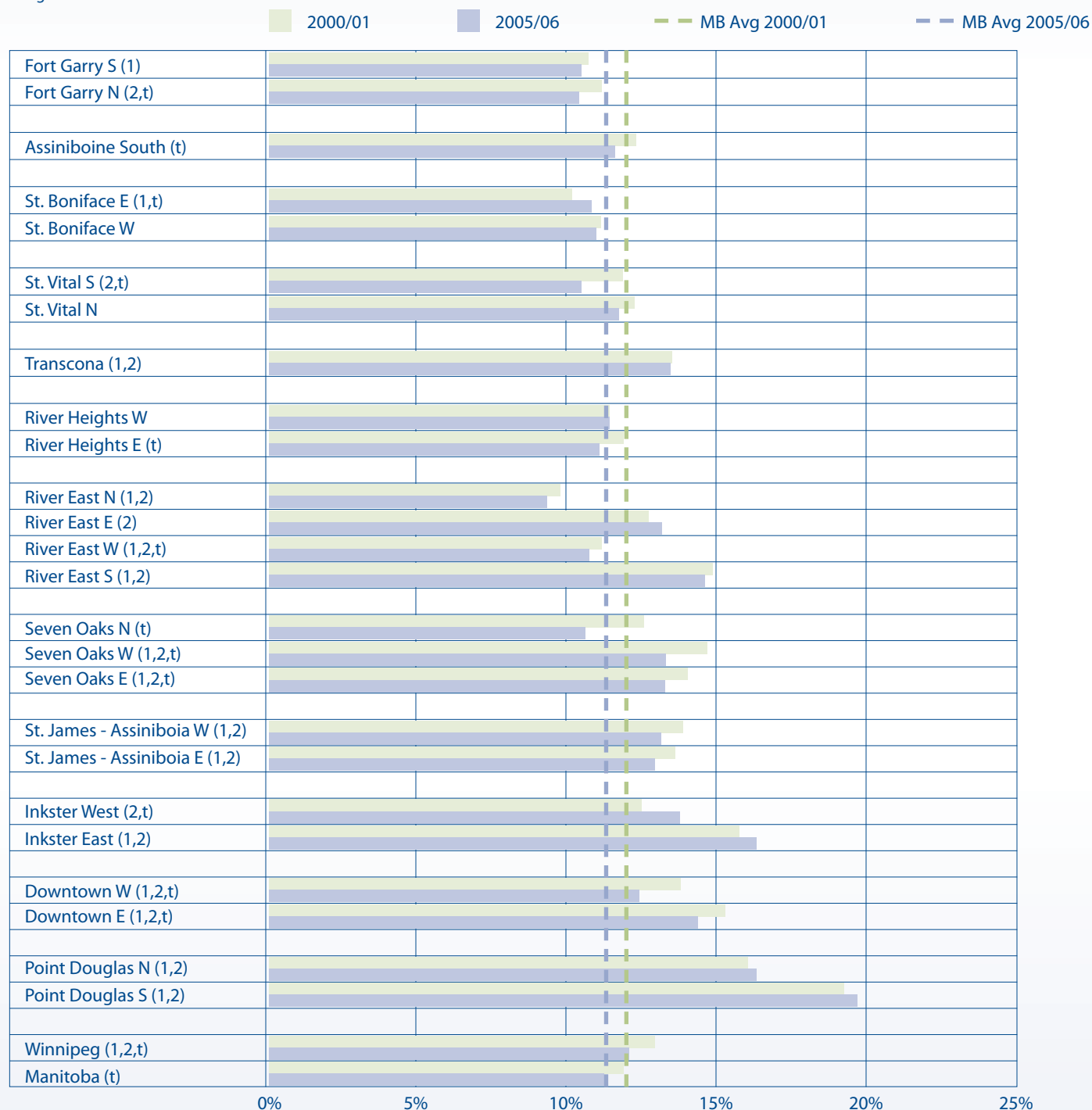
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# 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

'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

## 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

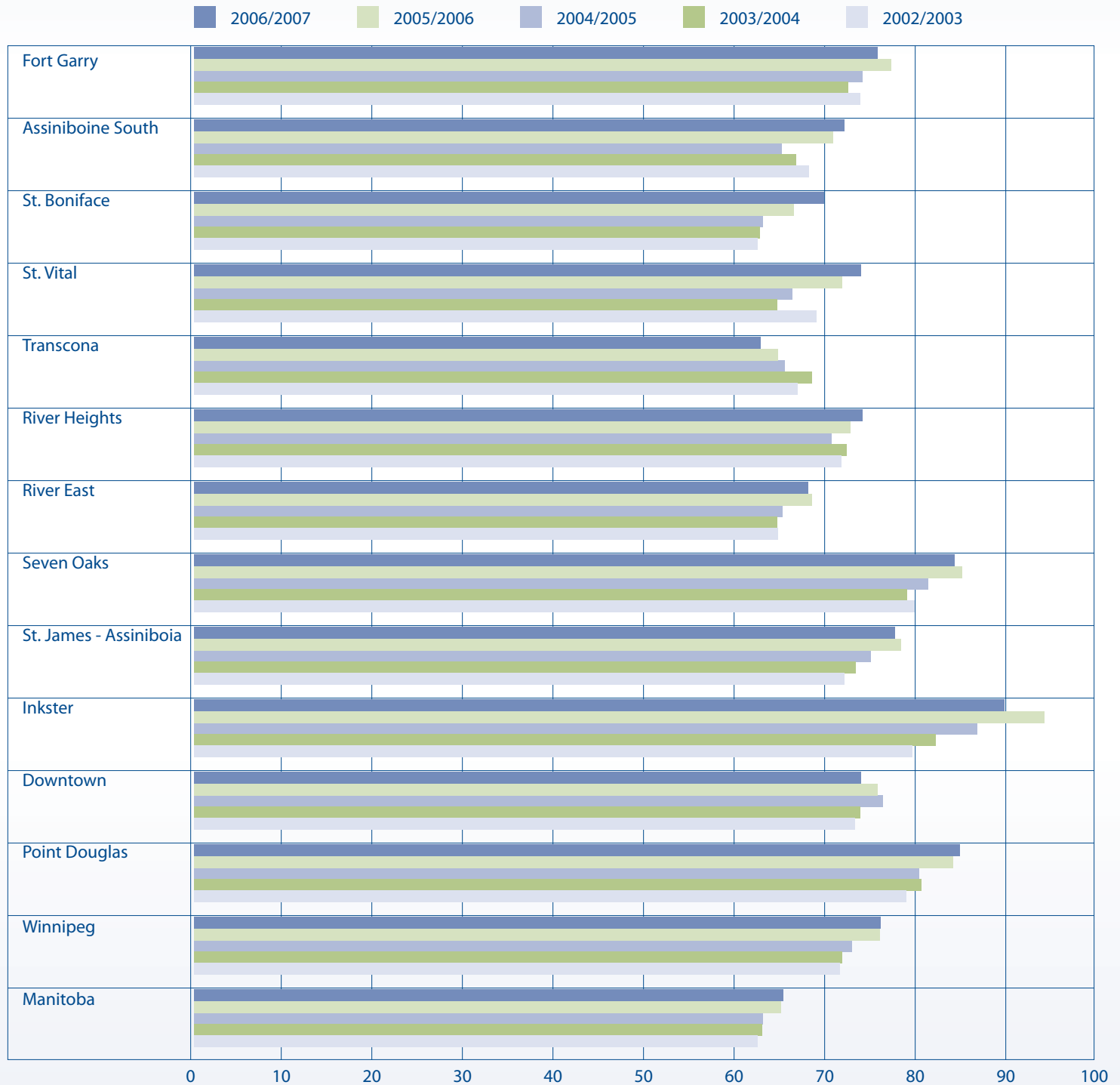
Community Area	Asthma Prevalence - Age Standardized Cases per 1,000 Residents by Community Area									
	Males					Females				
	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007
Fort Garry	73	72	74	77	76	76	75	74	74	75
Assiniboine South	68	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

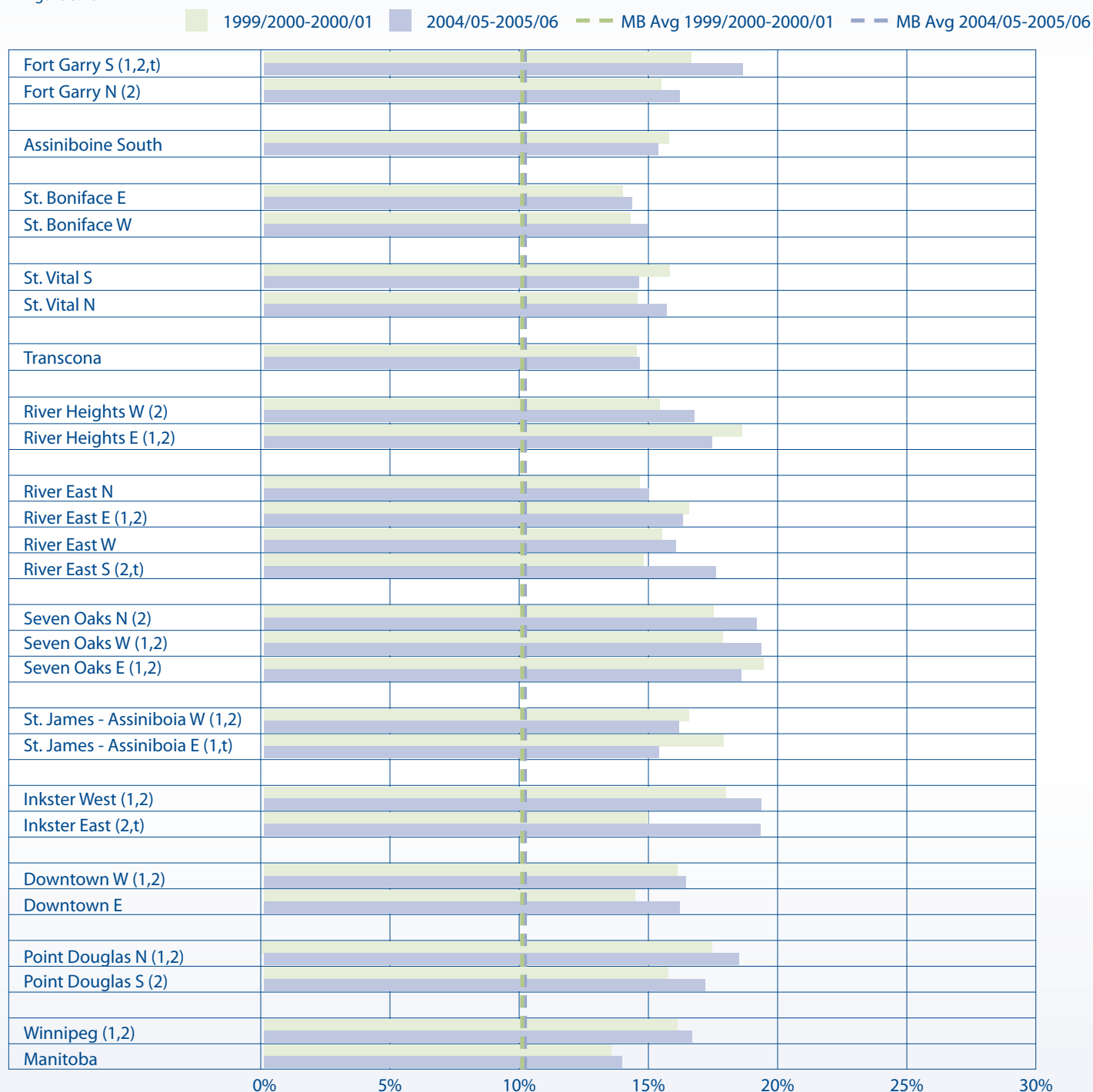
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

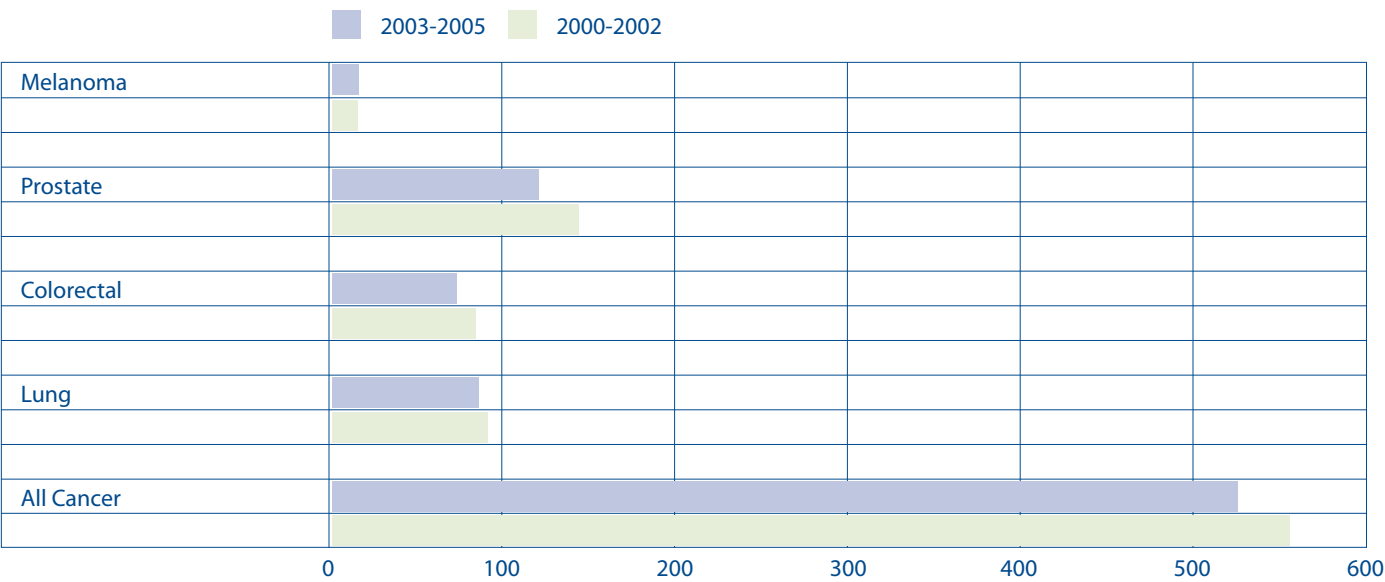
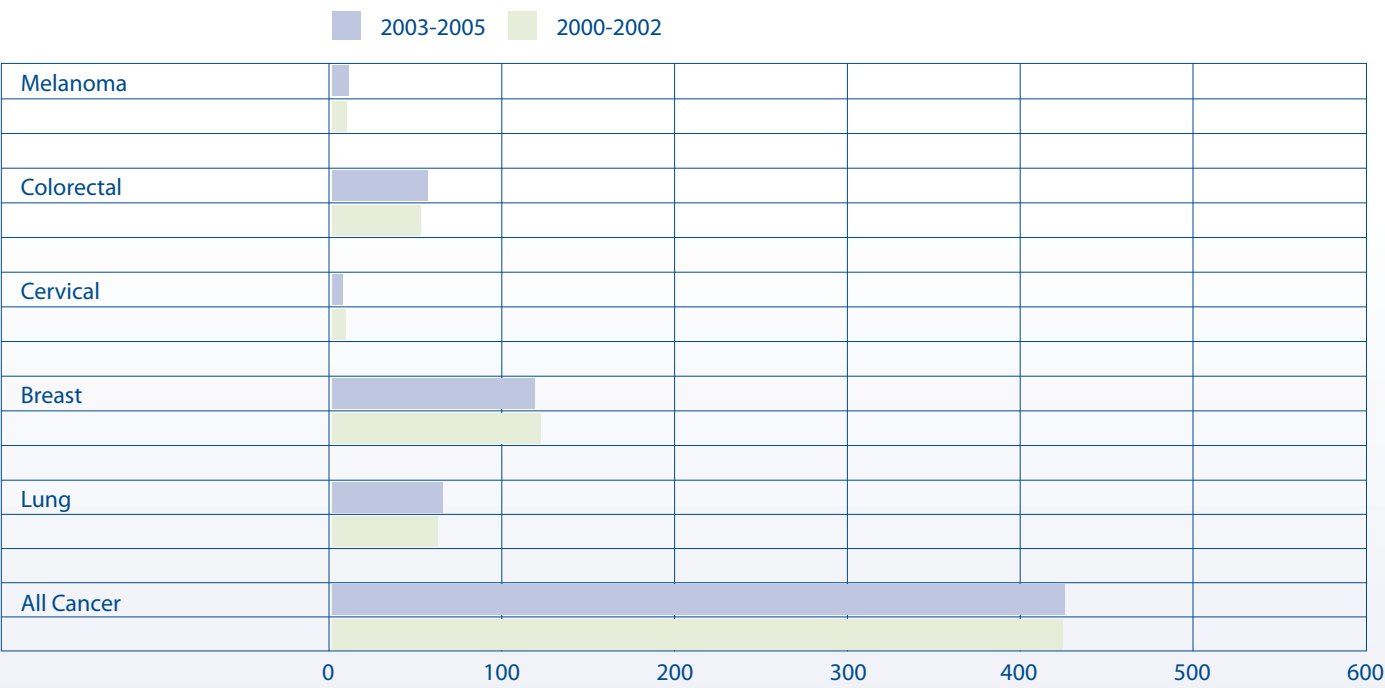


Figure 3.12: Cancer Incidence of Common Cancers in Females, 2000-2002 & 2003-2005



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)
<b>Mood disorders and/or use of antidepressants/ mood stabilizers</b>	20.3% 2001/02-2005/06	18.1% 1996/97-2000/01	15.8 -22.5%
<b>Anxiety Disorders</b>	8.3% 2001/02-2005/06	6.7% 1996/97-2000/01	6.8 -11.2%
<b>Substance Abuse</b>	4.7% 2001/02-2005/06	5.3% 1996/97-2000/01	2.6 -9.1%
<b>Personality Disorder</b>	0.99% 2001/02-2005/06	1.04% 1996/97-2000/01	0.66-1.77%
<b>Schizophrenia</b>	1.20% 2001/02-2005/06	1.20% 1996/97-2000/01	0.69 -2.65%
<b>One or more Mental Disorders (cumulative mental illness)</b>	25.6% 2001/02-2005/06	23.4% 1996/97-2000/01	20.9 -29.8%
<b>Teenagers prescribed SSRI Antidepressants</b>	15.5% 2005/06	19.4% 2002/03	9.0 -24.3%
<b>Dementia (age 55 and older)</b>	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**<sup>14</sup> 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.

<sup>14</sup> 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 stabilizers 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

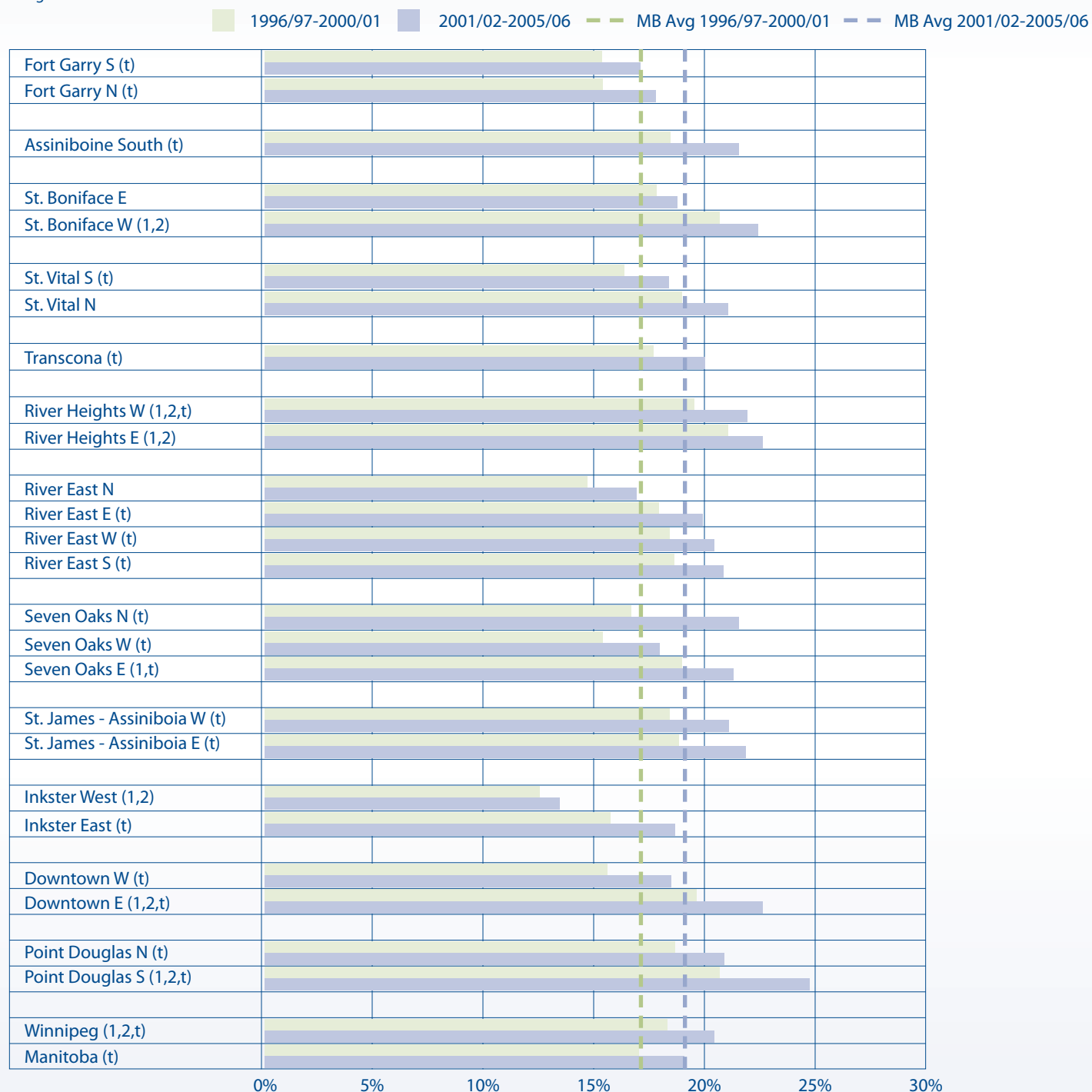
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

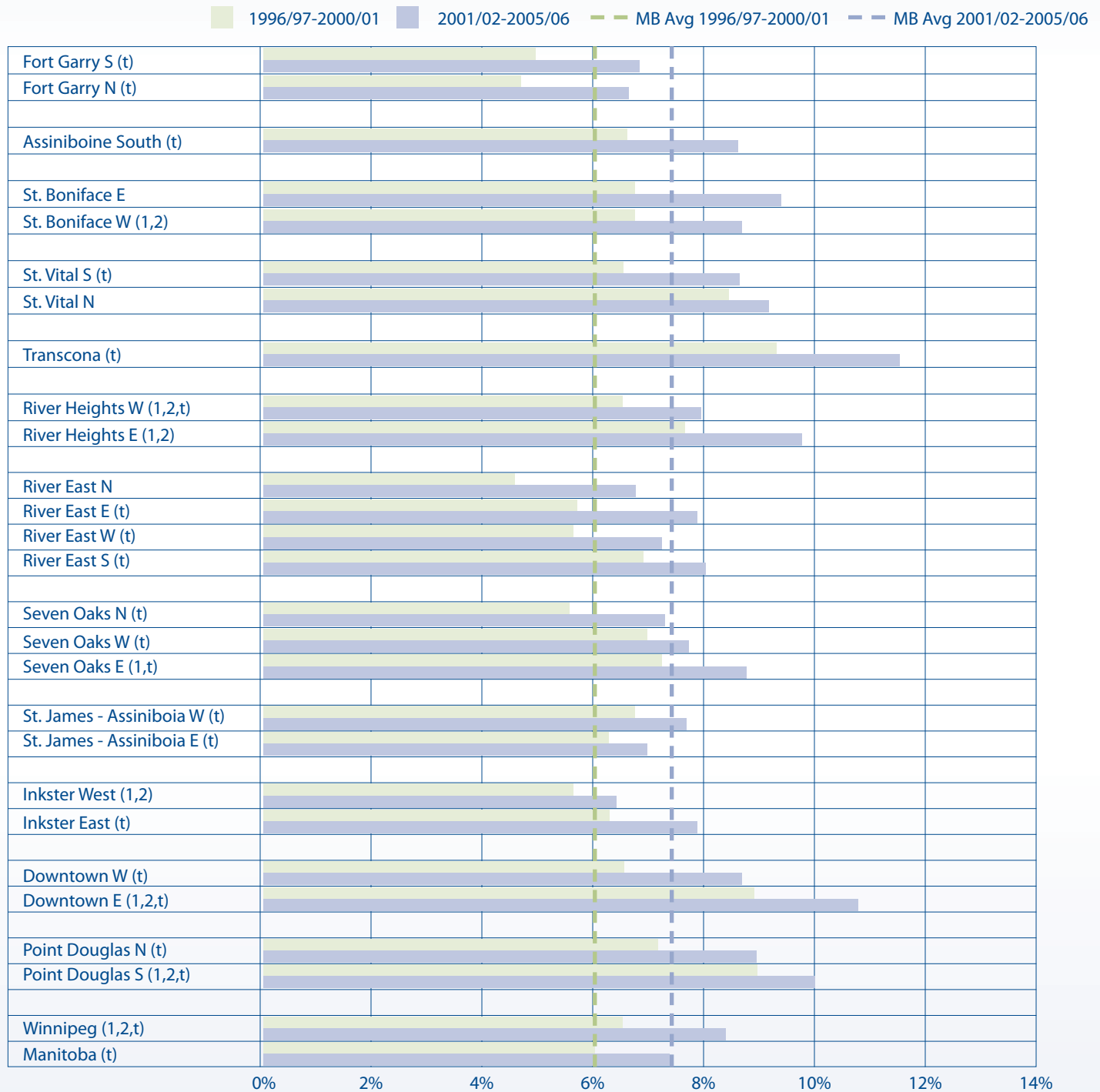
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

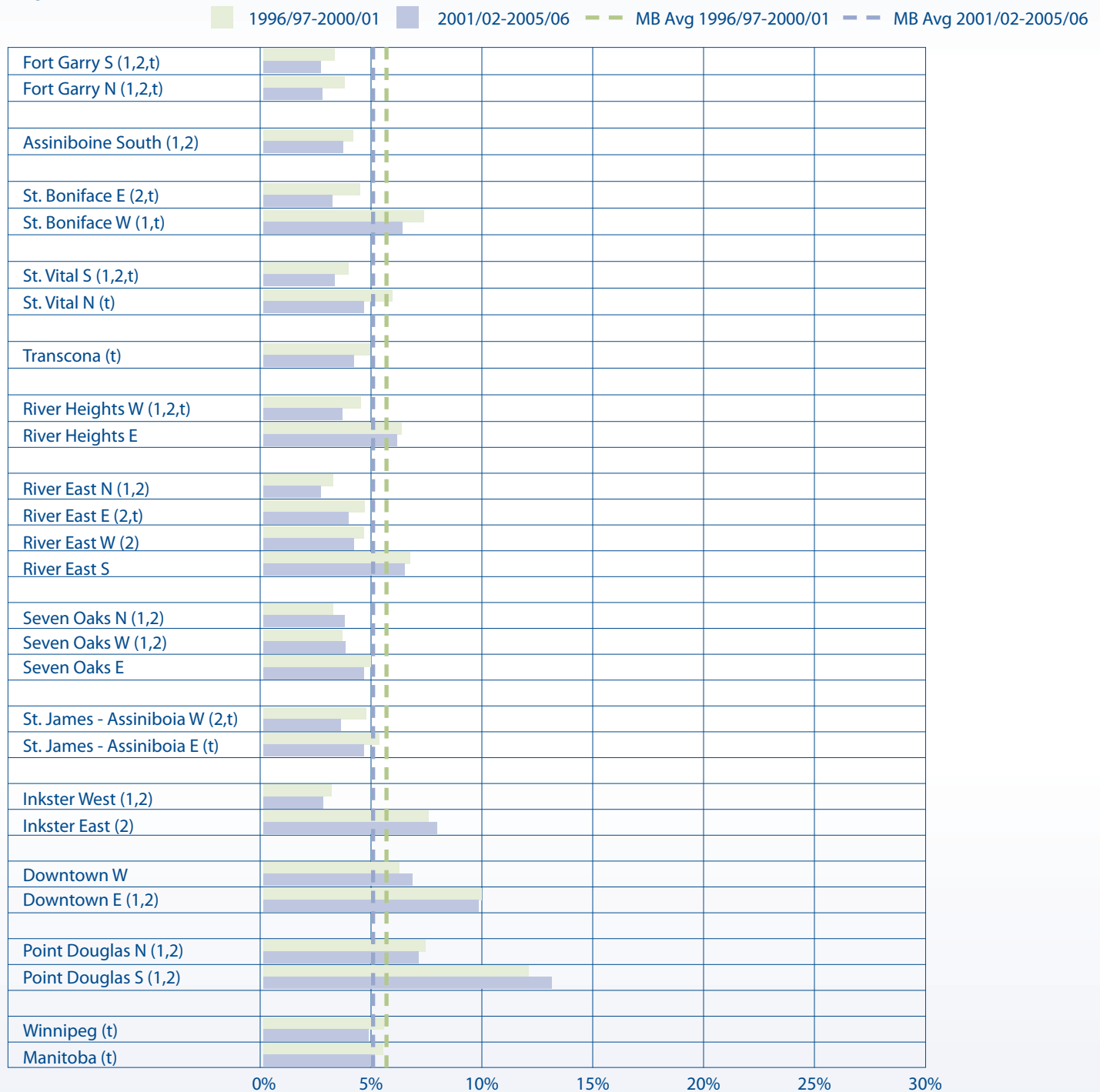
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

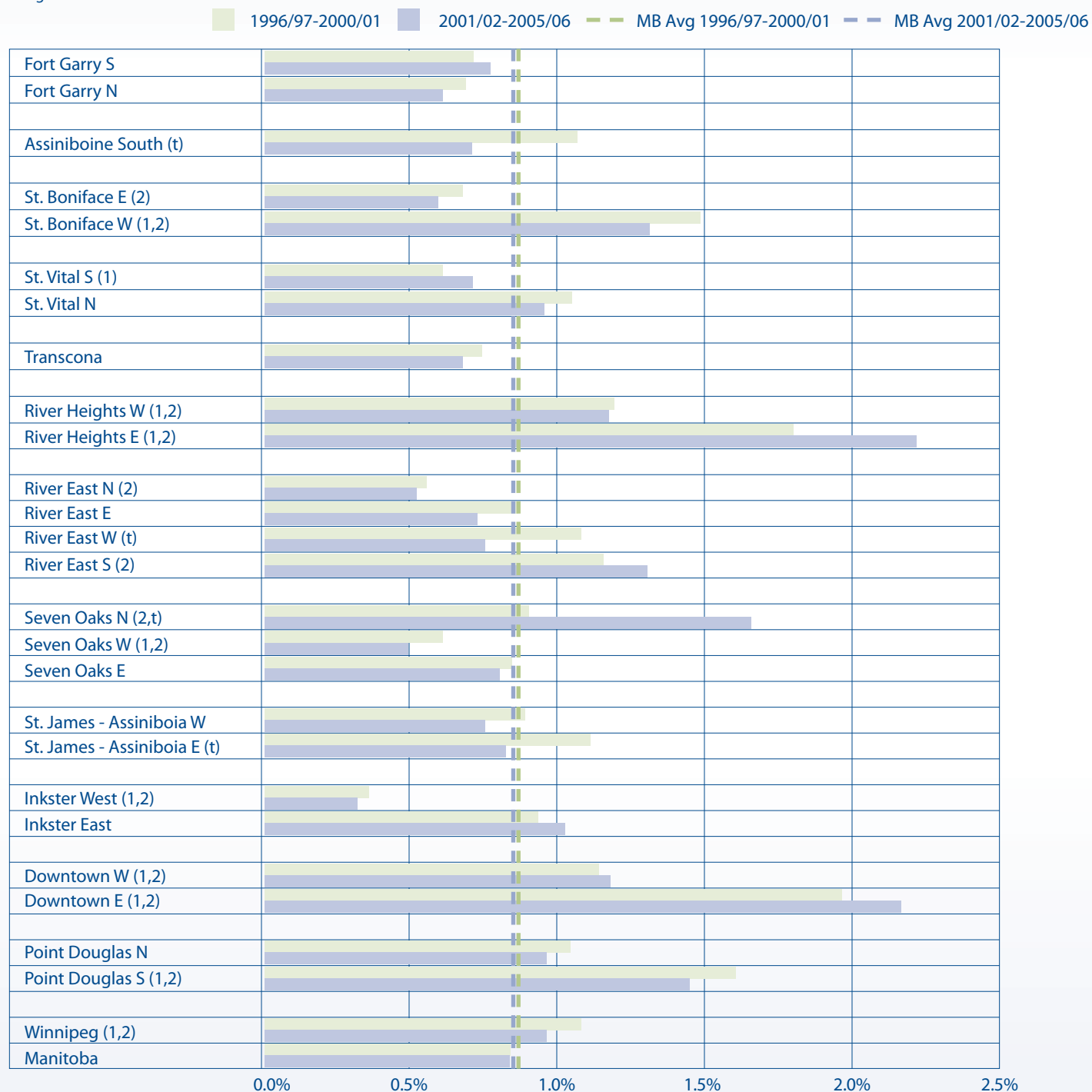
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

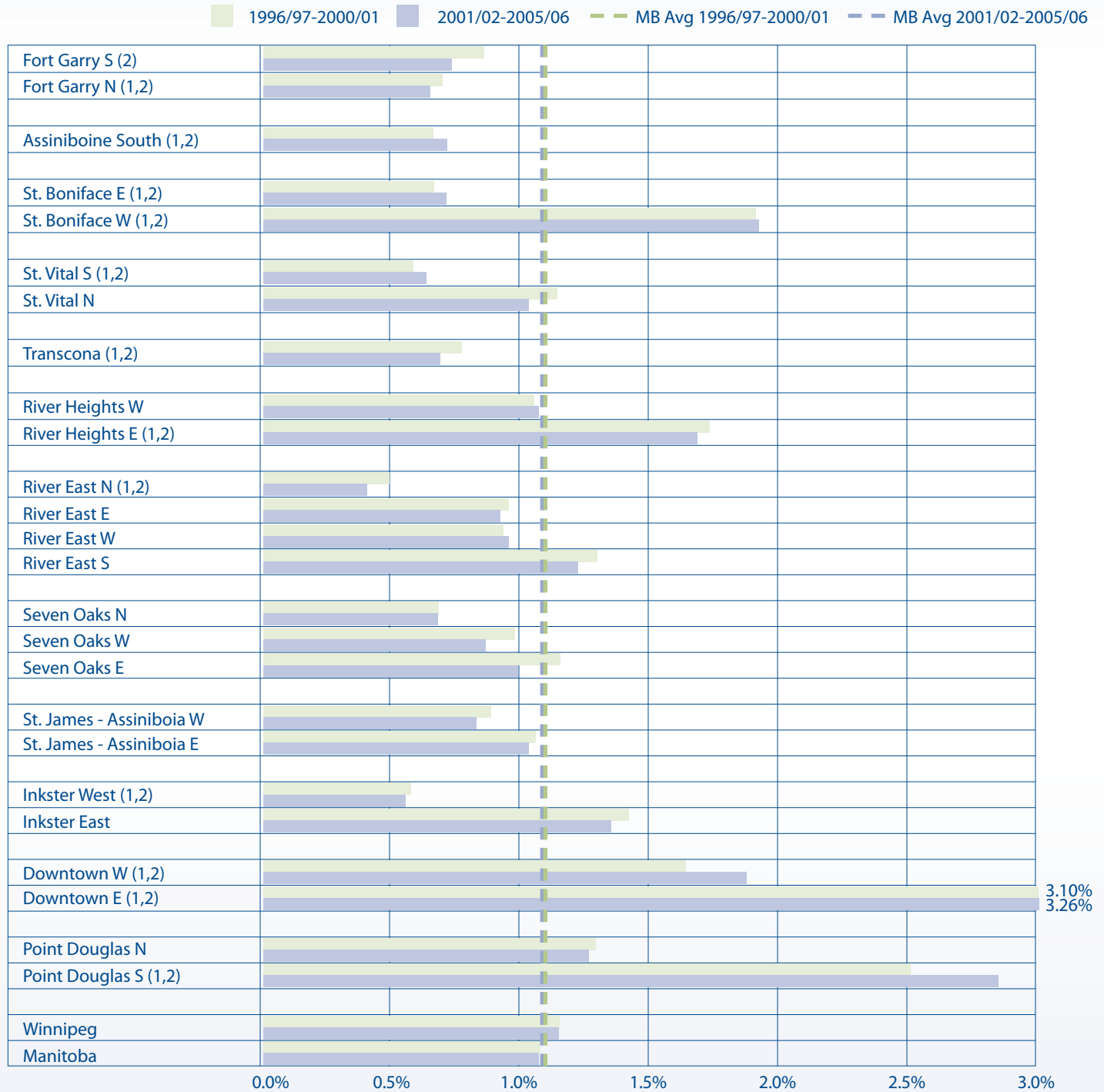
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Schizophrenia 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  
 '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

## 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

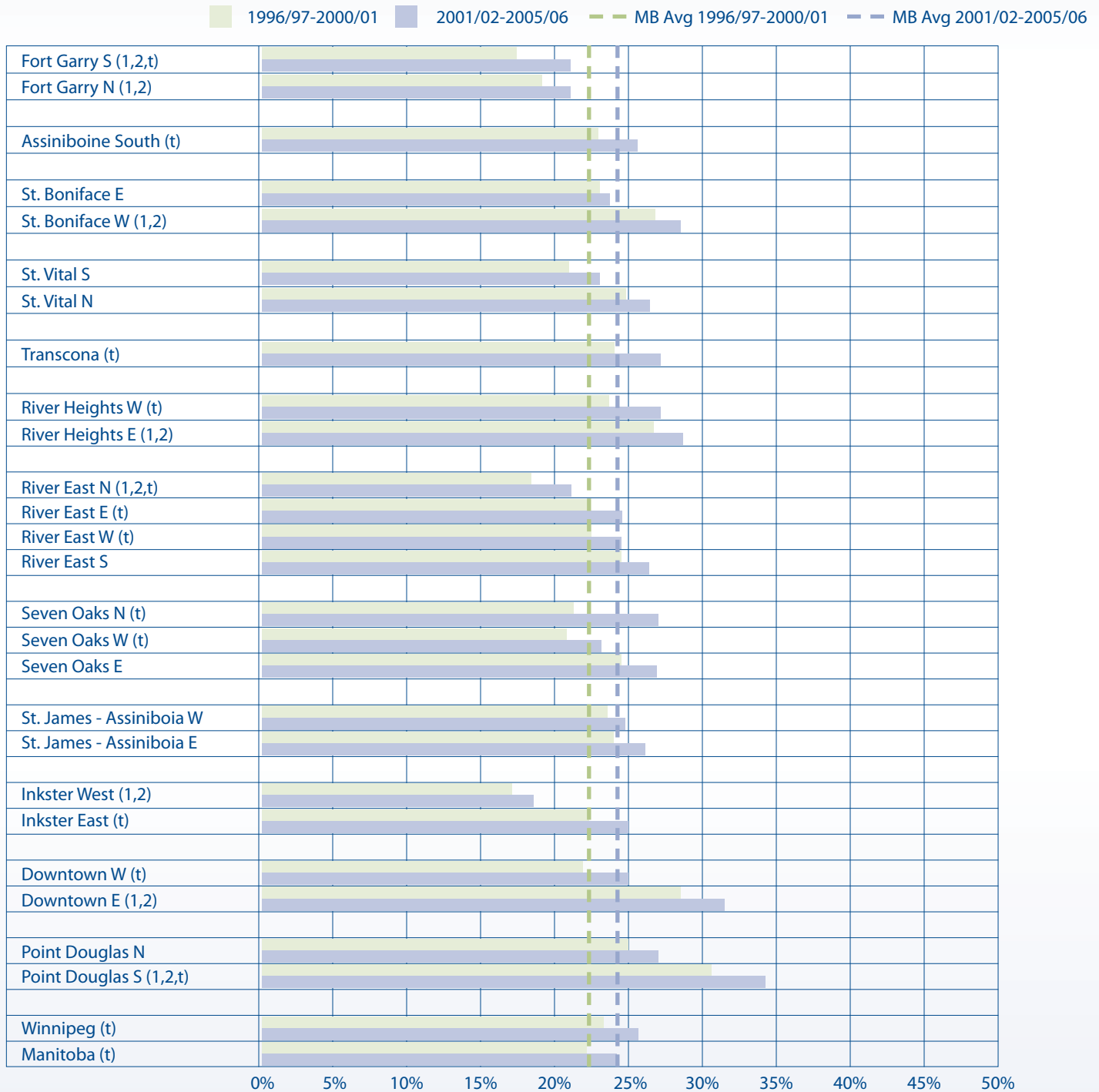
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

'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

## 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.

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

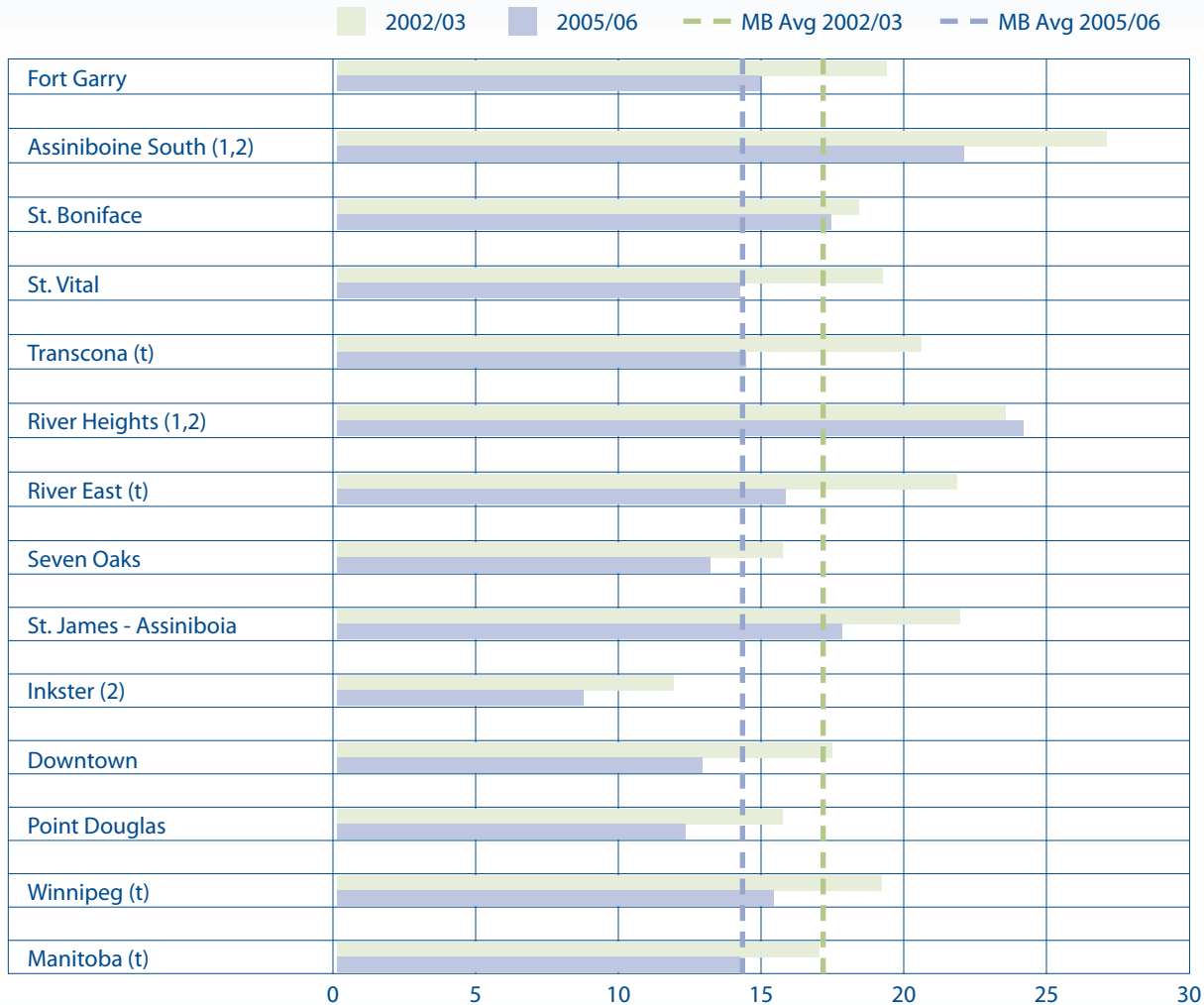
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## 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

'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



## 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):<sup>15</sup> 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

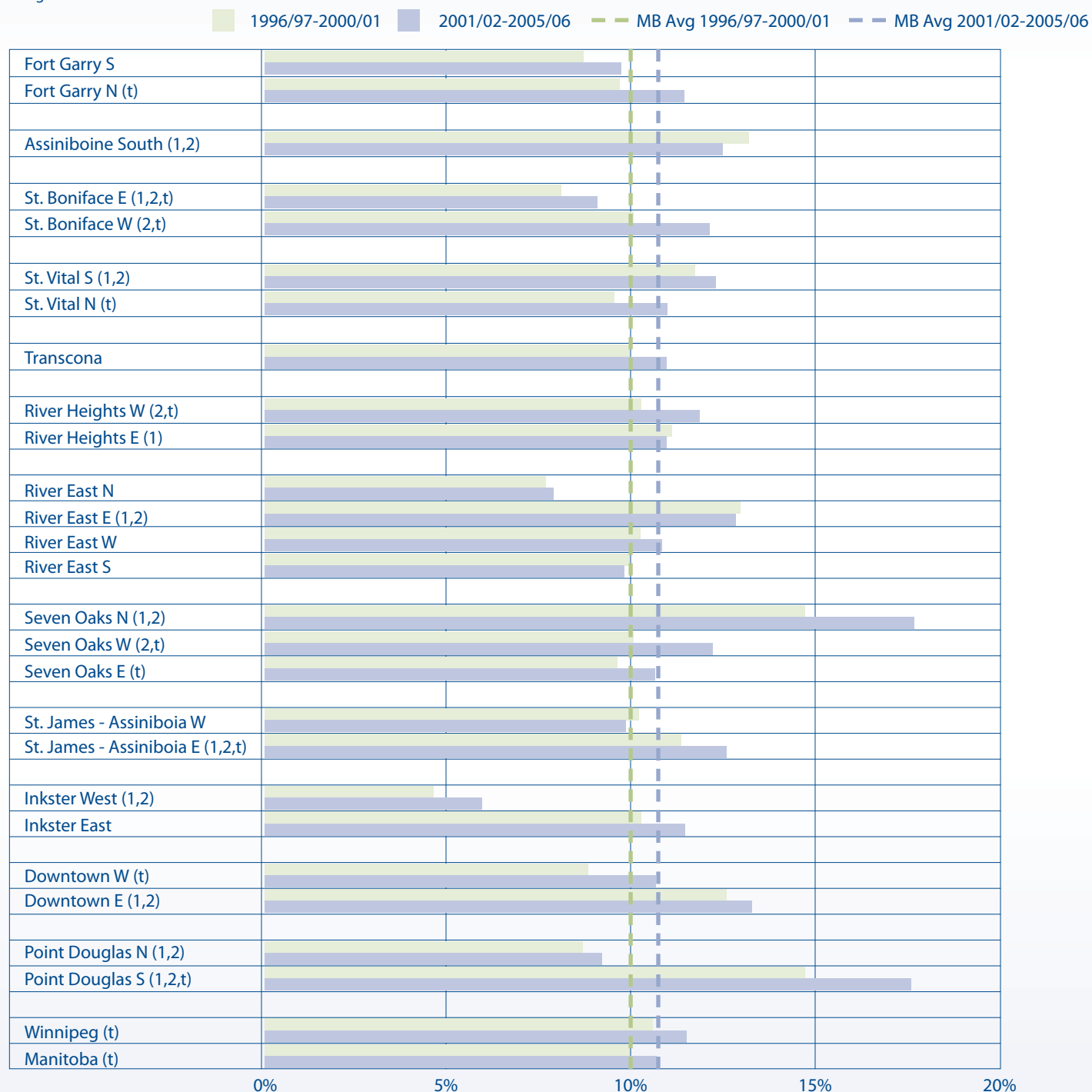
't' indicates for that area, the change in rates from Time 1 to Time 2 was significant

<sup>15</sup> 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

'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

## 5. INJURIES

### Winnipeg Regional Health Authority AT A GLANCE

	Current Estimates	Previous Estimates	Range of Current Estimates* (low CA-high CA)
<b>Injury Hospitalizations (0-19 years of age)</b>	33.2 / 10,000 2001/02-2005/06	41.1 / 10,000 1996/97-2000/01	20.9 – 64.4 / 10,000
<b>Unintentional Injury Death Rates</b>	Females: 30.6/100,000  Males: 32.0/100,000 2006	Females: 23.0/100,000  Males: 32.9/100,000 2002	N/A
<b>Suicide Rates</b>	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 (41.1/10000 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<sup>16</sup>

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](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>

<sup>16</sup> 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

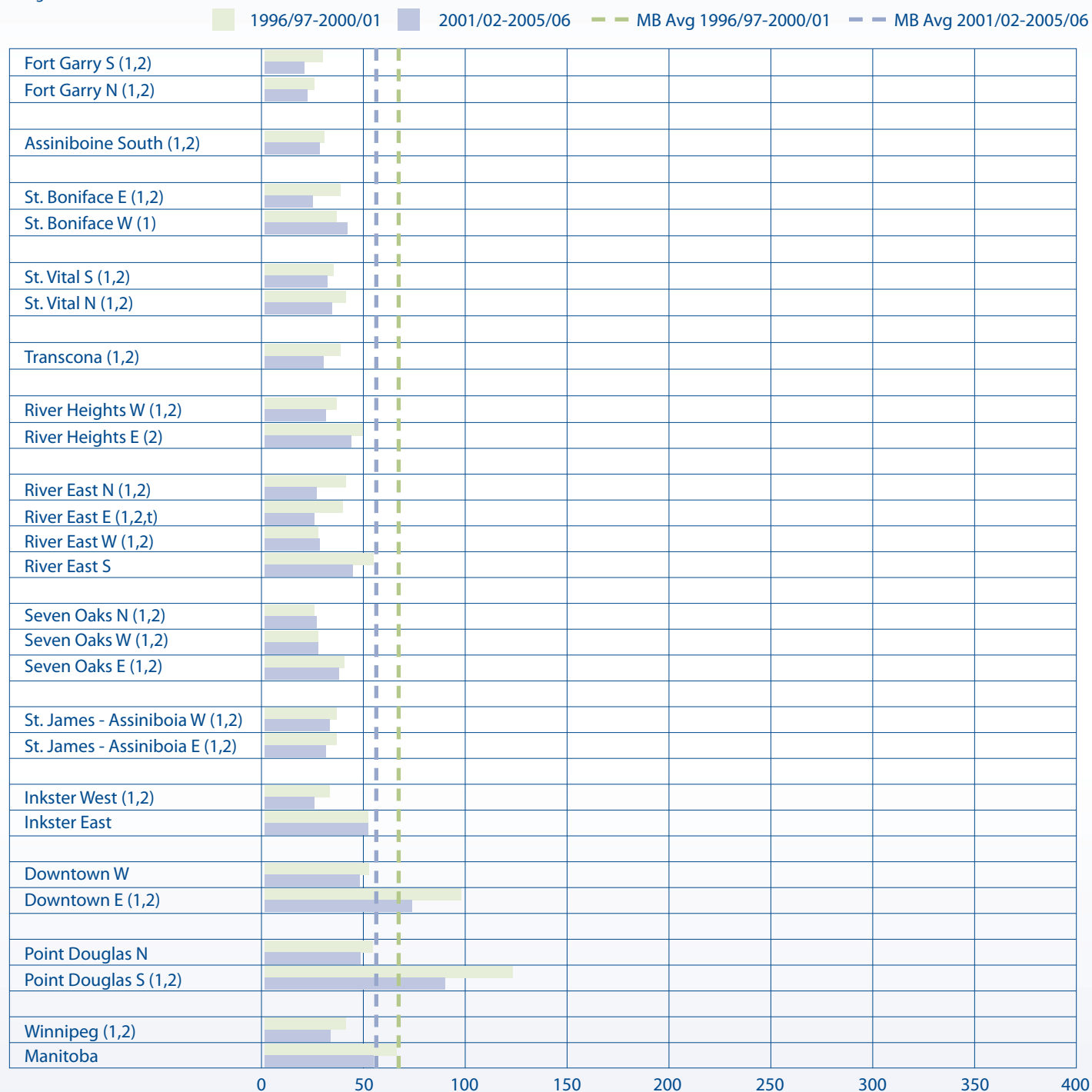
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# 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

'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

## 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-standardized 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

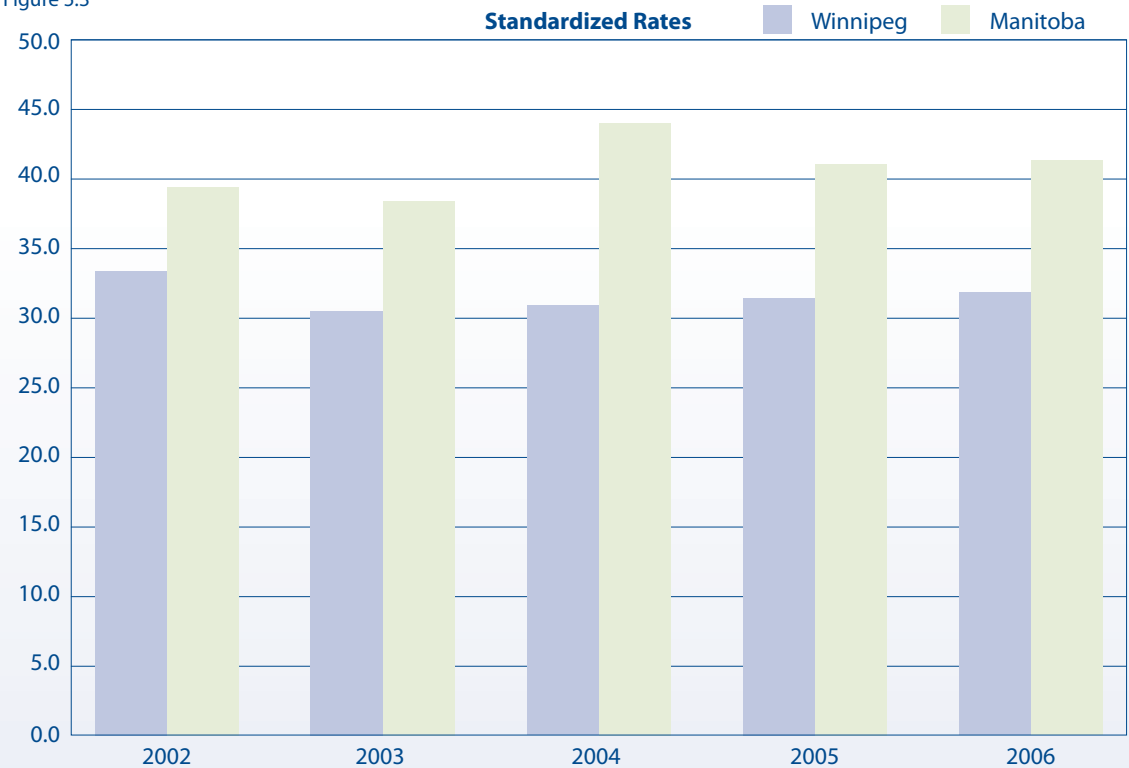
Figure 5.2



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.

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

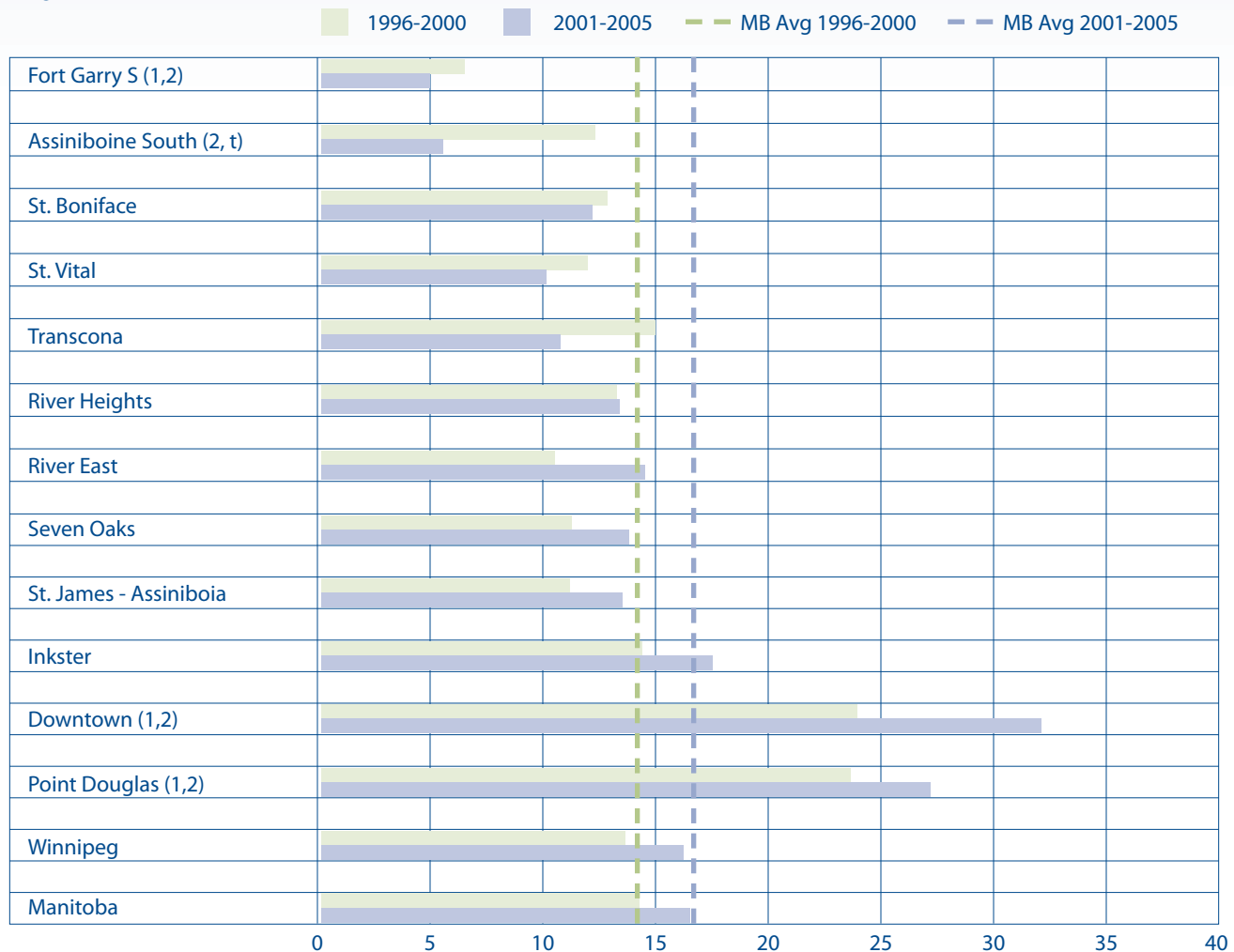
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## 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
<i>Chlamydia trachomatis</i>	515.5/100,000 2008
<i>Neisseria gonorrhoeae</i>	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
<b>TOTAL WHR</b>	<b>345.6</b>	<b>676.8</b>	<b>515.5</b>

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
<b>Overall</b>	<b>84.7</b>	<b>94.5</b>	<b>89.8</b>

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.



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)
<b>Adult Pneumococcal Immunization</b> (cumulative % in residents aged 65+)	60.3% 2005/06	23.9% 2000/01	57.8% - 64.9%
<b>Adult Influenza Immunization</b> (annual)	67.9% 2005/06	55.5% 2000/01	59.2% - 73.5%
<b>Childhood Immunization</b>			
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%
<b>Cervical Cancer Screening</b> (PAP tests)	73.2% 2003/04-2005/06	73.8% 1998/99-2000/01	61.3% - 78.3%
<b>Breast Cancer Screening</b> (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.<sup>17</sup> 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.<sup>17</sup> A consensus has been reached that a screening mammography every 2 years is beneficial for women 50-69 years of age.<sup>18</sup> In a summary of research studies, 25-30% fewer women died of breast cancer if they had regular screening mammograms starting at age 50.<sup>18</sup> 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%).

<sup>17</sup> Cancer Care Manitoba, Community Health Assessment 2009/2010. [http://www.cancercare.mb.ca/resource/File/communications/CCMB\\_2010\\_CHA-Report.pdf](http://www.cancercare.mb.ca/resource/File/communications/CCMB_2010_CHA-Report.pdf)

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

## ADDITIONAL INFORMATION<sup>19</sup>

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](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](http://www.cancercare.mb.ca/resource/File/communications/CCMB_2010_CHA-Report.pdf)

<sup>19</sup> 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

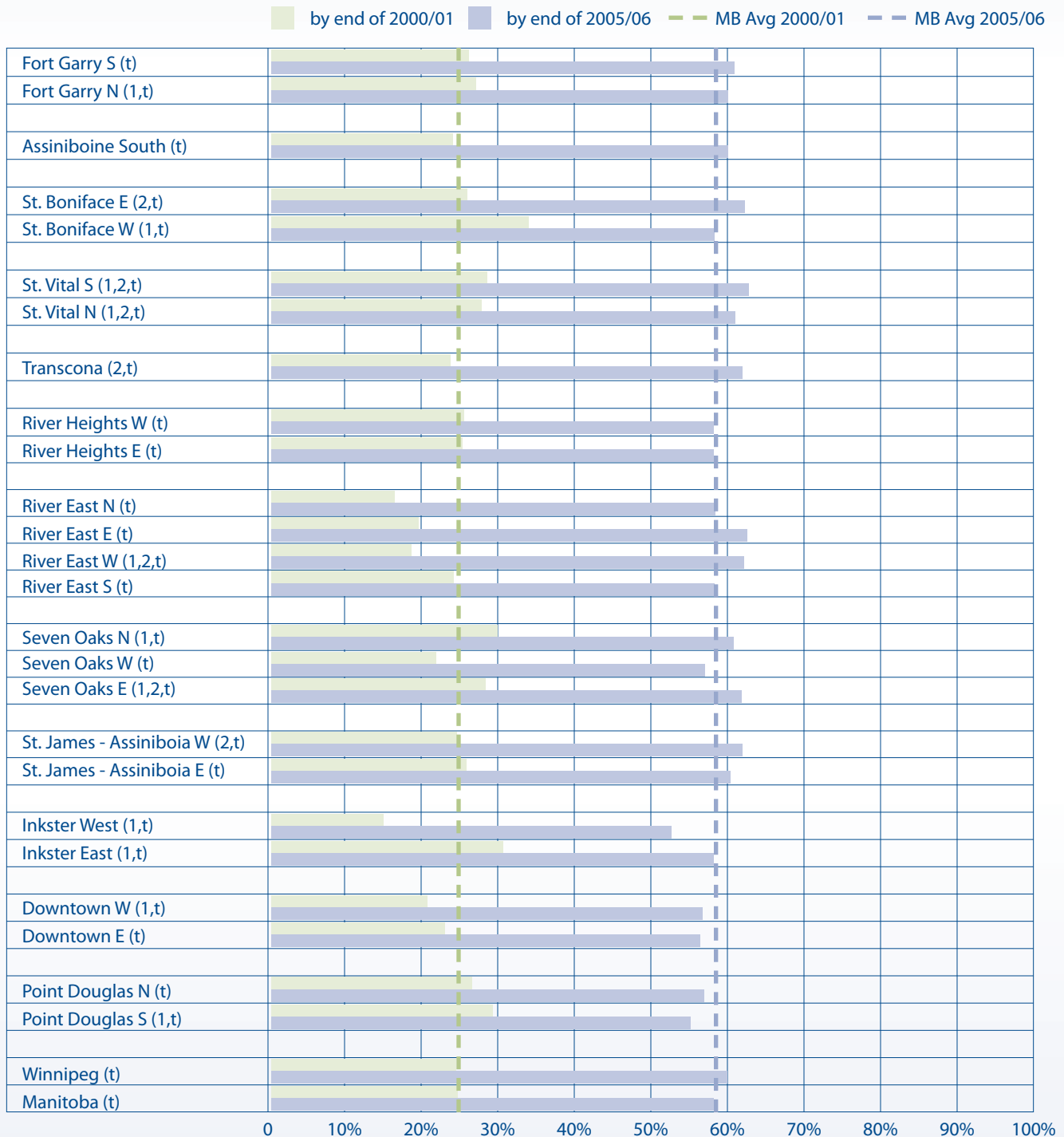
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

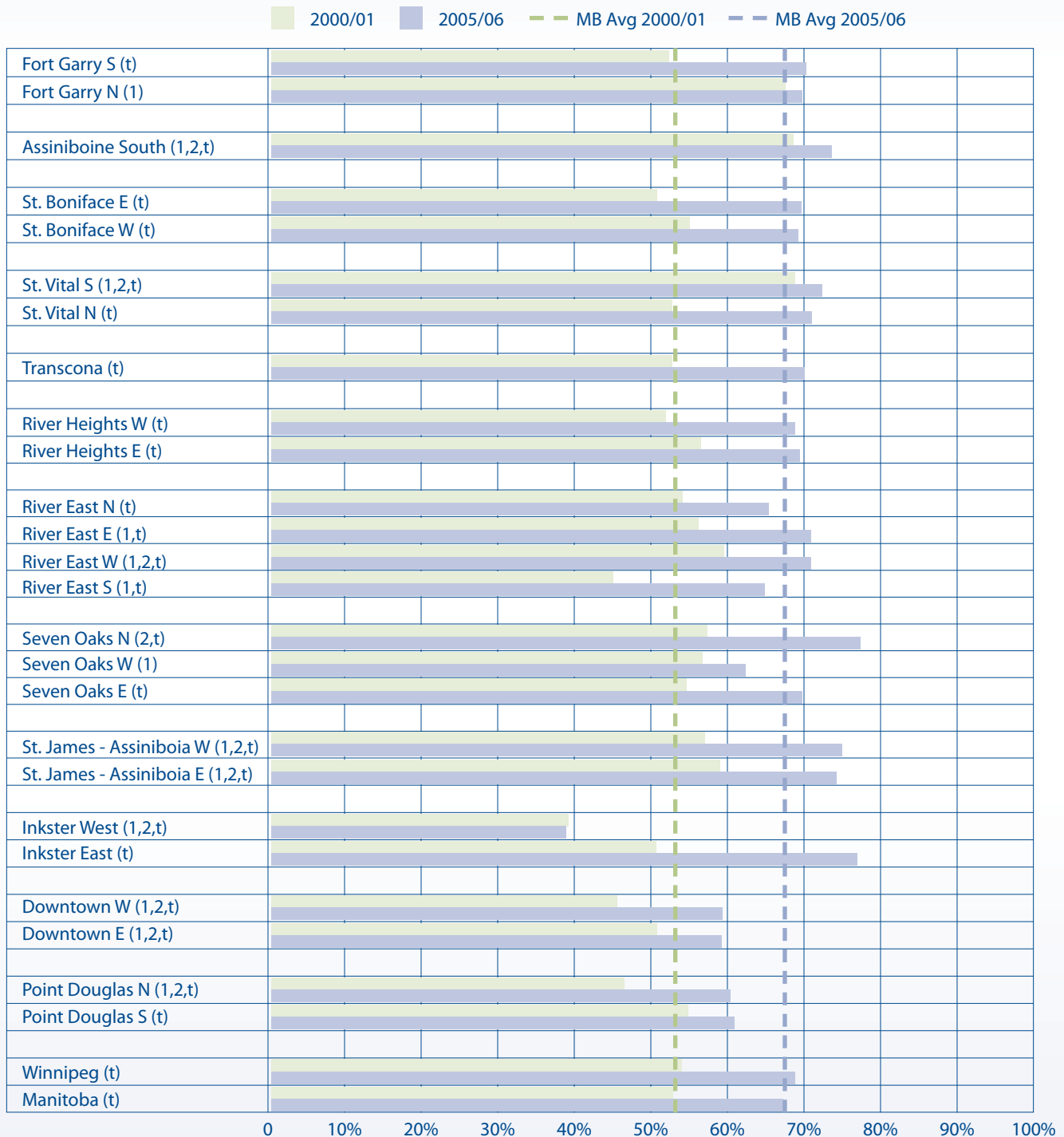
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

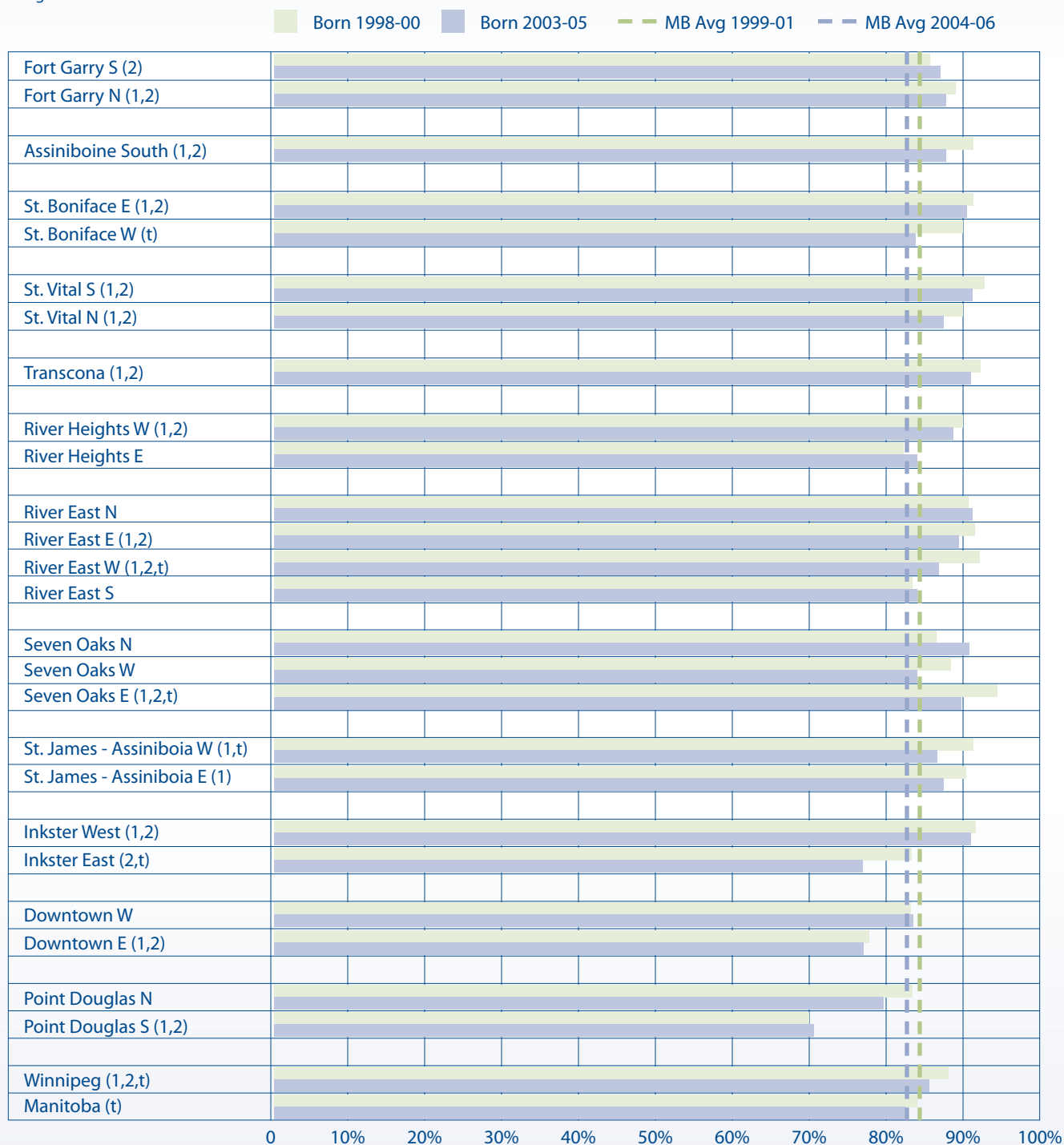
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

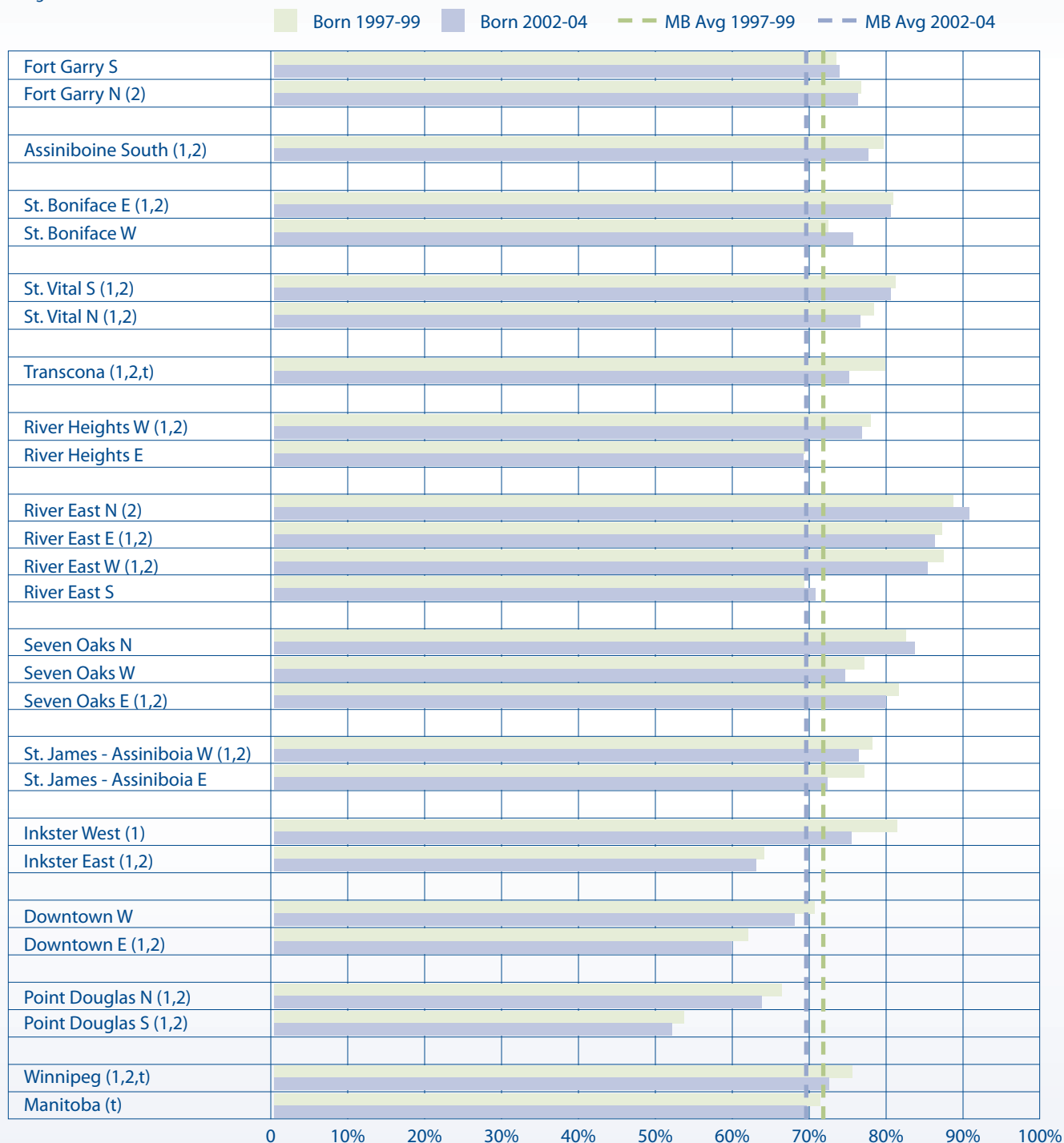
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

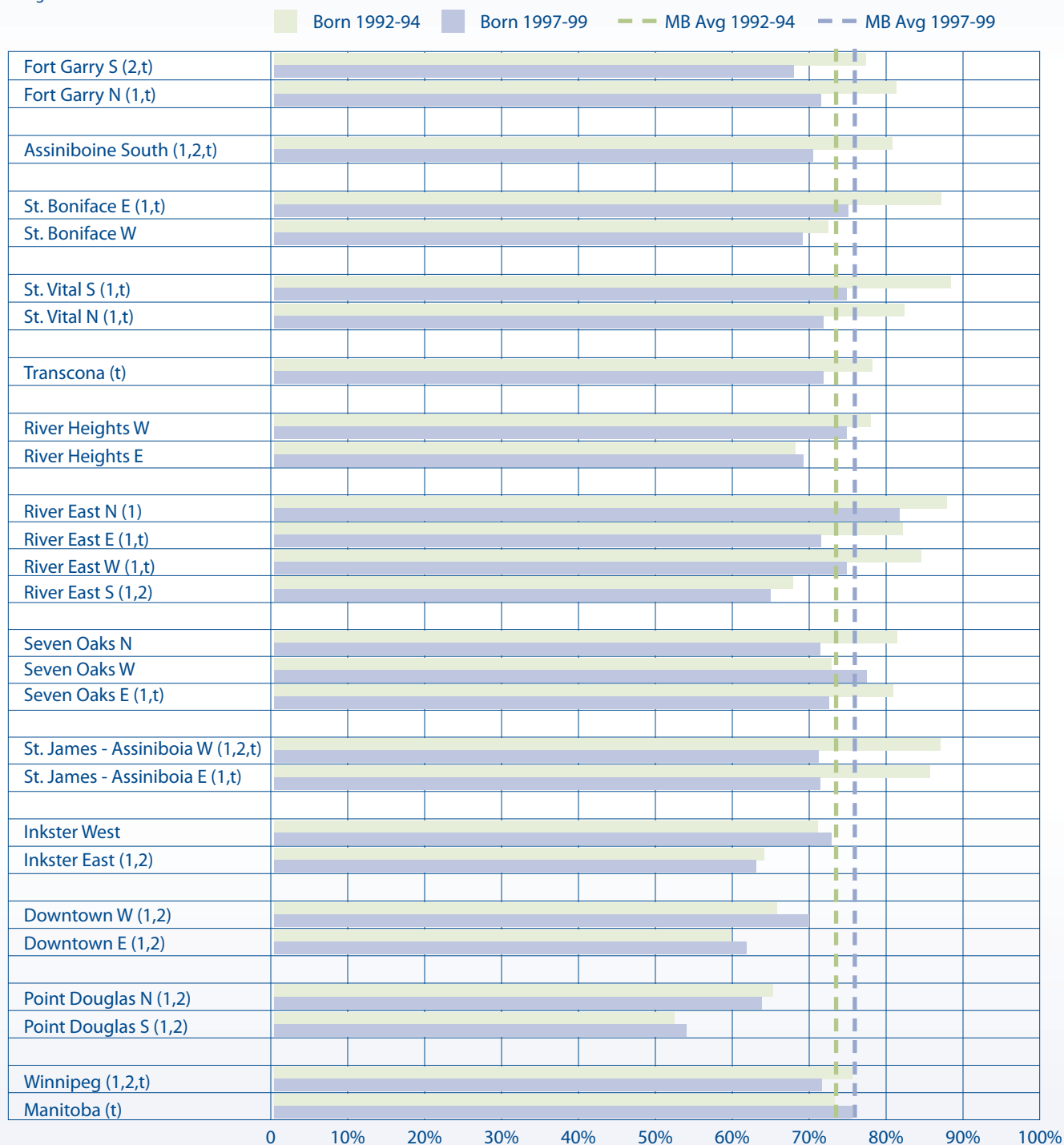
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

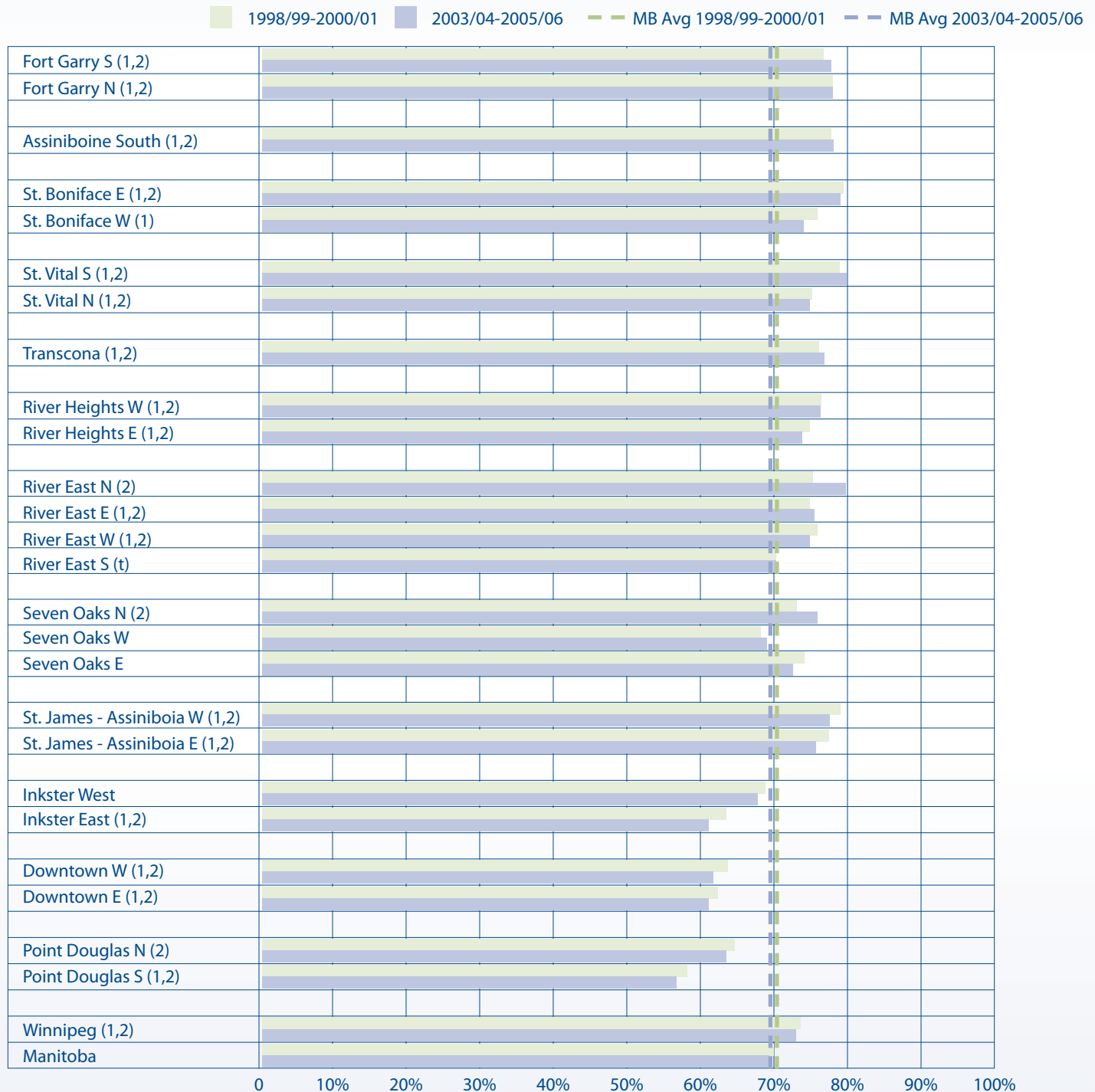
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

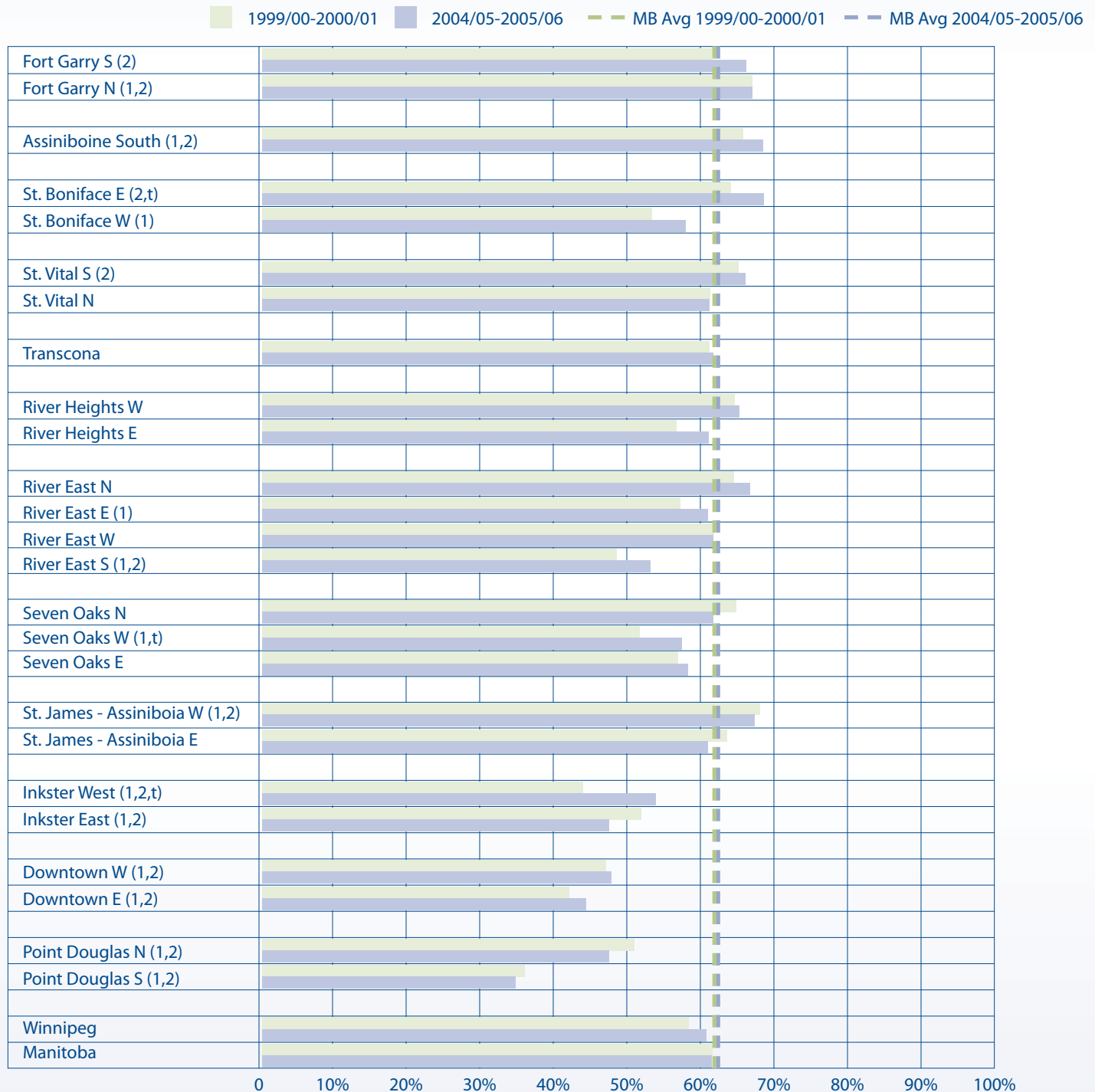
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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)
<b>Smoking</b>		
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	
<b>Second-Hand Smoke Exposure</b>		
Exposed	16.0%	7.7%-32.8%
No exposure	84.0%	67.2%-92.3%
	2003 & 2005	
<b>Body Mass Index (BMI)</b>		
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	
<b>Total Activity Level</b> (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	
<b>Nutrition: Fruit &amp; Vegetable Consumption</b>		
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](http://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 ( $\geq 3$  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 INFORMATION<sup>20</sup>

**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](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/>

<sup>20</sup> 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		Non-Smoker
	Current Smoker	Former Smoker	
Fort Garry	<b>11.3%</b>	40.4%	<b>48.3%</b>
Assiniboine South	<b>14.8%</b>	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%	<b>46.2%</b>
St. James - Assiniboia	27.1%	42.9%	<b>30.0%</b>
Inkster	22.5%	36.4%	41.1%
Downtown	26.1%	<b>30.2%</b>	43.6%
Point Douglas	<b>32.6%</b>	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

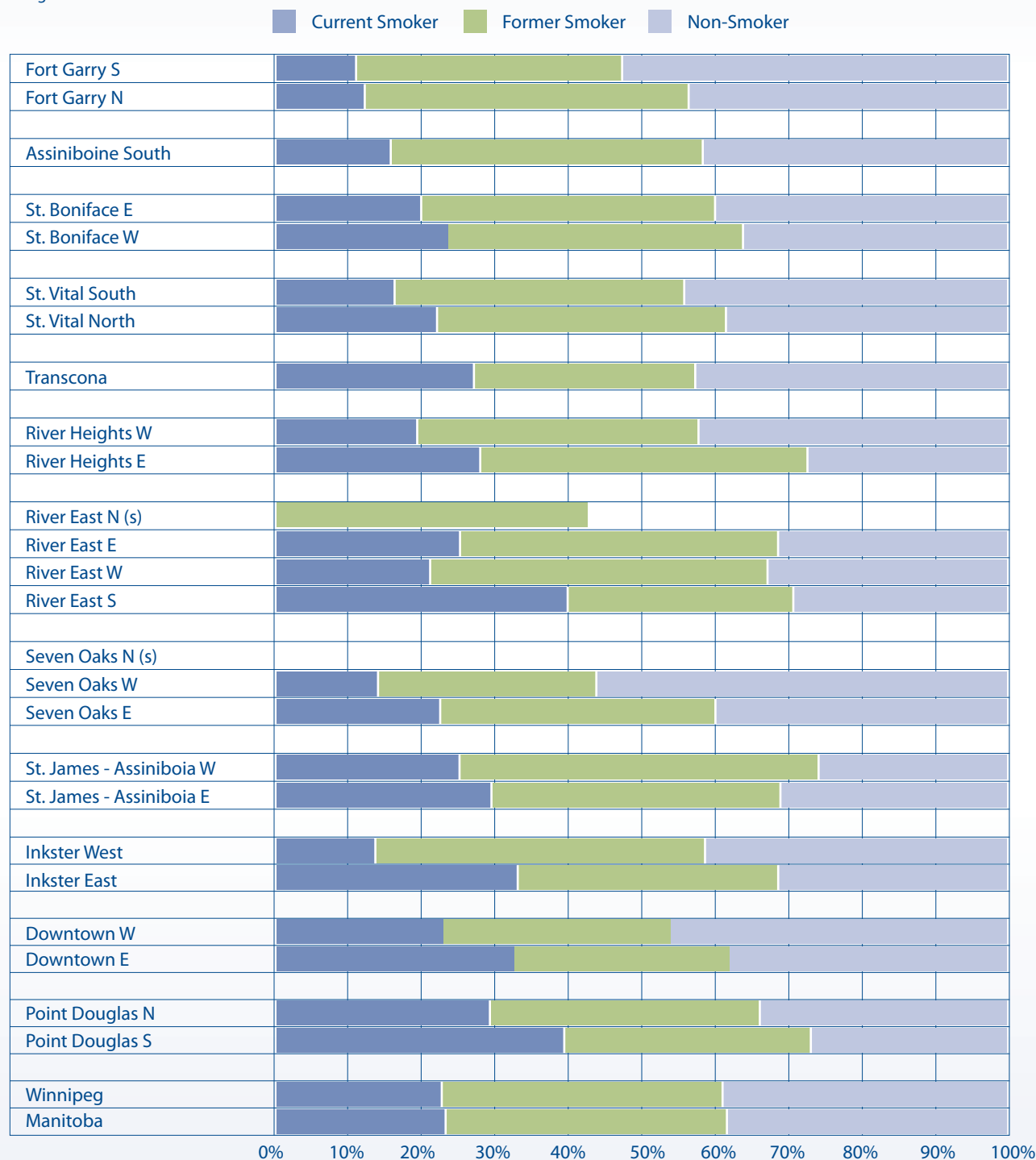
*italics* - indicates a warning - the area's rate is highly variable and should be interpreted with caution

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	<b>7.7%</b>	<b>92.3%</b>
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	<b>32.8%</b>	<b>67.2%</b>
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

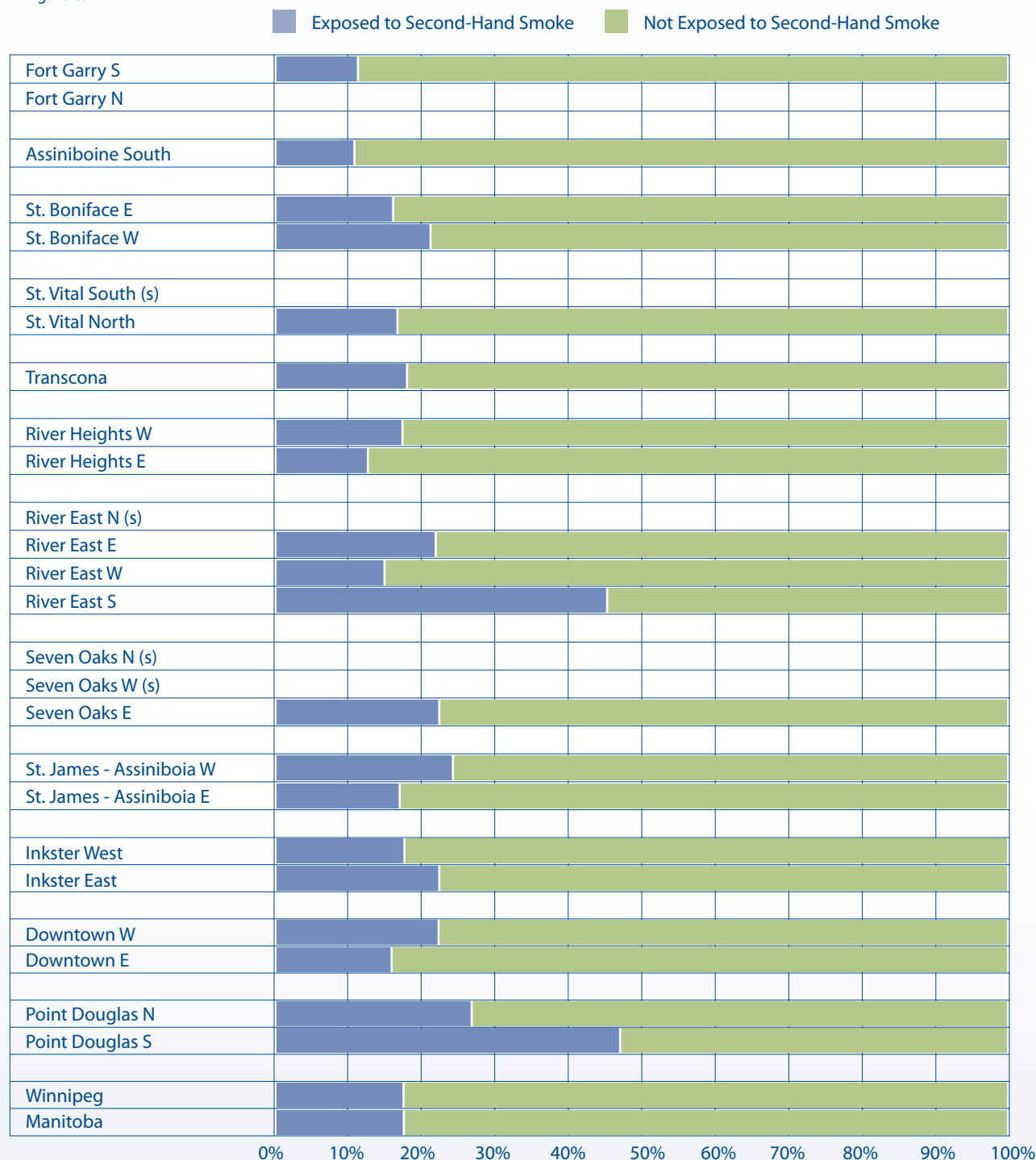
*italics* - indicates a warning - the area's rate is highly variable and should be interpreted with caution

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	<b>52.0%</b>	32.6%	<b>15.3%</b>
Assiniboine South	53.2%	35.0%	<b>11.8%</b>
St. Boniface	46.1%	35.7%	18.2%
St. Vital	39.4%	<b>41.5%</b>	19.1%
Transcona	50.7%	31.5%	17.8%
River Heights	<b>55.8%</b>	33.0%	<b>11.2%</b>
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	<b>53.7%</b>	29.8%	16.5%
Point Douglas	38.6%	39.4%	22.0%
Winnipeg	<b>47.4%</b>	34.1%	<b>18.4%</b>
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

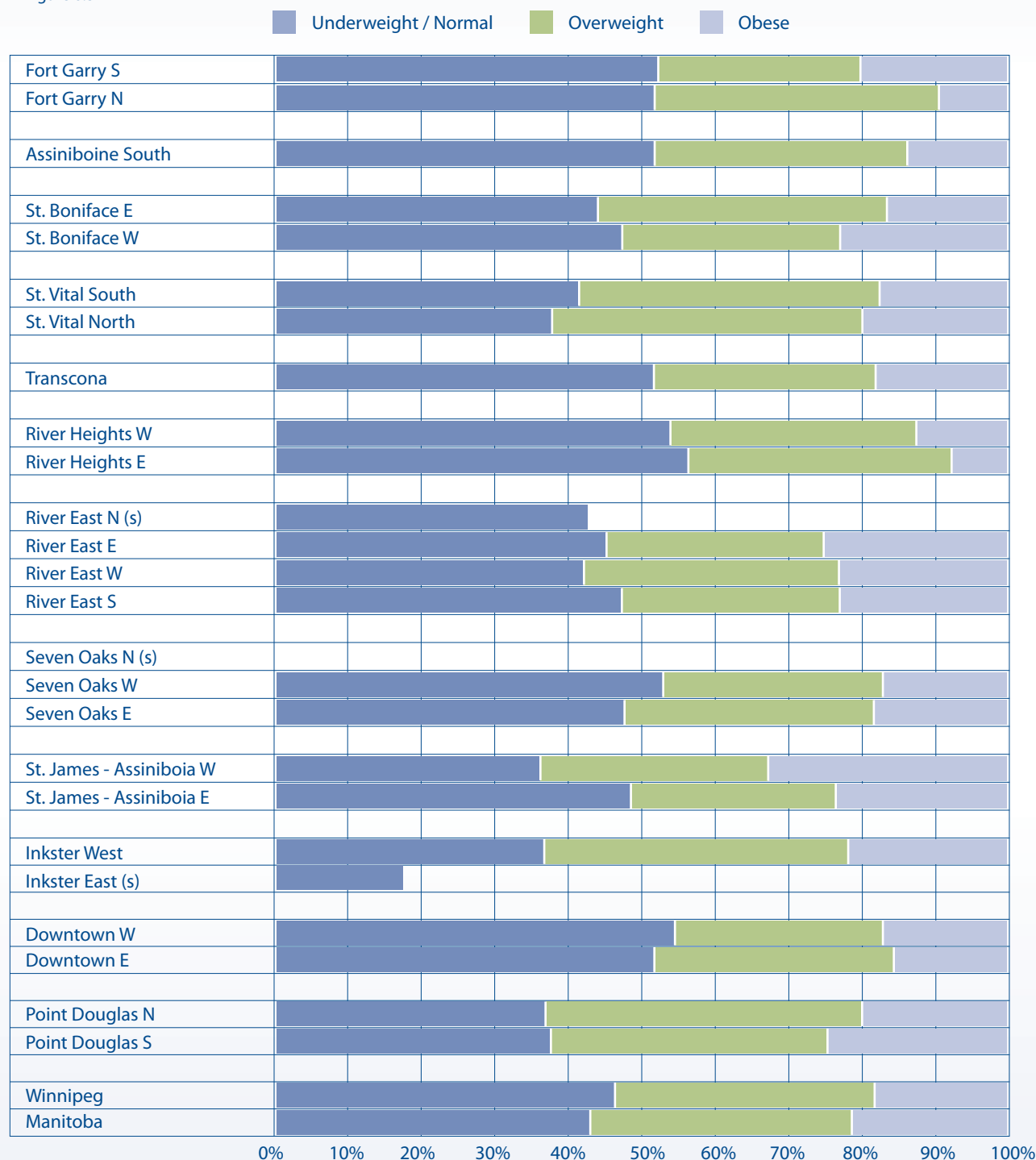
*italics* - indicates a warning - the area's rate is highly variable and should be interpreted with caution

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 ( $\geq 3$  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	<b>20.0%</b>	36.6%	43.4%
Assiniboine South	20.0%	37.6%	42.4%
St. Boniface	23.7%	42.7%	33.6%
St. Vital	<b>21.1%</b>	34.9%	44.0%
Transcona	24.3%	<b>51.2%</b>	<b>24.5%</b>
River Heights	22.0%	36.4%	41.6%
River East	28.0%	37.8%	34.2%
Seven Oaks	<b>15.7%</b>	26.2%	<b>58.1%</b>
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	<b>25.3%</b>	<b>35.6%</b>	<b>39.1%</b>
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

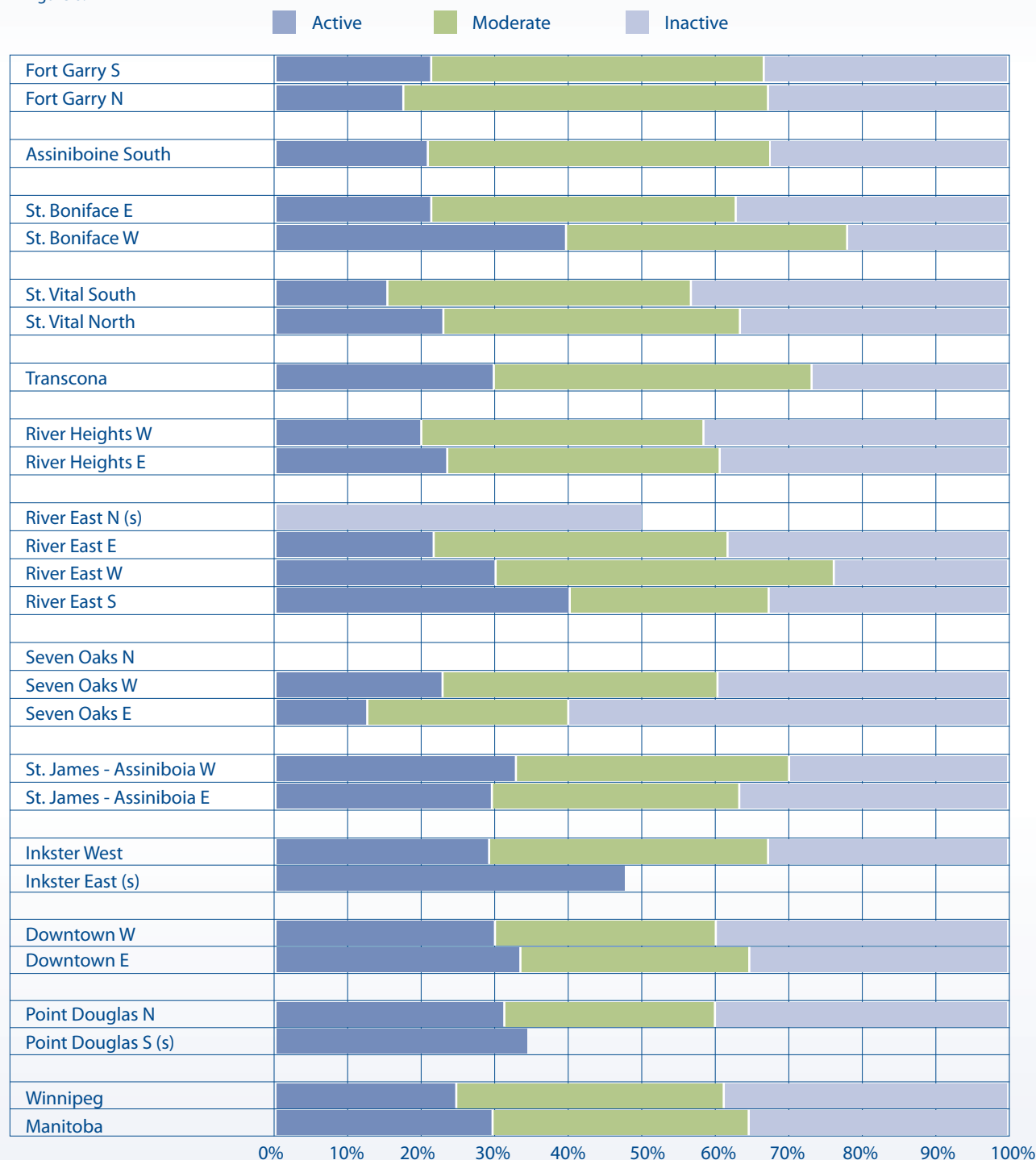
*italics* - indicates a warning - the area's rate is highly variable and should be interpreted with caution

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

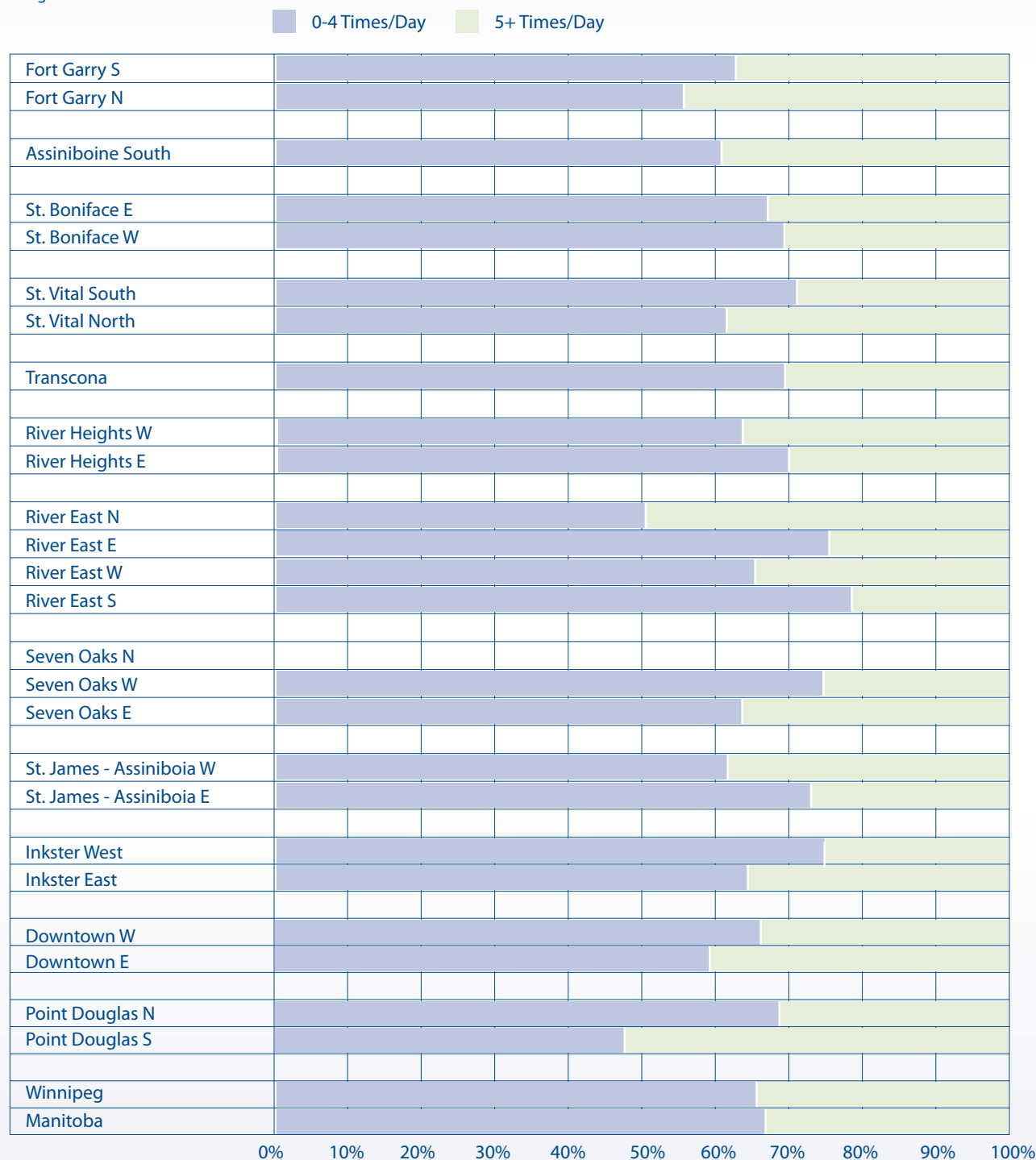
*italics* - indicates a warning - the area's rate is highly variable and should be interpreted with caution

<sup>1</sup>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”.

# 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)
<b>High School Completion</b>	78.7% 2005-2006			52.8% - 89.7%
<b>Highest Level of Education Attained by age group, 2006</b>	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%	
<b>Readiness for School</b> (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%	
<b>No School Changes</b> (Grade 3 Students)	77.8% 2002/03-2005/06			63.0% - 85.6%
<b>LICO (low income cut-offs)</b>	From the 2006 Census			
% individuals	42%			31% - 59%
% families	15%			8% - 34%
<b>Median Income</b>	From the 2006 Census			
Households	\$50182			\$30,307 - \$74,992
Individuals: Female	\$21941			\$17,626 - \$27,304
Individuals: Male	\$31615			\$20,323 - \$43,365
<b>Unemployment Rate</b> (Male & Female)	5% Males 5% Females From the 2006 Census			4% - 9% Male 4% - 8% Female
<b>Housing Affordability</b>	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.<sup>22</sup> 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

<sup>22</sup> 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.”<sup>23</sup> 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 INFORMATION<sup>24</sup>

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](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](http://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](http://www.gov.mb.ca/healthychild/edi/edi_mb_report.pdf)

<sup>23</sup> Statistics Canada. (2006). Census Data Dictionary, [www12.statcan.ca/english/census06/reference/dictionary/fam020.cfm](http://www12.statcan.ca/english/census06/reference/dictionary/fam020.cfm)

<sup>24</sup> 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

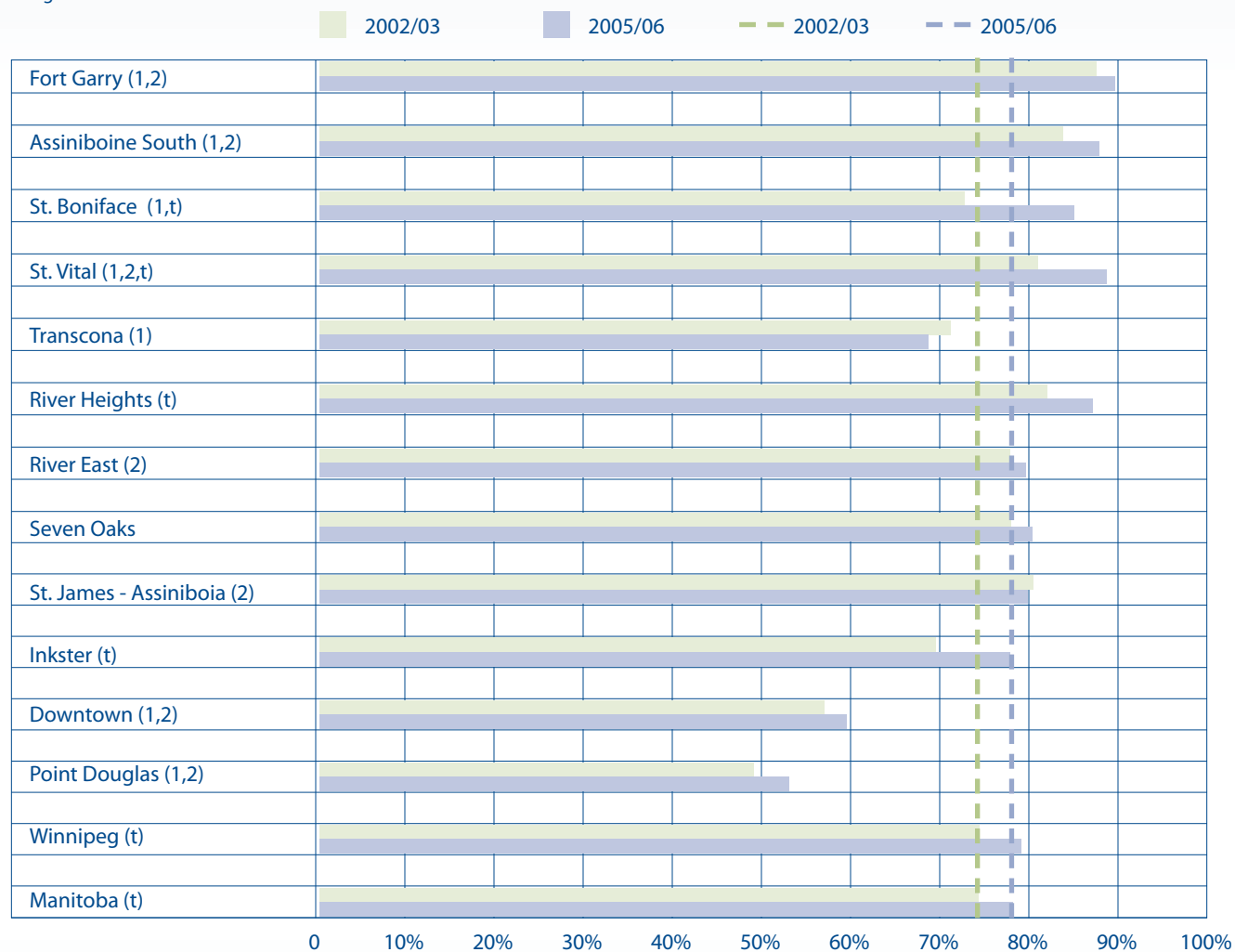
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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

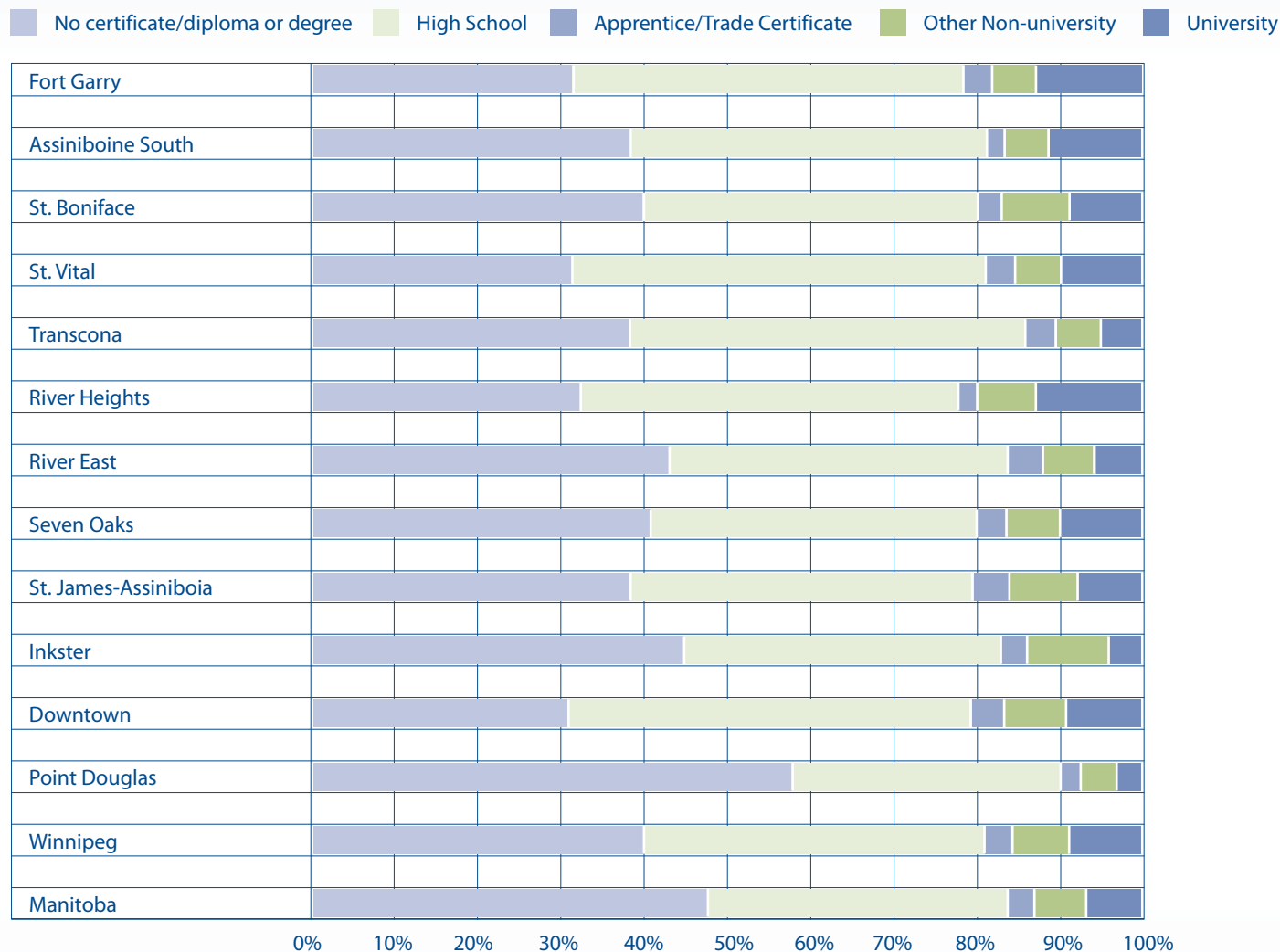
Table 9.4

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

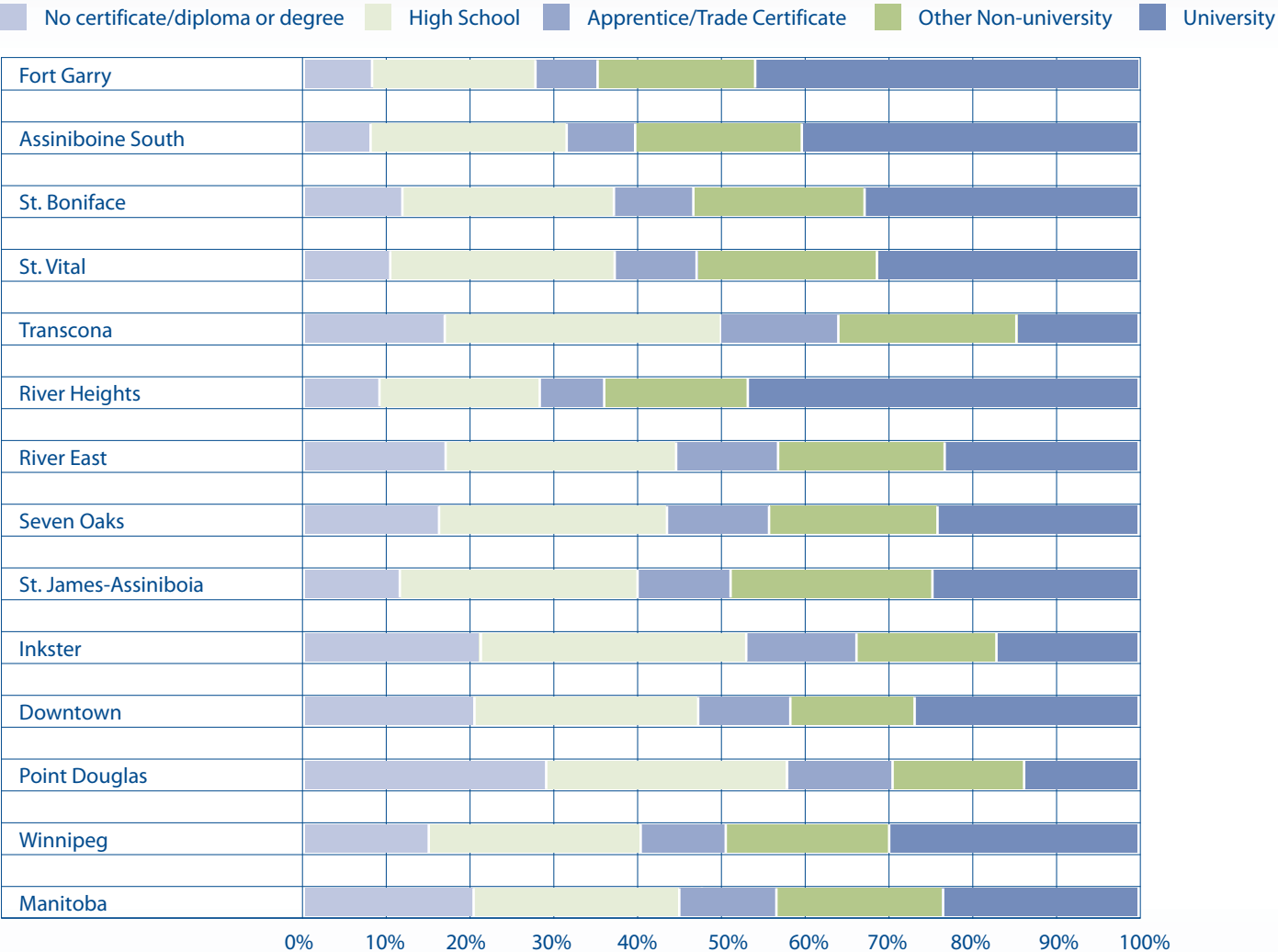
## Highest Level of Education Attained at the 2006 Census in the WHR: Persons 15 to 24 Years of Age

Figure 9.2



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

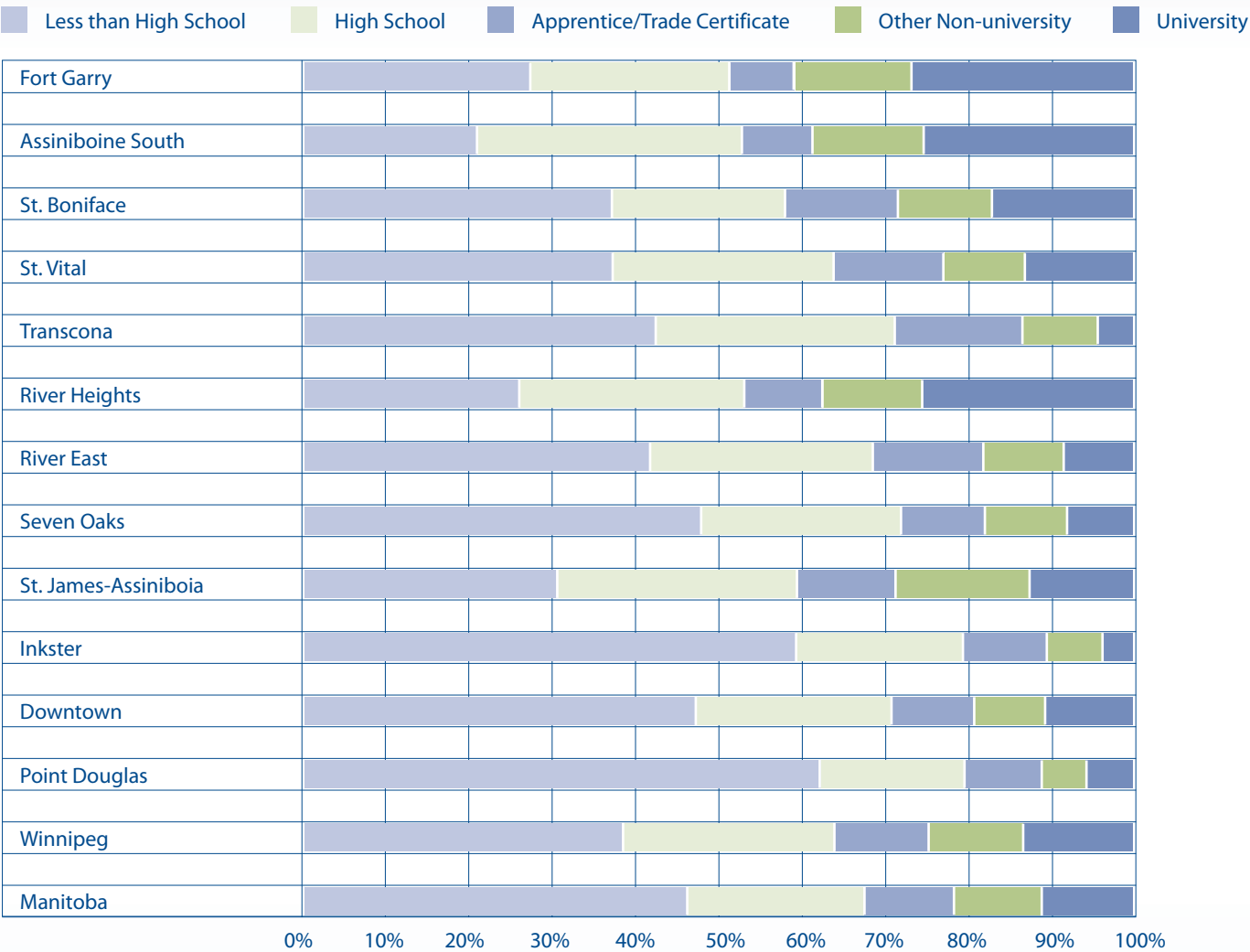
Figure 9.3





# 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

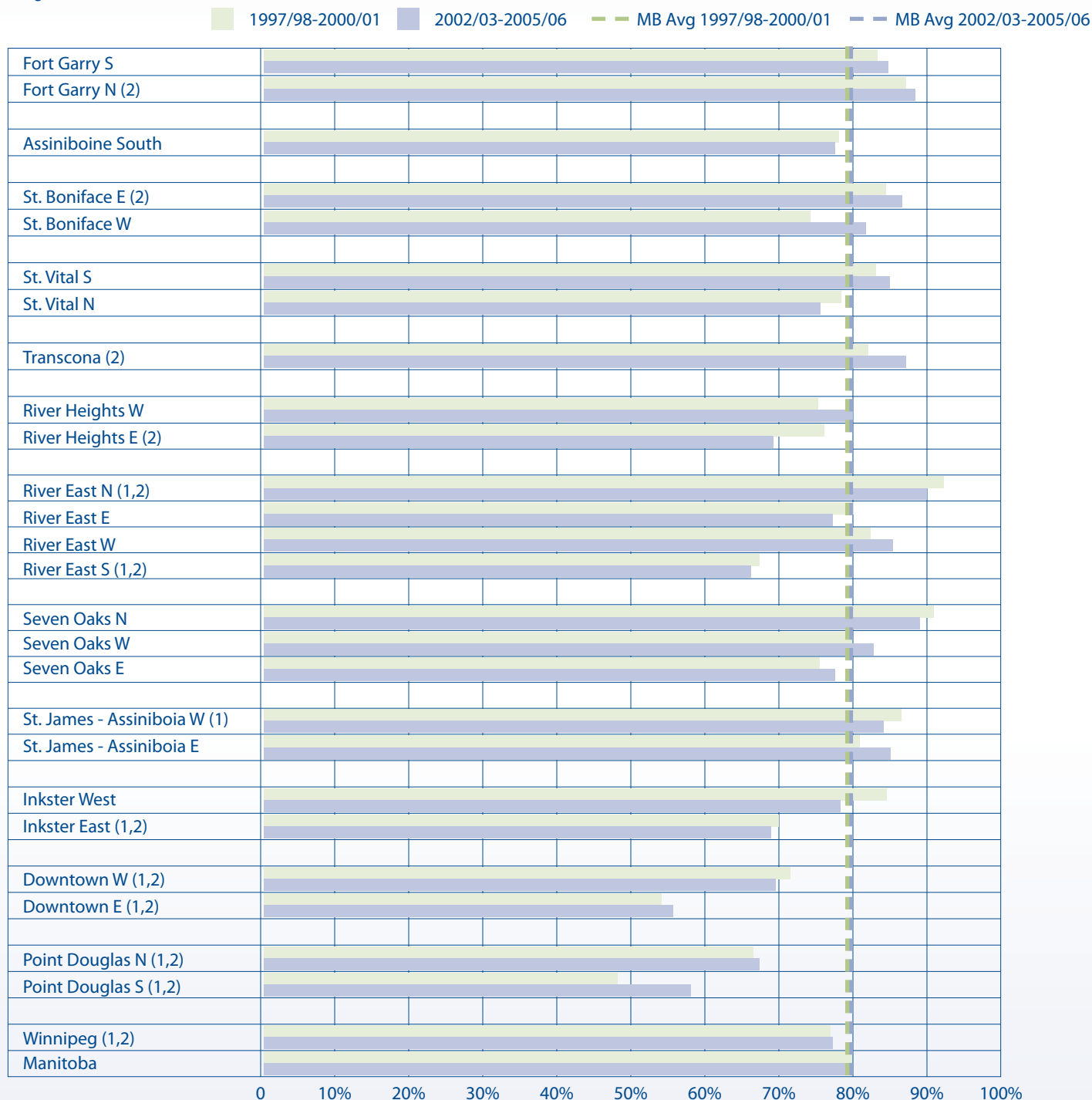
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

'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





Section C

# HEALTH SYSTEM PERFORMANCE



Winnipeg Regional  
Health Authority  
Caring for Health

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

This section provides a number of indicators to measure the effective implementation of the health system according to various dimensions: fiscal, accessibility, effectiveness, continuity of service and utilization. Characteristics of the health care system and how it performs are important to describe and measure (as indicators) because it helps policy makers to plan and prioritize in order to improve the efficiency and outcomes of healthcare services in the Winnipeg Health Region (WHR).

## FISCAL

*Percent Operating Budget Spent on Acute, PCH and Community Care Costs* is the lone fiscal indicator. It describes the percentage of the WHR's total operating budget going to one of three cost centres in each fiscal year (01 April to 31 March): acute, long term and community care costs. The percent of the operating budget spent on acute care has seen a 14% decrease from 2003/04-2007/08. However, the percentage of operating budget spent on PCH and community care remains stable. The 'other' cost centre is not reported on (e.g., salaried physicians, ambulance services). These increased from 5% to 24% (2003/04-2007/08).

## ACCESSIBILITY

Seven indicators reflect issues of equity and responsiveness in access to health care in the Winnipeg Health Region. The notable findings in this section include: 1) the proportion of residents with *at least one visit to a physician* remained stable between 2000/01 and 2005/06 for all Winnipeg community areas; 2) the age- and sex-adjusted rates of *ambulatory care visits* per resident per year ranged from 4.96 in River East to 5.88 in Point Douglas; 3) the *supply of PCH beds* in Winnipeg Health Region has decreased from 129 to 122 beds per 1000 residents aged 75 and older between 2000 and 2005; and, 4) the operational ("set-up") *hospital beds per capita* decreased from 3.55 beds per 1000 residents to 3.46.

## EFFECTIVENESS

Effectiveness refers to extent to which a healthcare system achieves its intended purpose. Six indicators are reported on in this sub-section to show how the system is performing and whether patients are being provided care appropriately. Data in this section illustrate that the rates of *tonsillectomy/adenoidectomy* surgery have appropriately declined overall in Winnipeg and that hysterectomy surgical rates have also declined (appropriately). The *caesarian section* rate has significantly increased in Winnipeg between the two time periods measured (1996/97-2000/01 and 2001/02-2005/06) despite efforts to discourage deliveries by this means yet *vaginal births after caesarian section* have appropriately stabilized across the WHR. The rate of hospitalization for *ambulatory care sensitive conditions* (ACS) or conditions best taken care of outside the acute care system also improved between the two time periods measures (2000/01 & 2005/06). *Readmission after acute myocardial infarction* (AMI) has been targeted for public reporting because it is a common, costly, and often preventable outcome. The readmission rate among Winnipeg residents is 4.4% and in Manitoba overall it is 5.2%.

## CONTINUITY OF SERVICES

Continuity of services indicators help us to measure whether residents of the WHR have a continuous and sustained relationship with a physician care provider. Continuity of services helps improve screening and treatment adherence and to realize fewer hospitalizations and lower use of emergency rooms. *Continuity of care* and *antidepressant follow-up* are reported on in this section. The proportion of residents in Winnipeg receiving at least 50% of their visits from the same physician increased over time (continuity of care). The rate of antidepressant prescription follow-up decreased slightly from 61.3% to 60.0% between the two measurement times (1998/99-2000/01 and 2003/04-2005/06).

## UTILIZATION

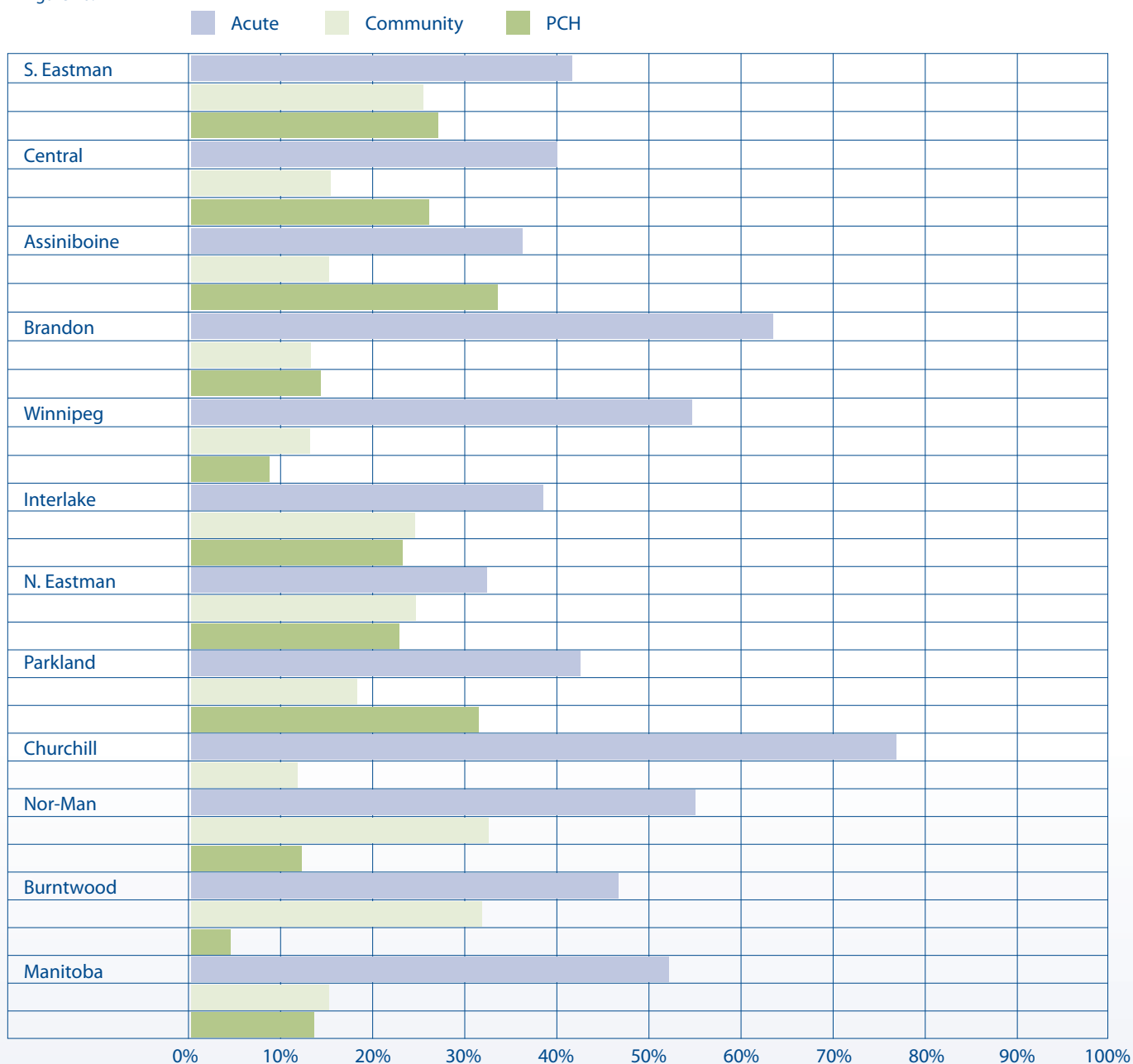
Indicators in this section span the types of care provided in the WHR from *hospital days used* to *new home care cases* opened per year. Included in this section are the rates of high profile surgeries (*knee and hip replacement* and *cataract*) and common heart surgeries (*CABG* and *cardiac catheterizations*). In addition, two measures of use of the healthcare system for *mental illness* are also included. Finally, *personal care home* (PCH) *admissions* are reported on for the WHR. With this diverse selection of indicators in this selection, the reader is encouraged to examine each of these indicators for their own merit.

# 10. FISCAL

Operating Budget spent on Acute, PCH and Community Care costs. Percentage 2007/2008 (Most recent year).

Percentage of Winnipeg Health Region's total operating budget spent on Acute, Personal Care Home (PCH) and community care costs, 2007/2008 (most recent year).

Figure 10.1



Source: Manitoba Health and Healthy Living, 2009



# 11. ACCESSIBILITY

## Location of Visits to General and Family Practitioners by RHA

Location of Visits to GP/FPs by Manitoba Regional Health Authority (RHA), 2000/01 & 2005/06

The proportion of visits to General and Family Practitioners (GPs/FPs) which took place within the resident's District, elsewhere in their RHA, in another RHA, or in Winnipeg. In Winnipeg and Brandon, all visits within the RHA were considered 'in District.' Churchill results are not shown because of incomplete data for physician claims. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.

Table 11.1

RHA	% In District	% Elsewhere in RHA	% To Other RHA	% To Winnipeg
South Eastman 00/01	59.1%	15.5%	3.1%	22.4%
South Eastman 05/06	57.8%	17.5%	3.1%	21.6%
Central 00/01	66.5%	11.6%	4.8%	17.1%
Central 05/06	67.3%	12.7%	4.6%	15.3%
Assiniboine 00/01	75.3%	7.7%	14.1%	2.9%
Assiniboine 05/06	72.5%	7.8%	17.3%	2.3%
Brandon 00/01 *	91.2%	.	6.5%	2.3%
Brandon 05/06 *	92.7%	.	5.3%	1.9%
<b>Winnipeg 00/01 *</b>	<b>98.0%</b>	.	<b>2.0%</b>	.
<b>Winnipeg 05/06 *</b>	<b>97.8%</b>	.	<b>2.2%</b>	.
Interlake 00/01	59.8%	4.3%	2.9%	33.0%
Interlake 05/06	58.7%	6.0%	3.5%	31.8%
North Eastman 00/01	53.2%	11.3%	6.7%	28.9%
North Eastman 05/06	58.7%	9.1%	6.4%	25.8%
Parkland 00/01	80.1%	12.0%	4.9%	3.0%
Parkland 05/06	78.8%	13.2%	5.1%	2.8%
Nor-Man 00/01	80.9%	9.8%	5.3%	3.9%
Nor-Man 00	82.6%	10.2%	3.8%	3.5%
Burntwood 00/01	68.7%	16.3%	5.4%	9.5%
Burntwood	67.4%	16.8%	5.4%	10.4%
Rural South 00/01	68.1%	11.1%	7.8%	13.1%
Rural South 05/06	66.7%	12.3%	8.5%	12.6%
Mid 00/01	65.3%	8.7%	4.5%	21.6%
Mid 05/06	65.2%	9.1%	4.8%	20.9%
North 00/01	74.2%	13.3%	5.4%	7.1%
North 00 05/06	74.3%	13.6%	4.9%	7.2%
Manitoba 00/01	85.8%	4.2%	3.9%	6.1%
Manitoba 05/06	85.6%	4.4%	4.1%	5.9%

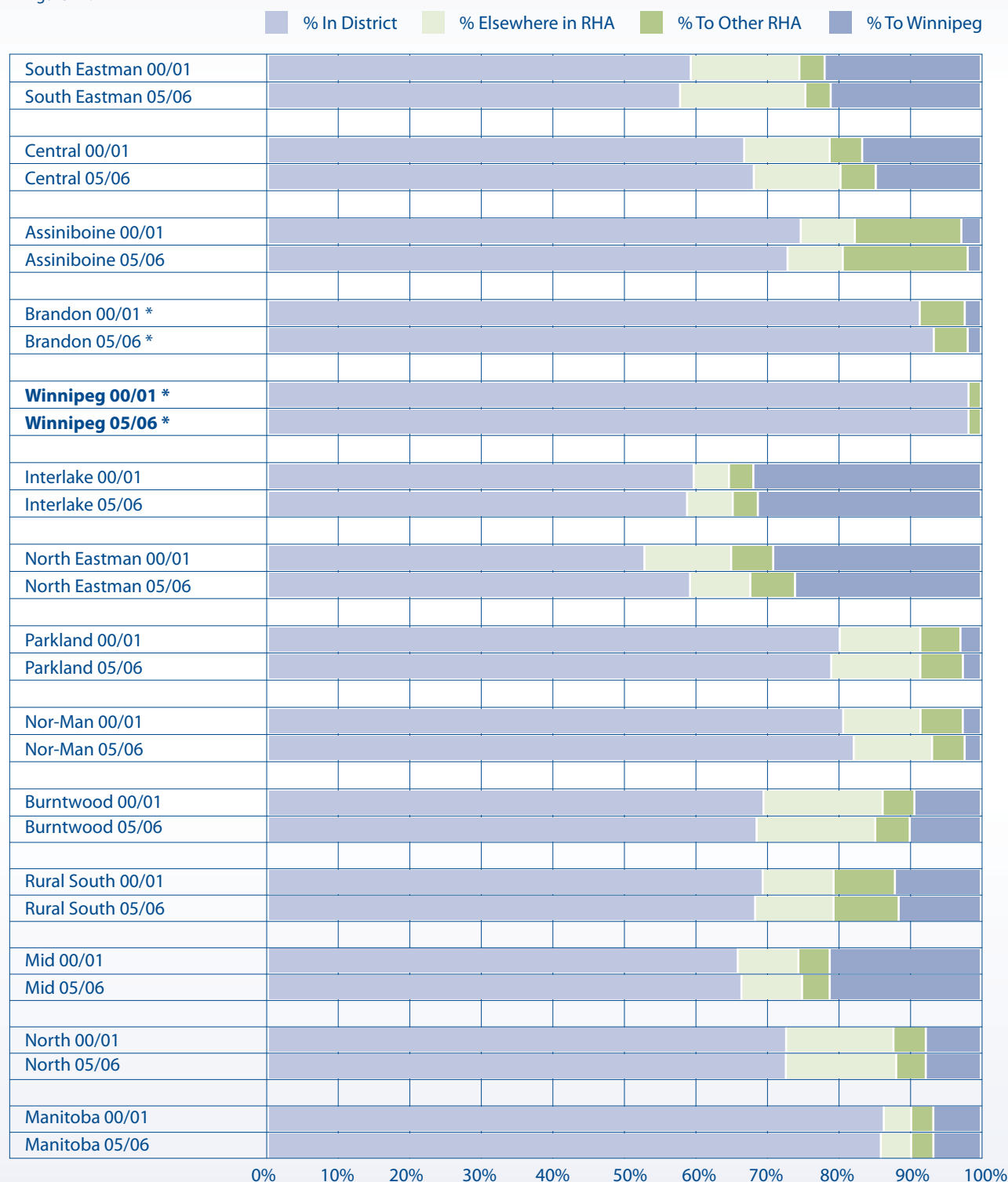
Source: Manitoba Centre for Health Policy, 2009

\* For Winnipeg and Brandon residents, visits to physicians anywhere within their RHA are considered 'In District'  
 ". " denotes suppression due to small numbers

## Location of Visits to General and Family Practitioners by RHA

Where RHA Residents Went for Visits to GP/FPs, 2000/01 & 2005/06.

Figure 11.1



Source: Manitoba Centre for Health Policy, 2009

\*For Winnipeg and Brandon residents, visits to physicians anywhere within their RHA are considered "In District".

## Use of Physicians by Winnipeg Community Areas

Age - & sex-adjusted percentage of residents with at least one ambulatory visit per year (to any physician), 2000/01 & 2005/06.

The proportion of an area's residents who received at least one ambulatory visit in a fiscal year. Ambulatory visits include virtually all contacts with physicians, except during inpatient hospitalization. Values were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.

Table 11.2

Community Areas	2000/01		2005/06		% Change
	Number of Residents	Adjusted %	Number of Residents	Adjusted %	
Fort Garry	51800	84.3%	55196	84.0%	-0.01%
Assiniboine South	31030	84.2%	31445	84.2%	0.48%
St. Boniface	40369	86.2%	43750	86.0%	0.14%
St. Vital	52130	85.9%	52951	86.0%	0.11%
Transcona	28125	85.4%	28201	85.8%	0.38%
River Heights	48174	85.3%	47398	85.2%	-0.25%
River East	77695	84.3%	79283	84.1%	-0.17%
Seven Oaks	49005	84.7%	50811	83.7%	-0.72%
St. James - Assiniboia	51086	85.0%	49810	84.5%	-0.71%
Inkster	26397	84.0%	26113	82.8%	-1.78%
Downtown	60323	83.3%	60054	83.7%	-0.29%
Point Douglas	34790	85.0%	35370	84.0%	-2.07%
Winnipeg	550928	84.7%	560382	84.5%	-0.36%
Manitoba	958477	83.2%	968517	82.6%	-0.96%

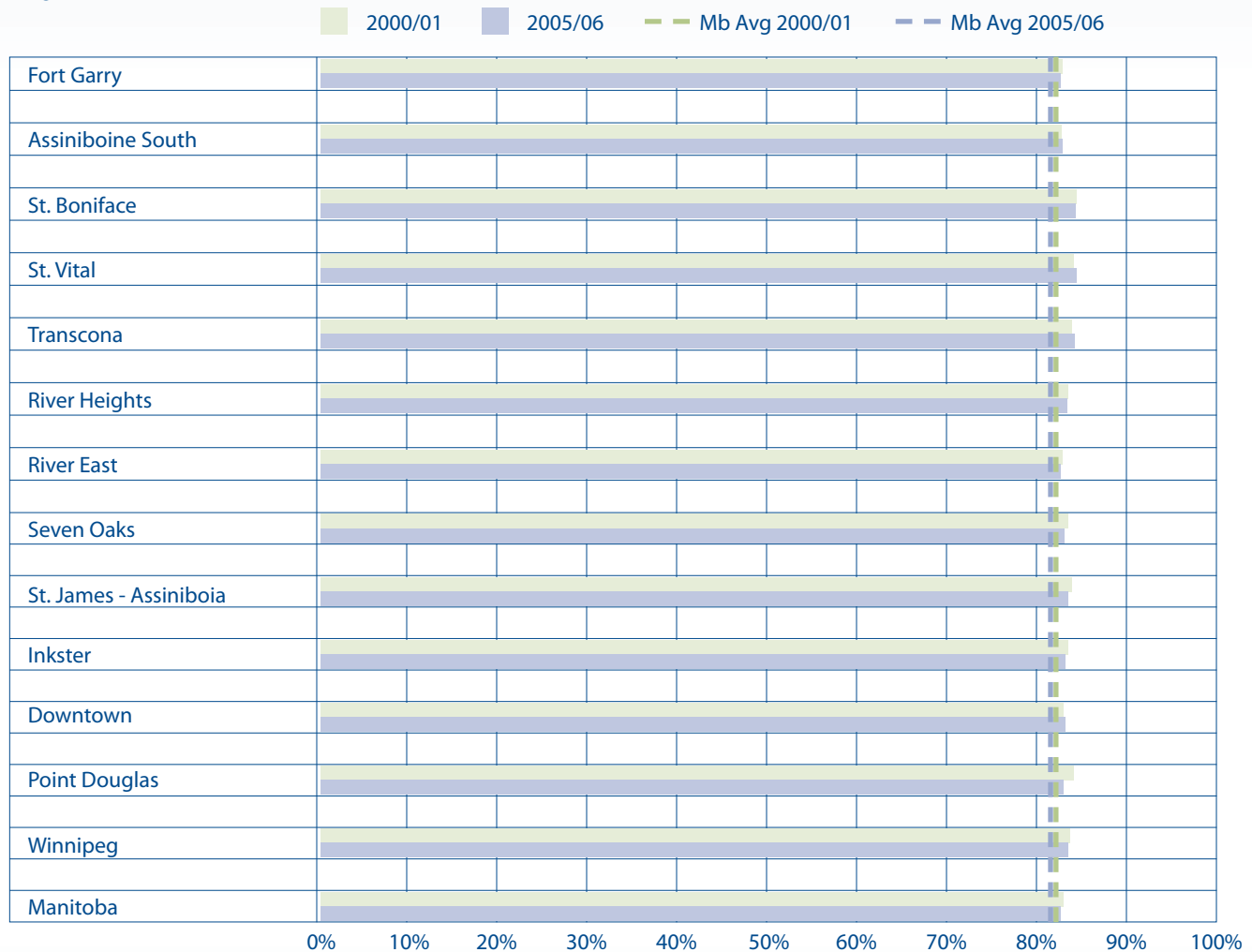
Source: Manitoba Centre for Health Policy, 2009

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.

## Use of Physicians by Winnipeg Community Areas

Age- & sex-adjusted percentage of residents with at least one ambulatory visit per year (to any physician), 2000/01 & 2005/06.

Figure 11.2



Source: Manitoba Centre for Health Policy, 2009



## Ambulatory Care Visit Rate

Age- & sex-adjusted annual rate of ambulatory visits to all physicians, per resident, 2000/01 & 2005/06.

This is the average number of visits to physicians per resident per year. Ambulatory visits include almost all contacts with physicians (general and family practitioners and specialists): office visits, walk-in clinics, home visits, nursing home visits, visits to outpatient departments, and some emergency room visits (where data are recorded). Excluded are services provided to patients while admitted to hospital and visits for prenatal care. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.

Table 11.3

Community Areas	2000/01		2005/06		% Change
	Number of Visits	Adj Rate/resident	Number of Visits	Adj Rate/resident	
Fort Garry	294611	5.0	317809	5.1	1.2%
Assiniboine South (1,2)	193621	5.6	198620	5.4	1.7%
St. Boniface (1)	246186	5.4	261503	5.3	-1.8%
St. Vital (2)	309403	5.3	323813	5.4	3.1%
Transcona	160091	5.1	160064	5.2	0.1%
River Heights (1,2)	321815	5.6	309045	5.5	-2.6%
River East	458646	5.1	464812	5.0	-0.9%
Seven Oaks (1,t)	318286	5.6	311519	5.1	-6.3%
St. James - Assiniboia (1)	327954	5.4	317801	5.3	-1.3%
Inkster (1,t)	159025	5.4	151216	5.1	-5.6%
Downtown (1,2)	418838	5.9	400996	5.8	-4.1%
Point Douglas (1,2)	242609	6.0	238403	5.9	-5.3%
Winnipeg (1)	3451085	5.3	3455601	5.2	-1.9%
Manitoba	5721596	5.0	5732203	4.9	-1.8%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per resident 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

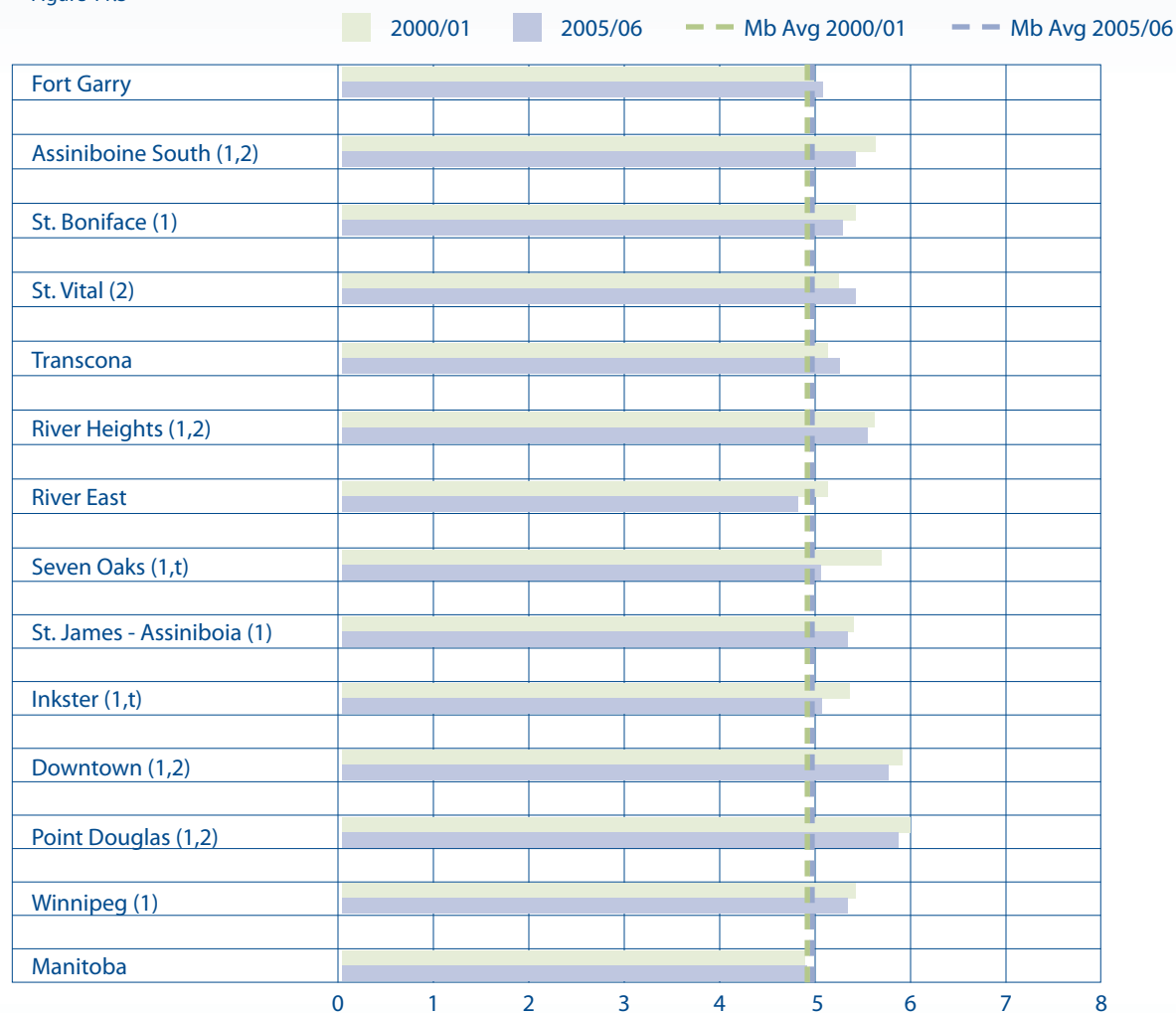
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## Ambulatory Care Visit Rate by Winnipeg Community Area

Age- & sex-adjusted annual rate of ambulatory visits to all physicians, per resident, 2000/01 & 2005/06.

Figure 11.3



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

## Ambulatory Care Consultation Rate

Age- & sex-adjusted annual rate of consults per resident (first referral), 2000/01 & 2005/06.

This is the average number of ambulatory consultations per resident per year. 'Consultations' are a subset of ambulatory visits: they occur when one physician refers a patient to another physician (usually a specialist or surgeon) because of the complexity, obscurity, or seriousness of the condition, or when the patient requests a second opinion. The consult rate is the best indicator of access to specialist care. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.

Table 11.4

Community Areas	2000/01		2005/06		% Change
	Number of Visits	Adj Rate/resident	Number of Visits	Adj Rate/resident	
Fort Garry (1,2)	18989	0.33	20807	0.33	2.8%
Assiniboine South (1,2)	12237	0.34	13681	0.36	10.9%
St. Boniface (1,2)	14463	0.31	16130	0.32	3.1%
St. Vital (1,2)	18297	0.31	20009	0.33	7.8%
Transcona (1,2)	9562	0.31	9904	0.31	3.7%
River Heights (1,2)	19265	0.33	19053	0.33	0.3%
River East (1,2)	27216	0.30	28230	0.30	1.5%
Seven Oaks (1,2)	17914	0.31	18503	0.30	-1.1%
St. James - Assiniboia (1,2)	19876	0.32	20678	0.33	5.9%
Inkster	7915	0.28	8051	0.27	1.0%
Downtown	19963	0.29	19830	0.29	-0.5%
Point Douglas	10904	0.28	11334	0.28	0.1%
Winnipeg (1,2)	196601	0.30	206210	0.31	2.7%
Manitoba	316454	0.27	327793	0.27	1.5%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per resident 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

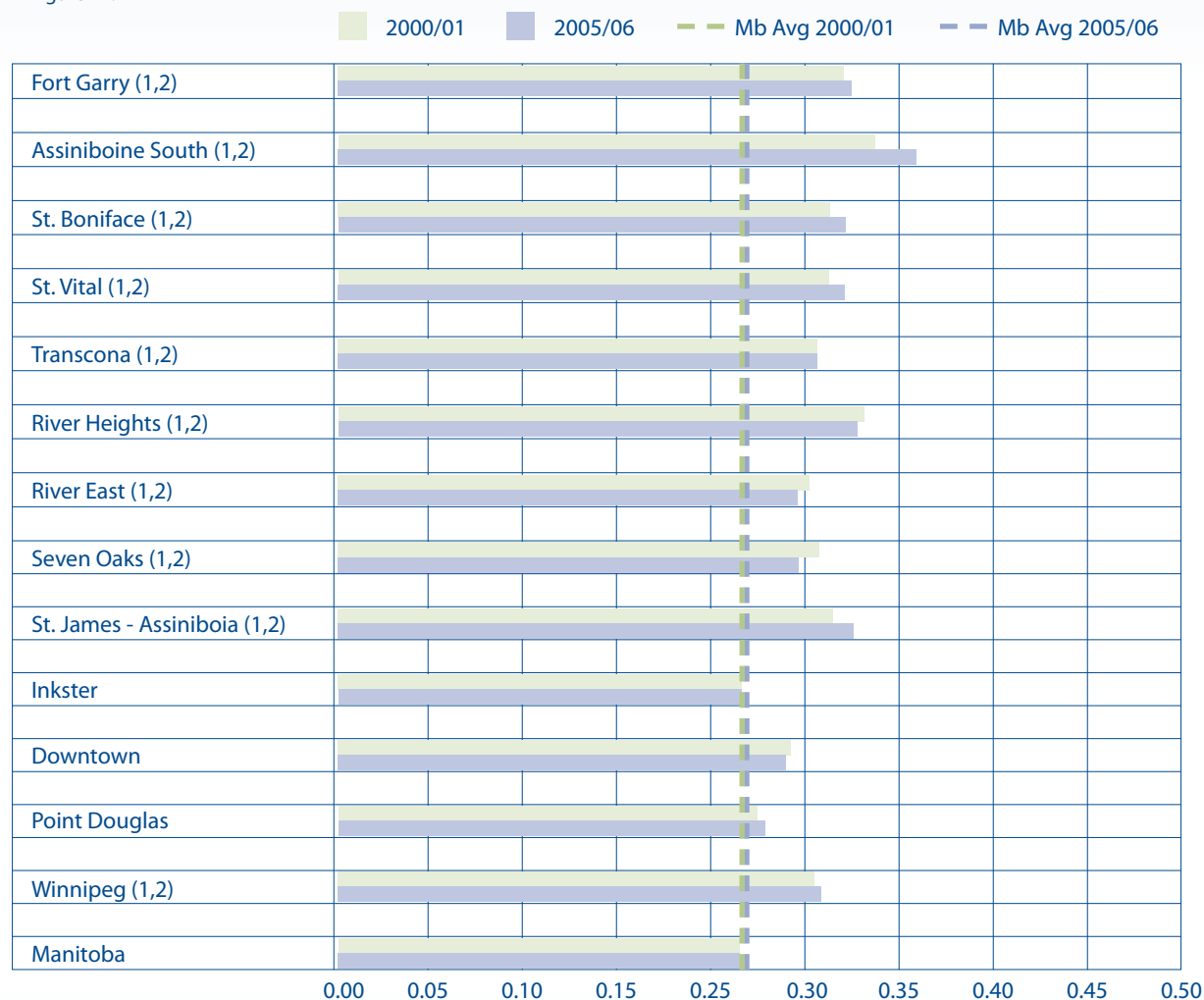
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## Ambulatory Care Consultation Rate by Winnipeg Community Area

Age- & sex-adjusted annual rate of consults per resident (first referral), 2000/01 & 2005/06.

Figure 11.4



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

## Location of Visits to Specialists by RHA

The proportion of visits to Specialist physicians which took place within the resident's District, elsewhere in their RHA, in another RHA, or in Winnipeg. In Winnipeg and Brandon, all visits within the RHA were considered 'in District.' Churchill results are not shown because of incomplete data for physician claims. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.

Table 11.5

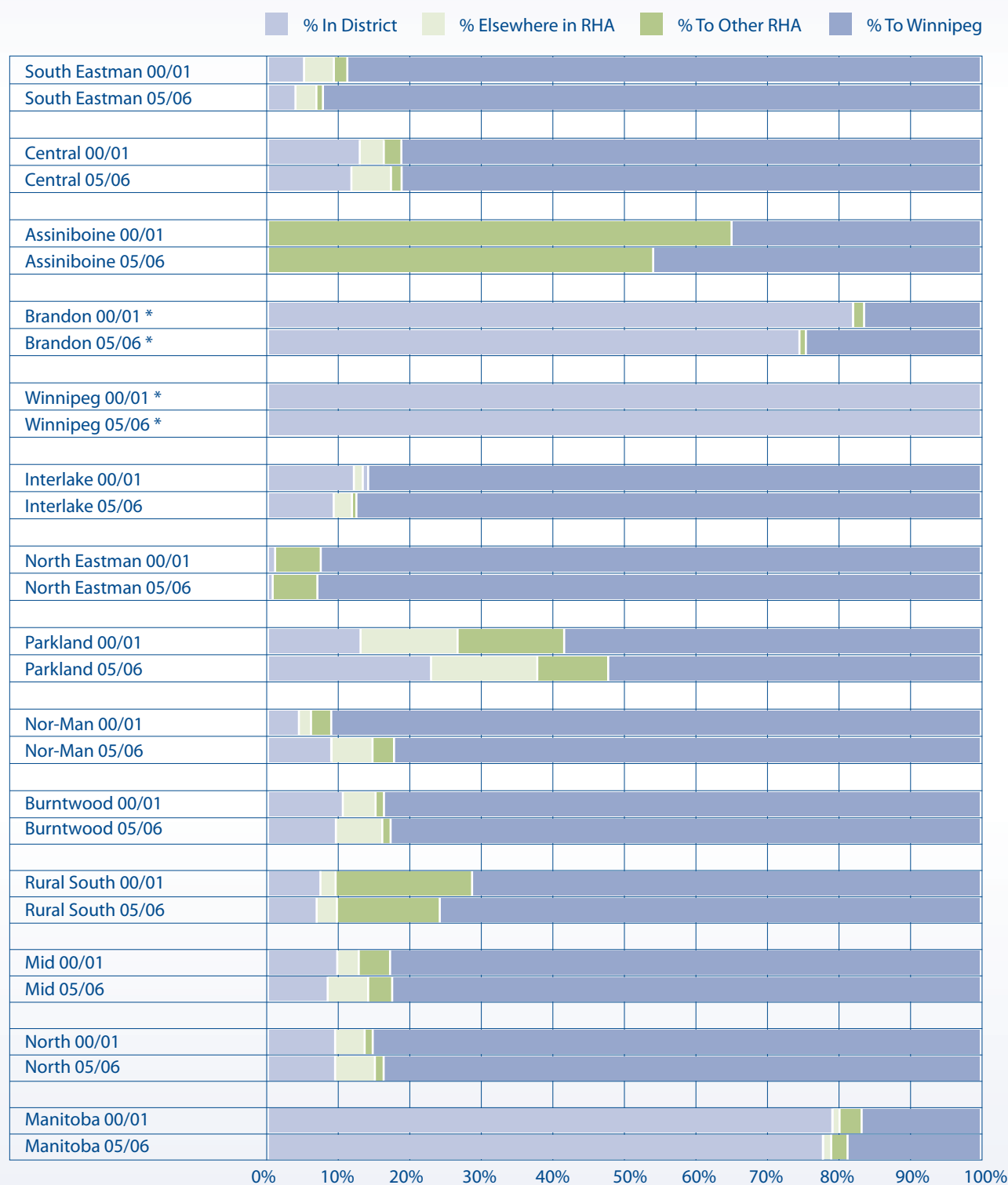
RHA	% In District	% Elsewhere in RHA	% To Other RHA	% To Winnipeg
South Eastman 00/01	5.9%	3.7%	1.8%	88.6%
South Eastman 05/06	4.5%	3.0%	0.9%	91.6%
Central 00/01	12.4%	3.1%	2.6%	81.9%
Central 05/06	11.5%	4.8%	1.7%	81.9%
Assiniboine 00/01	0.1%	0.1%	63.7%	36.2%
Assiniboine 05/06	0.0%	0.0%	54.4%	45.6%
Brandon 00/01 *	81.5%	.	2.1%	16.4%
Brandon 05/06 *	74.6%	.	0.5%	24.9%
<b>Winnipeg 00/01 *</b>	<b>99.8%</b>	<b>.</b>	<b>0.2%</b>	<b>.</b>
<b>Winnipeg 05/06 *</b>	<b>99.8%</b>	<b>.</b>	<b>0.2%</b>	<b>.</b>
Interlake 00/01	12.8%	1.4%	0.4%	85.3%
Interlake 05/06	9.1%	2.6%	0.6%	87.6%
North Eastman 00/01	0.6%	0.0%	6.0%	93.4%
North Eastman 05/06	0.3%	0.0%	6.1%	93.6%
Parkland 00/01	14.9%	12.7%	13.8%	58.7%
Parkland 05/06	22.9%	14.4%	9.9%	52.7%
Churchill 00/01	48.3%	.	1.0%	50.7%
Churchill 00	.	.	2.4%	97.6%
Nor-Man 00/01	4.0%	1.5%	3.0%	91.4%
Nor-Man 00	9.3%	4.9%	2.4%	83.4%
Burntwood 00/01	10.1%	4.1%	1.2%	84.6%
Burntwood	9.6%	5.4%	1.3%	83.8%
Rural South 00/01	6.7%	3.1%	14.1%	76.1%
Rural South 05/06	0.0%	0.0%	0.0%	0.0%
Mid 00/01	8.9%	3.8%	3.6%	83.7%
Mid 05/06	0.0%	0.0%	0.0%	0.0%
North 00/01	9.3%	5.1%	1.6%	83.9%
North 00 05/06	0.0%	0.0%	0.0%	0.0%
Manitoba 00/01	78.2%	0.8%	2.0%	18.9%
Manitoba 05/06	0.0%	0.0%	0.0%	0.0%

Source: Manitoba Centre for Health Policy, 2009

\* For Winnipeg and Brandon residents, visits to physicians anywhere within their RHA are considered 'In District'  
 ". " denotes suppression due to small numbers

## Location of Visits to Specialists by RHA

Figure 11.5: Where RHA Residents Went for Visits to Specialists, 2000/01 & 2005/06



Source: Manitoba Centre for Health Policy, 2009

\*For Winnipeg and Brandon residents, visits to physicians anywhere within their RHA are considered "In District".

## Supply of Personal Care Home Beds

PCH beds per 1000 residents aged 75+

The number of PCH beds per thousand residents aged 75+. Bed counts were taken from the Manitoba Health and Healthy Living PCH bed map. Data are shown for two 2-year periods: 1999/00–2000/01 and 2004/05–2005/06. '00' indicates 1999/2000–2000/01; '05' indicates 2004/05–2005/06.

Table 11.6

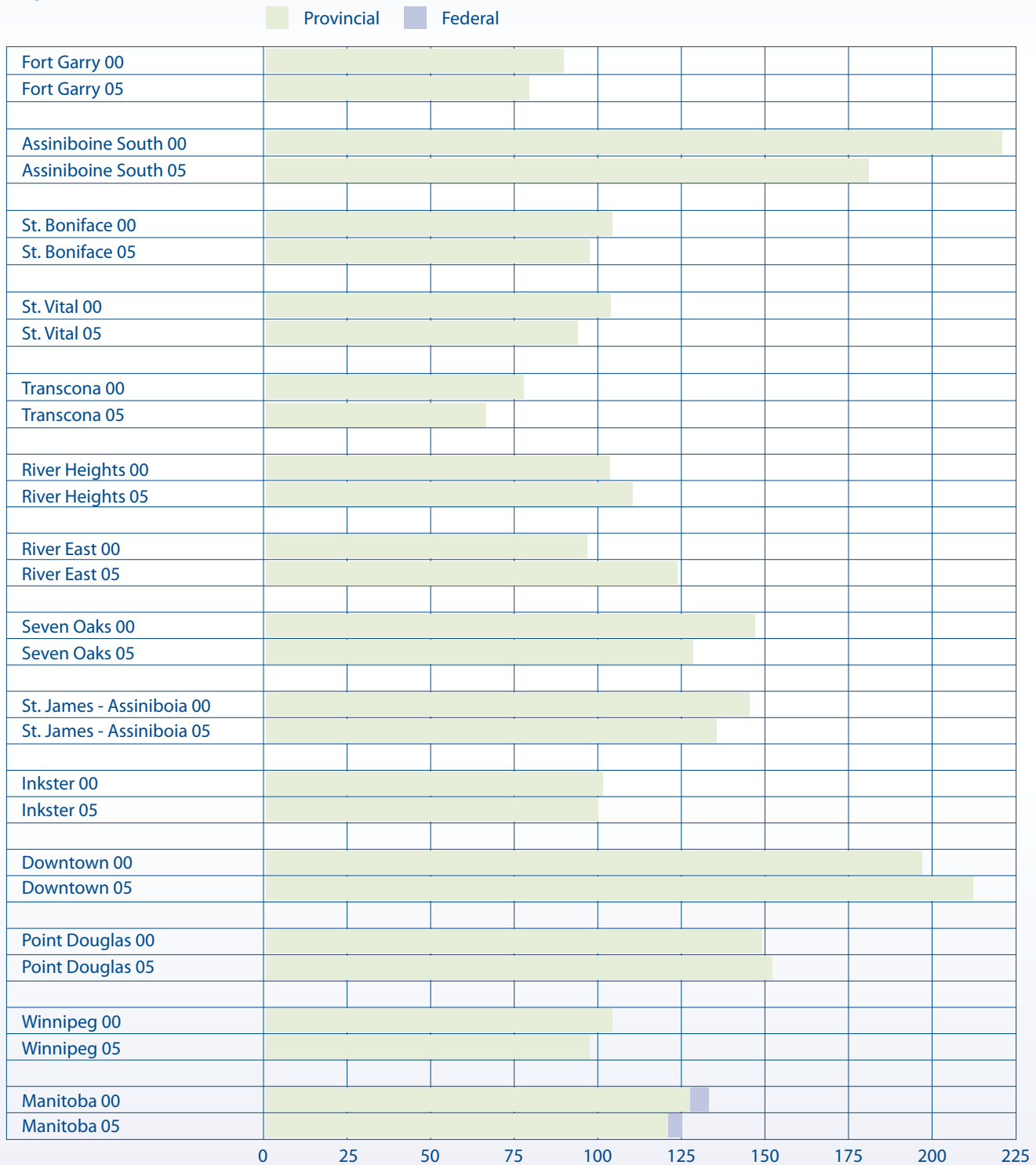
Wpg CA	Provincial Bed Count	Federal Bed Count	Pop 75+	Provincial Beds/1000 residents aged 75+	Federal Beds/1000 residents aged 75+
Fort Garry 00	269		3004	89.5	
Fort Garry 05	305		3874	78.7	
Assiniboine South 00	518		2344	221.0	
Assiniboine South 05	518		2854	181.5	
St. Boniface 00	314		3042	103.2	
St. Boniface 05	314		3224	97.4	
St. Vital 00	391		3796	103.0	
St. Vital 05	391		4237	92.3	
Transcona 00	100		1306	76.6	
Transcona 05	100		1512	66.2	
River Heights 00	576.5		5545	104.0	
River Heights 05	587		5272	111.3	
River East 00	608		6258	97.2	
River East 05	648		5272	122.9	
Seven Oaks 00	597		4090	146.0	
Seven Oaks 05	577		4495	128.4	
St. James - Assiniboia 00	736		5097	144.4	
St. James - Assiniboia 05	731.5		5415	135.1	
Inkster 00	136		1354	100.5	
Inkster 05	136		1362	99.9	
Downtown 00	935		4804	194.6	
Downtown 05	952		4511	211.0	
Point Douglas 00	469		3144	149.2	
Point Douglas 05	433		2852	151.8	
Winnipeg 00	5650		43781	129.0	
Winnipeg 05	5693		46669	122.0	
Manitoba 00	9679	229	76224	127.0	3.0
Manitoba 05	9774	248	80045	122.1	3.1

Source: Manitoba Centre for Health Policy, 2009

## Supply of Personal Care Home Beds by Winnipeg Community Area

Supply of personal care home (PCH) beds by Winnipeg Community Areas, PCH beds per 1000 residents aged 75+. '00' indicates 1999/2000-2000/01; '050' indicates 2004/05-2005/06.

Figure 11.6



Source: Manitoba Centre for Health Policy, 2009



## Operational Hospital Beds by RHA

Number of 'Setup Beds' per 1000 residents, 2000/01 & 2005/06.

The number of beds in acute care hospitals within each RHA, divided by the population of the RHA. The beds counts come from the "setup beds" data kept by Manitoba Health and Healthy Living for 2000/01 and 2005/06. These values need to be interpreted with caution because the actual number for beds in use in each hospital varies through the year and beds can be assigned use for "non-acute" care. The values are shown to provide an overall indication of the relative supply of beds across the province, and to track major changes over time.

Table 11.7

	Pop 2000/01	# Setup Beds 2000/01	Beds per 1000 Pop 2000/01	Pop 2005/06	# Setup Beds 2005/06	Beds per 1000 Pop 2005/06
South Eastman	54427	104	1.91	60368	125	2.07
Central	96835	431	4.45	101163	343	3.39
Assiniboine	71544	380	5.31	68515	357	5.21
Brandon	47337	336	7.10	49225	315	6.40
<b>Winnipeg</b>	<b>649011</b>	<b>2306</b>	<b>3.55</b>	<b>662520</b>	<b>2293</b>	<b>3.46</b>
Interlake	74944	185	2.47	76816	175	2.28
North Eastman	39369	96	2.44	40012	88	2.20
Parkland	43939	226	5.14	42192	224	5.31
Churchill *	1008	28	27.78	957	28	29.26
Nor-Man	25233	134	5.31	24381	91	3.73
Burntwood	45051	170	3.77	46167	161	3.49
Rural South	222806	915	4.11	230046	825	3.59
Mid	158252	507	3.20	159020	487	3.06
North	71292	332	4.66	71505	280	3.92
Manitoba	1151894	4396	3.82	1175234	4200	3.57

Source: Manitoba Centre for Health Policy, 2009

Note: the total population for MB includes public trustees, but these population numbers have been excluded from the populations for each RHA and aggregate area

public trustees 2000/01 = 3196

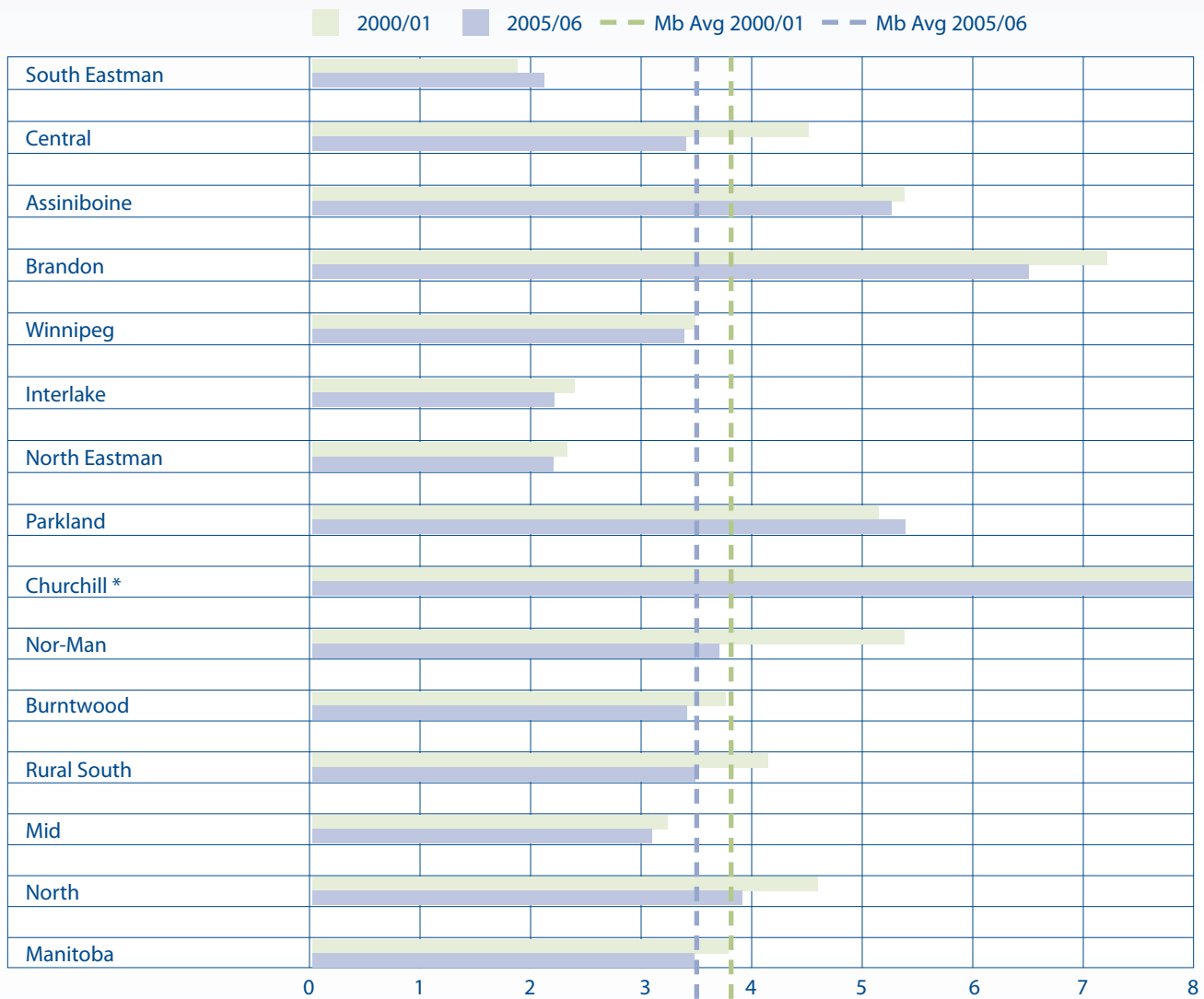
public trustees 2005/06 = 2918

\* The Churchill Regional Health Centre also serves other Northern areas, including Nunavut.

## Operational Hospital Beds by RHA

Number of operative 'Setup Beds' per 1000 residents by RHA.

Figure 11.7



Source: Manitoba Centre for Health Policy, 2009

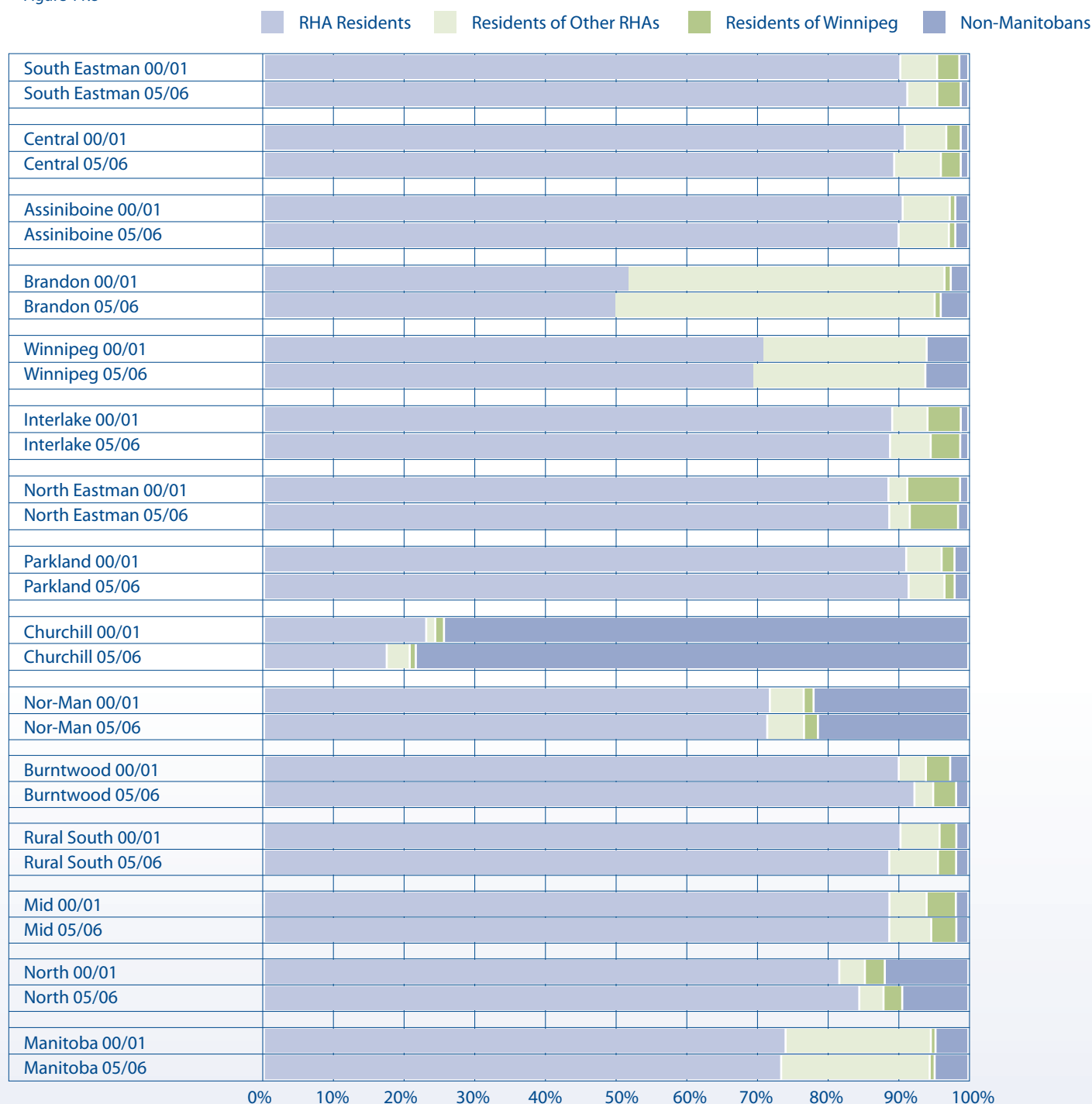
\* The Churchill Regional Health Centre also serves other Northern areas, including Nunavut.

## In & Out Flow of RHA Inpatients

The in and out flow of the Winnipeg Region's residents in measuring:  
 Catchment: where RHA hospital inpatients came from based on hospital separations, and  
 Location: where RHA residents went for hospital separations.

We report on Hospital Catchment: Where Patients Using WRHA Hospitals Came From of all separations from all hospitals in each RHA. This is the proportion of hospitalizations that was provided to WHR residents, residents of other RHAs, Winnipeg residents, or out-of-province residents. Over 97% of residents of Winnipeg attend hospitals in the region (location). Less than 1.5% of WHR residents use out-of-province hospitals.  
 '00/01 indicated 2000/01; 05/06 indicates 2005/06

Figure 11.8



Source: Manitoba Centre for Health Policy, 2009



# 12. EFFECTIVENESS

## Tonsillectomy/Adenoidectomy

Variations in surgical rates can suggest “clinical uncertainty” around indications for the surgical procedure in question. This uncertainty can mean that patients may unnecessarily undergo a surgical procedure with all of its attendant risks and with little benefit.

Rates of tonsillectomy and/or adenoidectomy (T/A) procedures performed per 1000 children 0 to 14 years of age and were calculated for two, five-year time periods: 1996/97–2000/01 and 2001/02–2005/06. Both inpatient and outpatient T/A procedures were captured in the analysis. Age- and sex-adjusted rates per 1000 children aged 0–14.

Table 12.1

Community Area	1996/97–2000/01		2001/02–2005/06		% Change
	Surgeries in 5 years	Adjusted Rate /1000	Surgeries in 5 years	Adjusted Rate /1000	
Fort Garry	275	4.4	283	4.7	-57.8%
Assiniboine South	179	4.9	145	4.5	-16.8%
St. Boniface	258	5.9	226	5.0	-8.1%
St. Vital	341	5.4	262	4.8	-10.8%
Transcona	222	6.1	179	5.3	-32.5%
River Heights	181	4.3	161	4.0	-38.5%
River East	464	5.2	437	5.1	-30.5%
Seven Oaks (t)	290	5.3	221	4.3	54.7%
St. James - Assiniboia	316	6.2	247	5.2	-15.2%
Inkster (1,2)	154	4.0	125	3.5	101.3%
Downtown (1,2)	216	3.2	189	2.9	-19.6%
Point Douglas (1,2)	185	4.0	152	3.3	22.3%
Winnipeg (t)	3081	6.6	2627	6.1	25.4%
Manitoba (t)	6515	11.3	5474	9.5	-1.2%

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.

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

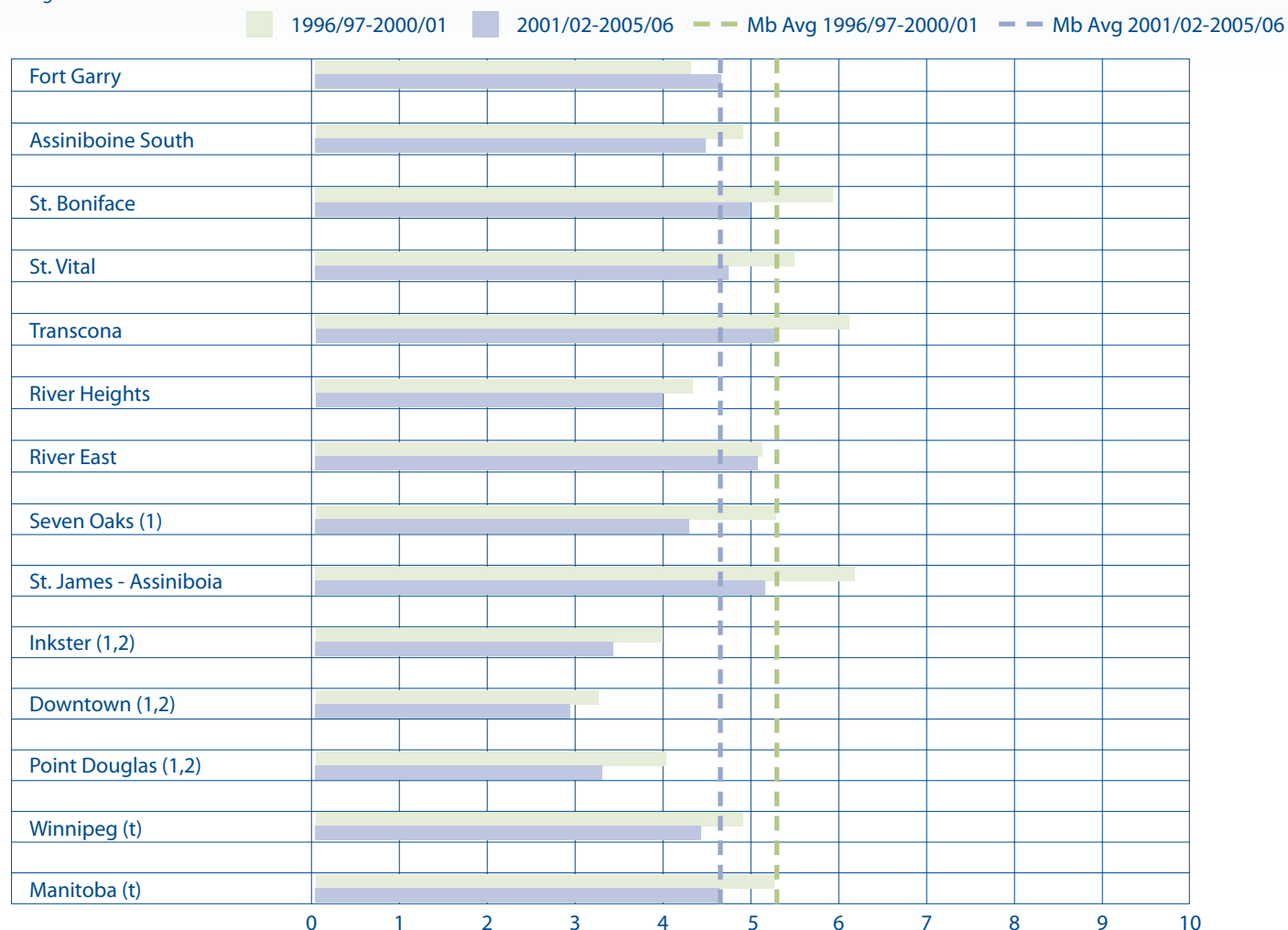
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Tonsillectomy/Adenoidectomy

Age- and sex-adjusted tonsillectomy/adenoidectomy surgeries per 1000 children aged 0-14.

Figure 12.1



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

## Hysterectomy

A hysterectomy is a surgical operation to remove the uterus and, sometimes, the cervix. Removal of the body of the uterus without removing the cervix is referred to as a subtotal (or partial) hysterectomy. Concerns have been voiced that hysterectomy is used too often as a first line of treatment and is not necessarily always appropriate. The WHR is encouraging the use of less invasive methods to manage discretionary indications for hysterectomy.

Hysterectomy rates were calculated for women aged 25 or older for fiscal years 1988/89-1995/96 and 1996/97-2003/04. Hysterectomy was defined as any hospitalization for a hysterectomy surgery. These were identified by ICD-9-CM procedure codes of 68.4, 68.5 or 68.9 in any procedure field. (Note: this excludes procedure codes for radical hysterectomies typically associated with cancer cases, i.e., codes 68.6 and 68.7). The age-adjusted number of hysterectomies performed per 1000 women aged 25 or older, by area of residence, regardless of location of provision.

Table 12.2

Community Area	1988/89-1995/96		1996/97-2003/04		% Change
	Avg # Hysterectomies / year	Adjusted Rate /1000	Avg # Hysterectomies / year	Adjusted Rate /1000	
Fort Garry (1,2,t)	86	4.4	87	3.8	-13.4%
Assiniboine South (t)	73	5.4	63	4.4	-19.7%
Transcona	60	5.4	63	5.3	-19.3%
River Heights (1,2,t)	101	4.6	79	3.7	-15.6%
St. Boniface (2,t)	76	4.7	72	4.2	-11.2%
St. Vital (t)	110	5.3	100	4.4	-10.4%
Seven Oaks (2,t)	98	5.0	92	4.3	0.1%
River East (t)	161	5.2	150	4.5	-15.3%
St. James - Assiniboia (t)	130	5.6	114	5.1	-11.7%
Inkster	50	5.1	50	4.7	-4.0%
Point Douglas	66	4.9	59	4.6	-10.8%
Downtown (1,2,t)	92	4.0	78	3.4	-3.3%
Winnipeg (2,t)	1103	5.0	1006	4.4	-11.8%
Manitoba (t)	1933	5.2	1880	4.9	-6.8%

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.

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

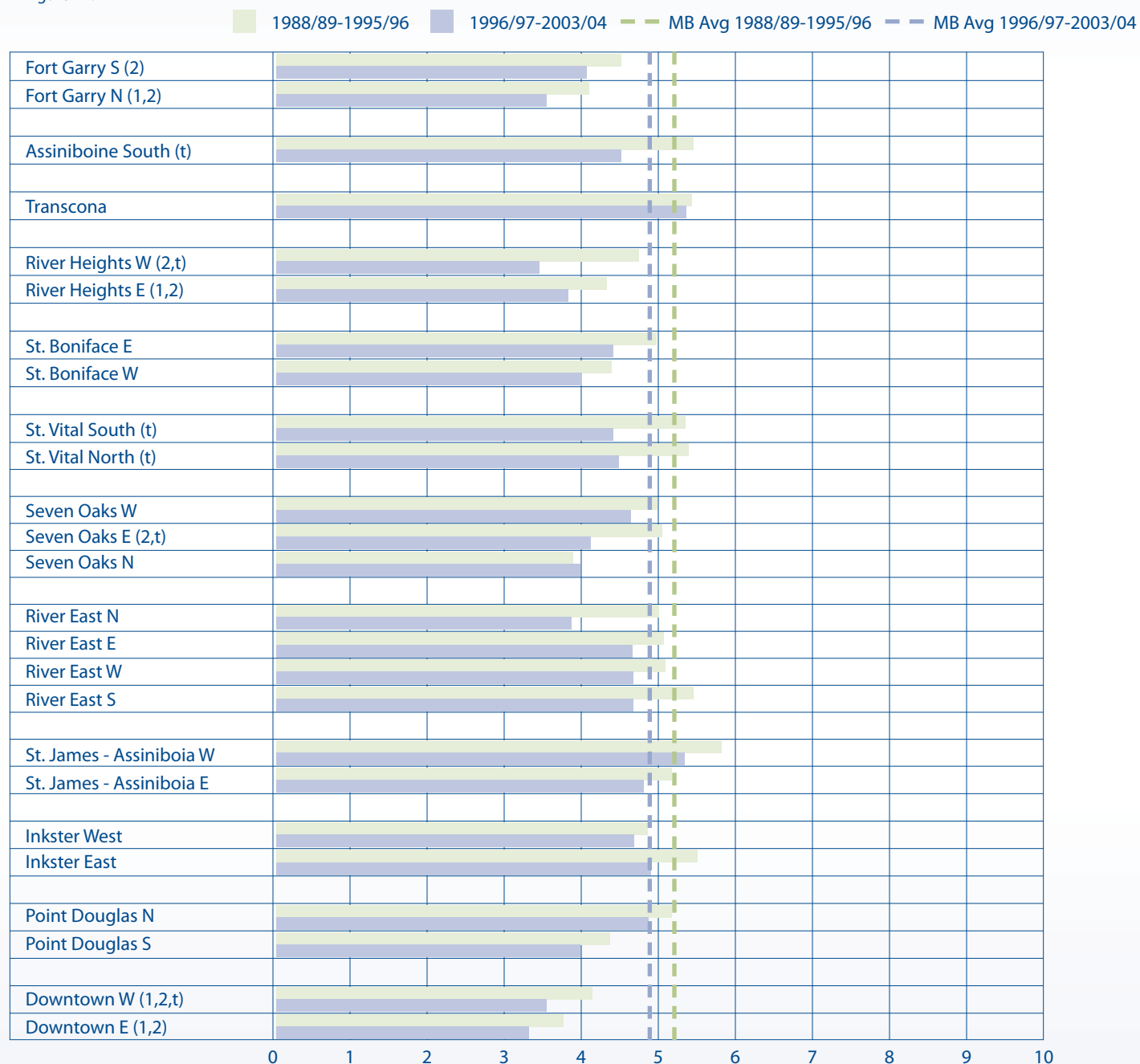
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Hysterectomy

Age-adjusted hysterectomy rates per 1000 women age 25+

Figure 12.2



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



## Caesarean Section (C-Section)

A C-section is a procedure in which a baby, rather than being born vaginally, is surgically extracted (removed) from the uterus. This type of delivery can have an impact on the newborn's health. Babies delivered via Caesarean section (C-Section) are at increased risk of complications including respiratory problems and difficulties breastfeeding.<sup>1</sup> C-Sections are also more costly than vaginal births (CIHI, 2006) and increase the risk of complications to the mother.<sup>2</sup>

The C-Section rates for women of child-bearing age (in this case 12 to 51 years) are calculated by taking the ratio of the number of women giving birth by C-Section to the total number of women giving birth. Data come from the hospital records. Values were calculated for two 5-year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age-adjusted to the Manitoba population in the first time period.

<sup>1</sup> Canadian Institute for Health Information. *Giving Birth in Canada: Providers of Maternity and Infant Care*. Available from [http://secure.cihi.ca/cihiweb/products/GBC2004\\_report\\_ENG.pdf](http://secure.cihi.ca/cihiweb/products/GBC2004_report_ENG.pdf)

Accessed on: August 19, 2010.

<sup>2</sup> Belizan JM, Althabe F, Cafferata ML. Health consequences of the increasing Caesarean Section rates. *Epidemiology* 2007;18(4):485–486.

Table 12.3

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Avg # C-sections / year	Adjusted Rate (%)	Avg # C-sections / year	Adjusted Rate (%)	
Fort Garry (t)	127	17.6%	142	20.0%	16.9%
Assiniboine South	55	17.1%	61	19.3%	15.2%
St. Boniface (t)	87	16.3%	111	20.3%	28.7%
St. Vital	122	16.9%	126	18.9%	12.5%
Transcona	73	18.0%	70	19.7%	11.2%
River Heights	121	18.2%	118	19.2%	7.3%
River East	184	17.5%	182	19.0%	10.1%
Seven Oaks (t)	113	18.1%	125	20.8%	16.5%
St. James - Assiniboia	115	18.6%	109	19.4%	5.0%
Inkster	78	18.0%	66	17.0%	-7.0%
Downtown	168	16.3%	174	17.9%	9.8%
Point Douglas (2)	94	16.0%	93	15.7%	-2.7%
Winnipeg (t)	1339	17.3%	1378	18.9%	10.2%
Manitoba (t)	2463	17.4%	2652	19.5%	13.2%

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

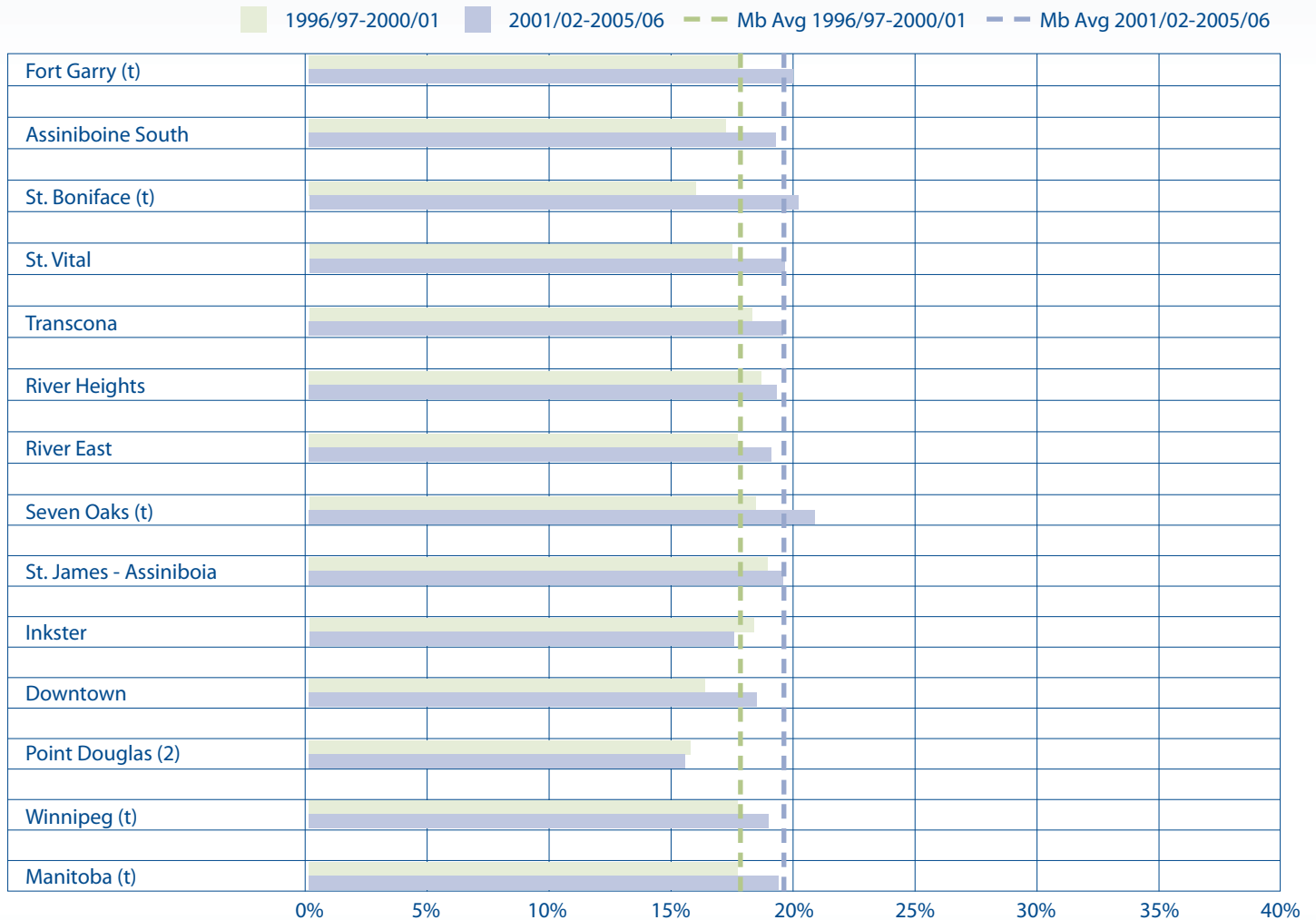
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Caesarean Section (C-Section)

Age-adjusted percent of deliveries

Figure 12.3



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

## Vaginal Birth after Caesarean Section

This indicator is limited to women who have previously given birth by C-Section. Vaginal birth after Caesarean Section (VBAC) is an important indicator of the effort to reduce unnecessary C-Sections when there is no indication for a C-Section and evidence that C-Sections may increase complications for the newborns. VBACs also tend to carry lower health risks to the mother and require shorter hospital stays than C-Sections.

The percent of women giving birth vaginally who had previously had at least one delivery by C-Section; the data come from the hospital records. Values were calculated for two 5-year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age-adjusted percent of deliveries to the Manitoba population in the first time period.

Table 12.4

Community Area	1996/97-2000/01		2001/02-2005/06		% Change
	Avg # VBACs / year	Adjusted Rate (%)	Avg # VBACs / year	Adjusted Rate (%)	
Fort Garry	26	38.5%	23	30.0%	-22.6%
Assiniboine South (t)	12	37.9%	8	24.3%	-36.3%
St. Boniface (t)	22	46.0%	19	33.7%	-28.0%
St. Vital	23	38.3%	24	38.3%	0.4%
Transcona	13	33.3%	12	33.1%	-1.3%
River Heights	15	28.4%	17	31.3%	8.4%
River East	32	33.8%	31	31.6%	-8.2%
Seven Oaks	24	35.8%	19	30.4%	-15.4%
St. James - Assiniboia	19	34.8%	17	32.3%	-7.8%
Inkster	17	35.9%	18	42.4%	19.0%
Downtown (2)	42	43.1%	45	42.7%	-1.3%
Point Douglas (2)	29	45.0%	33	45.3%	-1.1%
Winnipeg	274	37.9%	265	35.4%	-7.2%
Manitoba (t)	555	38.1%	549	34.9%	-9.0%

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

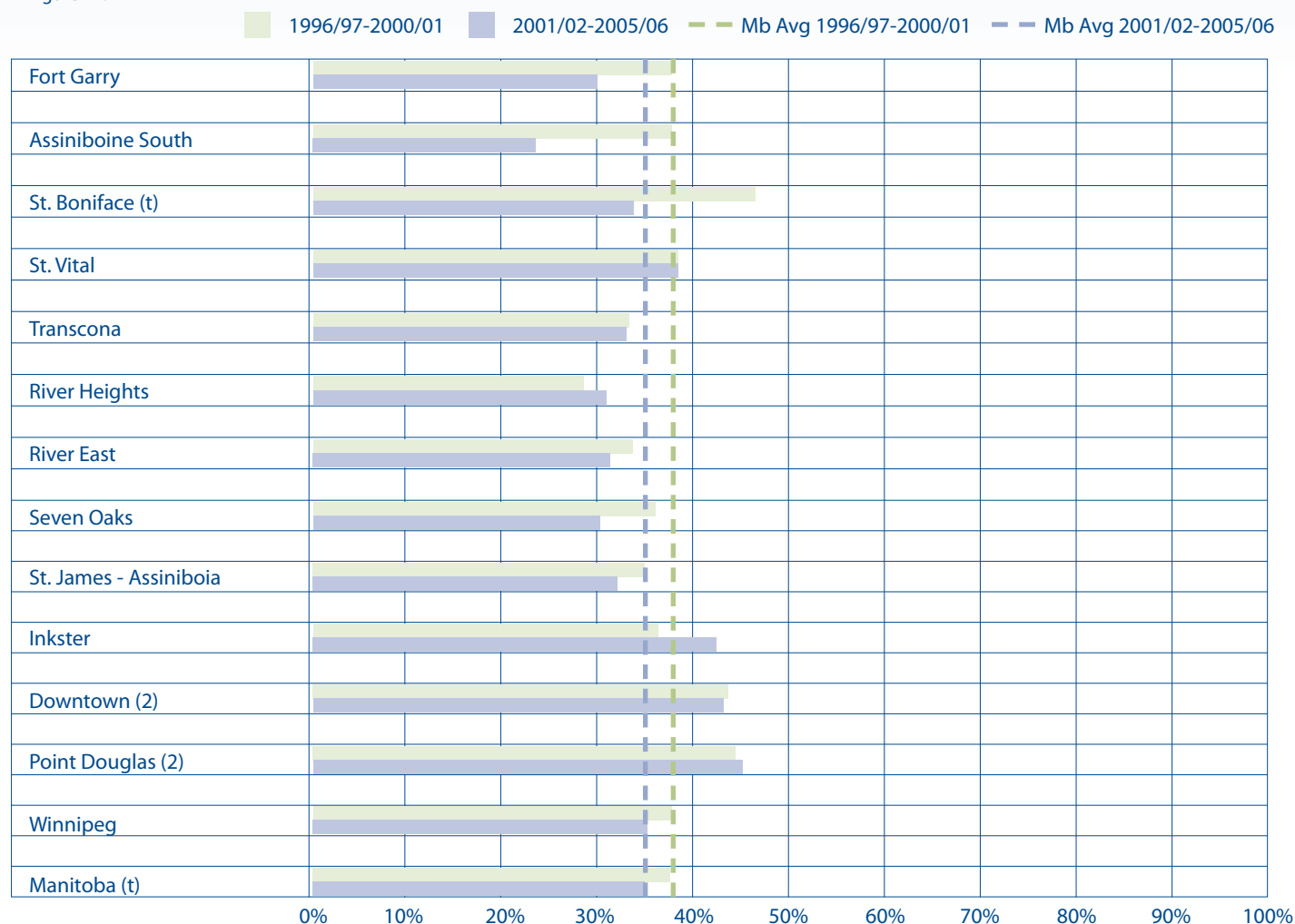
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Vaginal Birth after Caesarean Section

Age-adjusted percent for females ages 15+ with a previous C-section

Figure 12.4



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

## Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive (ACS) conditions are a set of medical conditions or diagnoses “for which timely and effective outpatient care can help to reduce the risks of hospitalization by either preventing the onset of an illness or condition, controlling an acute episodic illness or condition, or managing a chronic disease or condition.”<sup>1</sup>

The idea behind this measure was that if people receive an adequate level of good quality primary care, they should not need to be hospitalized for these conditions.

This indicator describes the rate at which an area’s residents were hospitalized for Ambulatory Care Sensitive (ACS) Conditions, per 1000 residents per year. The crude and adjusted rate of hospitalizations for ACS conditions per 1000 residents age 0-74 was measured over two fiscal years: 2000/01 and 2005/2006. The conditions making up this indicator are listed in Appendix A. For all ACS conditions, the ACS condition must have been coded as the “most responsible diagnosis” on the hospital discharge. All Winnipeg hospitals are included; PCHs and personal care homes including Deer Lodge and Riverview were excluded. Individuals who died in hospital were excluded from the numerator. The denominator includes all residents of the WHR age 0-74 as of December 31, 2000 and 2005.

<sup>1</sup> Billings J, Zeitel L, Lukomnik J, Carey TS, Blank AE, Newman L. Impact of socioeconomic status on hospital use in New York City. Health Affairs 1993;12(1):162-73.

Table 12.5

Community Area	2000/01		2005/06		% Change
	Hospitalizations	Adjusted Rate /1000	Hospitalizations	Adjusted Rate /1000	
Fort Garry (1,2)	281	4.8	249	4.1	-15.8%
Assiniboine South (1,2)	146	4.3	148	4.2	2.0%
St. Boniface (1,2)	216	4.8	226	4.6	-3.4%
St. Vital (1,2)	247	4.4	250	4.3	0.6%
Transcona (1,2)	193	6.5	187	6.2	-2.3%
River Heights (1,2)	263	5.1	242	4.7	-7.2%
River East (1,2)	569	6.5	552	6.3	-4.3%
Seven Oaks (1,2,t)	328	6.2	296	5.0	-13.3%
St. James - Assiniboia (1,2)	355	5.7	354	6.0	2.5%
Inkster (1)	237	8.6	224	8.3	-6.2%
Downtown (t)	737	11.7	568	9.4	-23.4%
Point Douglas (2)	406	11.4	453	12.3	6.3%
Winnipeg (1,2)	3978	6.6	3749	6.1	-7.4%
Manitoba (t)	12128	11.3	10342	9.5	-16.2%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rates per 1000 resident 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

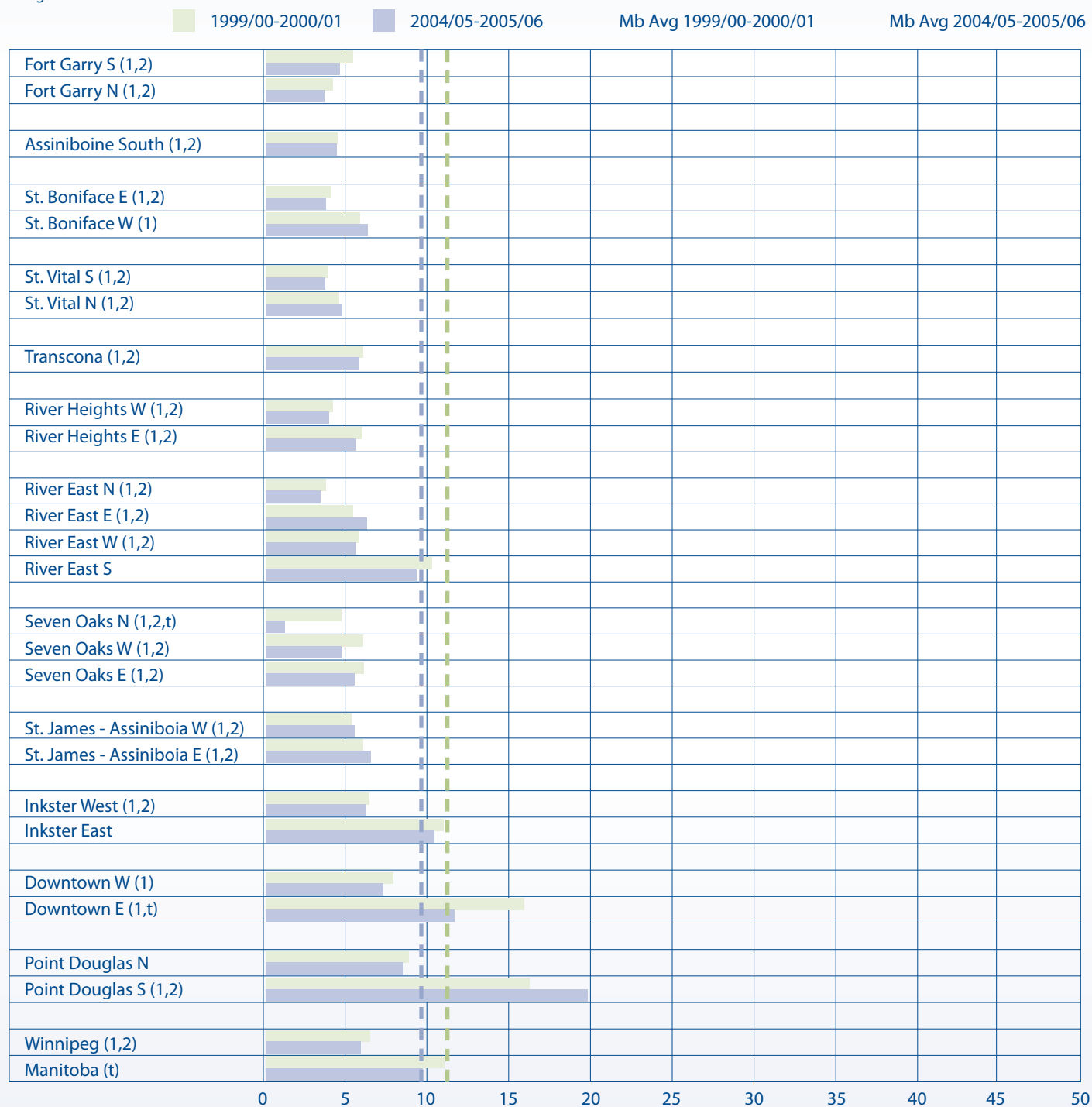
‘2’ indicates that in the second time period, the area’s rate was statistically different from the MB average at that time

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

# Ambulatory Care Sensitive Conditions

Age- & Sex-adjusted rate of hospitalization for Ambulatory Care Sensitive (ACS) conditions per 1000 residents age 0-74

Figure 12.5

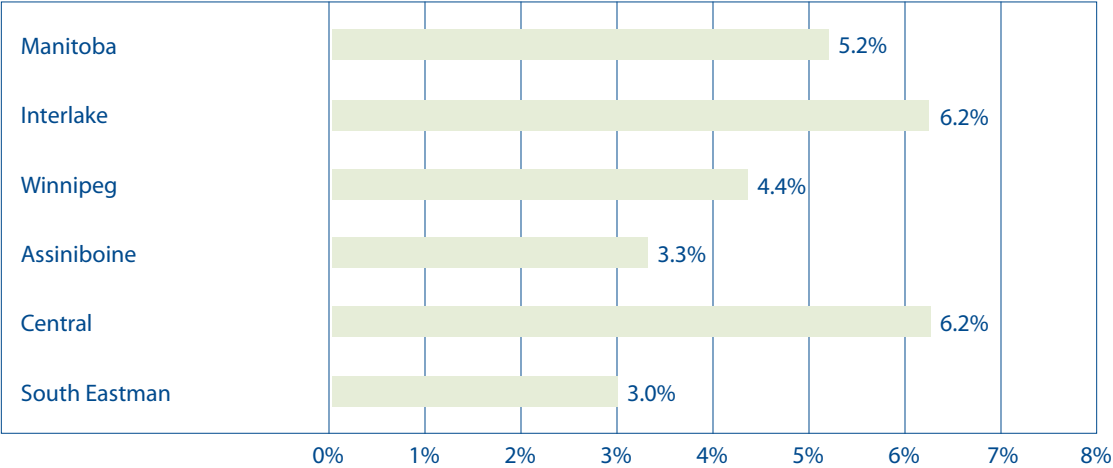


Source: Manitoba Centre for Health Policy, 2009

# Unplanned Readmission Following Discharge for AMI

Readmission after acute myocardial infarction (AMI) has been targeted for public reporting because it is a common, costly, and often preventable outcome. This indicator is the risk-adjusted rate of unplanned readmissions for selected reasons within 28 days following discharge for a heart attack in Manitoba. To enable comparison across regions, a statistical model was used to adjust for differences in age, sex and co-morbidities (co-existing illness). Due to small numbers, the Canadian Institute for Health Information's Health Indicators 2008 report data is used. Results are based on three years of pooled data, 2004/2005-2006/2007.

Figure 12.6



Source: Manitoba Centre for Health Policy, 2009





# 13. CONTINUITY OF SERVICES

## Continuity of Care

The proportion (%) of residents receiving at least 50% of their ambulatory visits over a two-year period from the same physician. For children 0 to 14, it could be a GP/FP or a Pediatrician; for those 15 to 59, only GP/FPs were used; for those 60+, it could be a GP/FP or an Internal Medicine specialist. Residents with less than three ambulatory visits over the two-year period were excluded. Values were calculated 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 13.1

Community Area	FY 1999/2000-2000/01		FY 2004/05-2005/06		% Change
	Patients in 3 years	Adjusted Rate (%)	Patients in 3 years	Adjusted Rate (%)	
Fort Garry	30864	69.3%	34400	71.6%	5.6%
Assiniboine South (2,t)	18696	68.8%	20349	73.1%	8.1%
St. Boniface	24697	68.4%	26359	68.0%	0.4%
St. Vital	32048	68.7%	34111	71.0%	5.7%
Transcona (1,2,t)	17945	72.5%	20036	80.0%	12.9%
River Heights	28594	66.2%	29650	69.1%	5.7%
River East (1,2)	50720	74.6%	54245	77.0%	4.6%
Seven Oaks (1,2,t)	32303	73.3%	35131	77.7%	7.4%
St. James - Assiniboia (2,t)	32015	68.5%	33705	74.3%	9.9%
Inkster	15557	68.1%	16126	71.0%	6.0%
Downtown (t)	33495	62.9%	36226	66.8%	7.6%
Point Douglas	19794	64.0%	21008	67.1%	6.2%
Winnipeg	336728	68.9%	361346	72.0%	6.4%
Manitoba	560555	65.8%	587365	67.7%	4.7%

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.

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

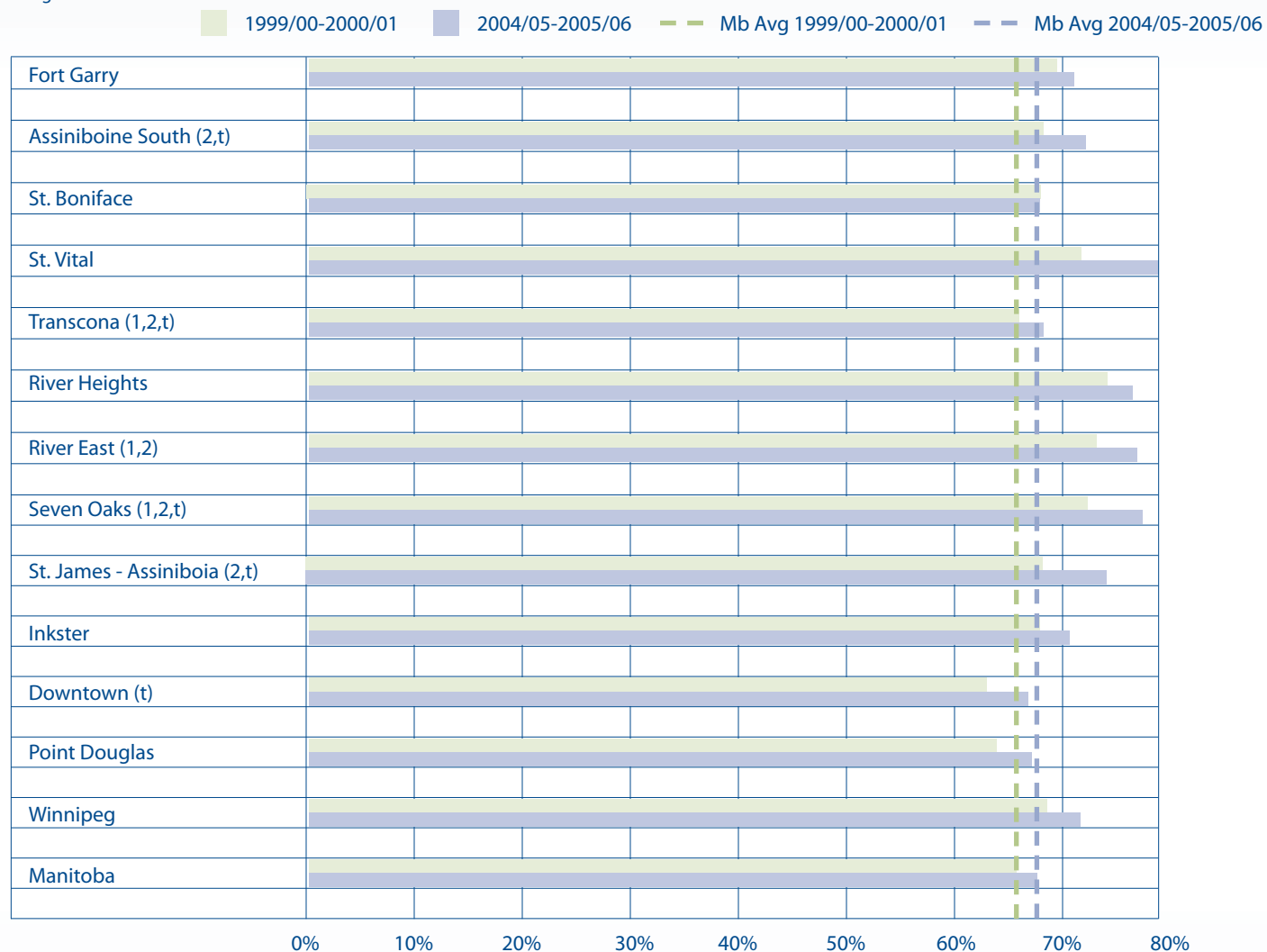
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## Continuity of Care Rates by Winnipeg Community Areas

The percentage of residents receiving at least 50% of their ambulatory visits over a two-year period from the same physician.

Figure 13.1



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

## Antidepressant Follow-Up

The proportion (%) of persons with a new prescription for antidepressants and a physician diagnosis of depression who had at least three physician visits within four months of the prescription being filled.

Average percentage rates were calculated for two 3-year periods, 1998/99-2000/01 and 2003/04-2005/06.

Table 13.2

Community Area	FY 1998/99-2000/01		FY 2003/04-2005/06		% Change
	Patients	Percentage	Patients	Percentage	
Fort Garry	741	60.2%	653	61.6%	2.3%
Assiniboine South	514	61.9%	491	59.9%	-3.2%
St. Boniface (1,t)	621	64.6%	552	58.0%	-10.2%
St. Vital	907	60.9%	693	58.0%	-4.7%
Transcona	527	58.1%	458	55.2%	-4.9%
River Heights (1)	911	63.2%	749	59.8%	-5.4%
River East	1284	59.0%	1106	57.6%	-2.4%
Seven Oaks (2)	747	63.1%	615	64.1%	1.6%
St. James - Assiniboia	916	60.7%	816	59.8%	-1.5%
Inkster	320	60.9%	286	59.8%	-1.9%
Downtown	1030	62.0%	976	62.1%	0.1%
Point Douglas (2)	552	62.0%	559	63.7%	2.8%
Winnipeg (1,2)	9070	61.3%	7954	60.0%	-1.9%
Manitoba	15783	58.8%	14155	58.2%	-1.8%

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

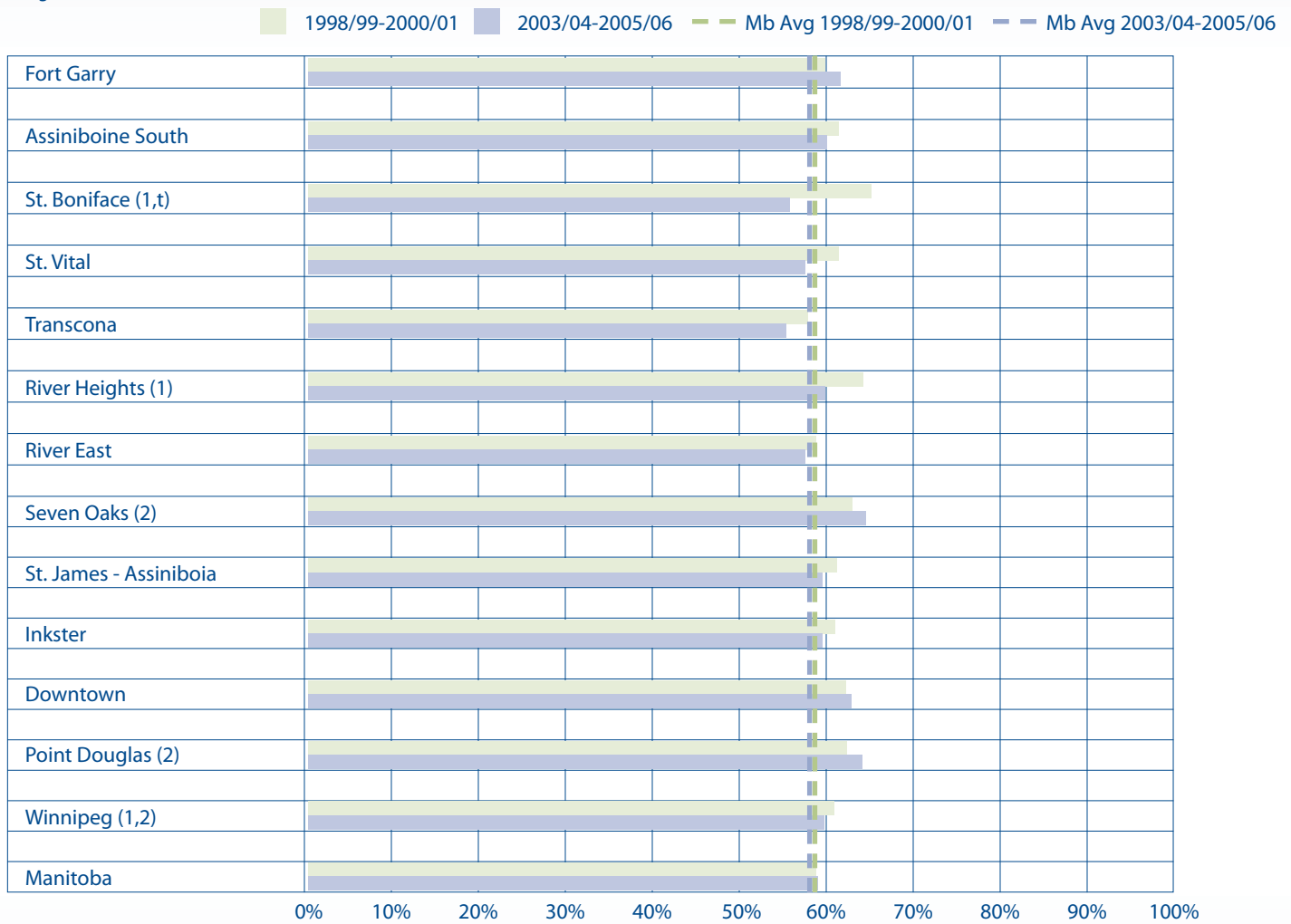
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## Antidepressant Follow-Up

Average percentage of persons prescribed a new antidepressant who received at least 3 physician visits in 4 months following the antidepressant prescription.

Figure 13.2



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



# 14. UTILIZATION

## Ambulatory Visits to All Physicians by Category of Illness

The distribution of diagnoses (illness categories) as attributed during ambulatory visits (one diagnosis code is recorded for each physician visit). Visits are grouped according to the 19 chapters of the International Classification of Diseases system (ICD-9-CM), and the top 10 reasons for a visit to a physician in Winnipeg are shown for each one-year fiscal time period, 2000/01 and 2005/06.

Figure 14.1: Physician Visits by Cause (percentage), Winnipeg 2000/01

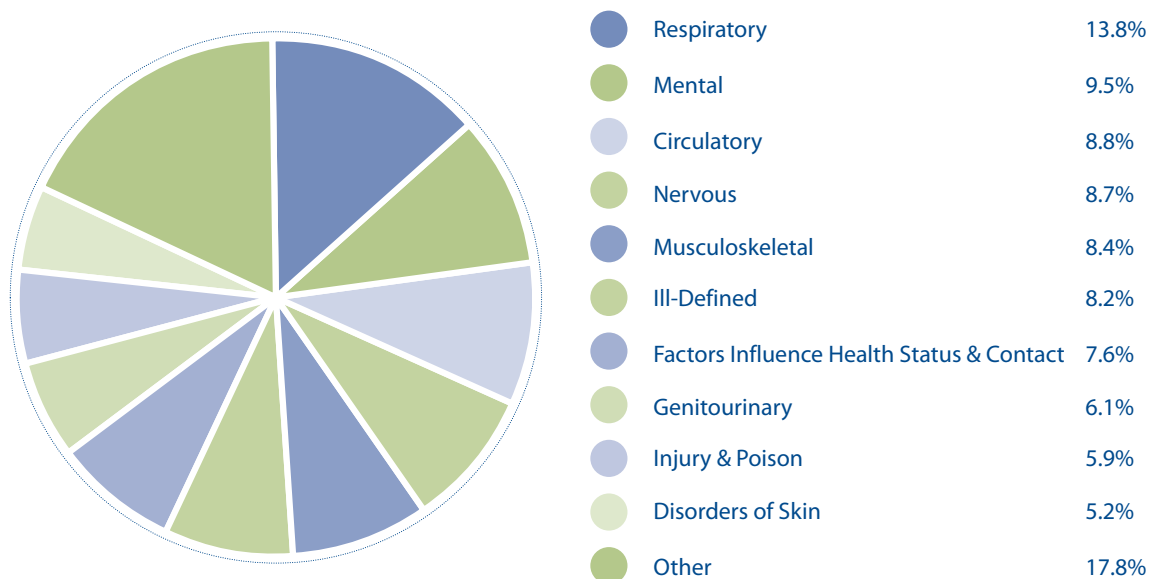
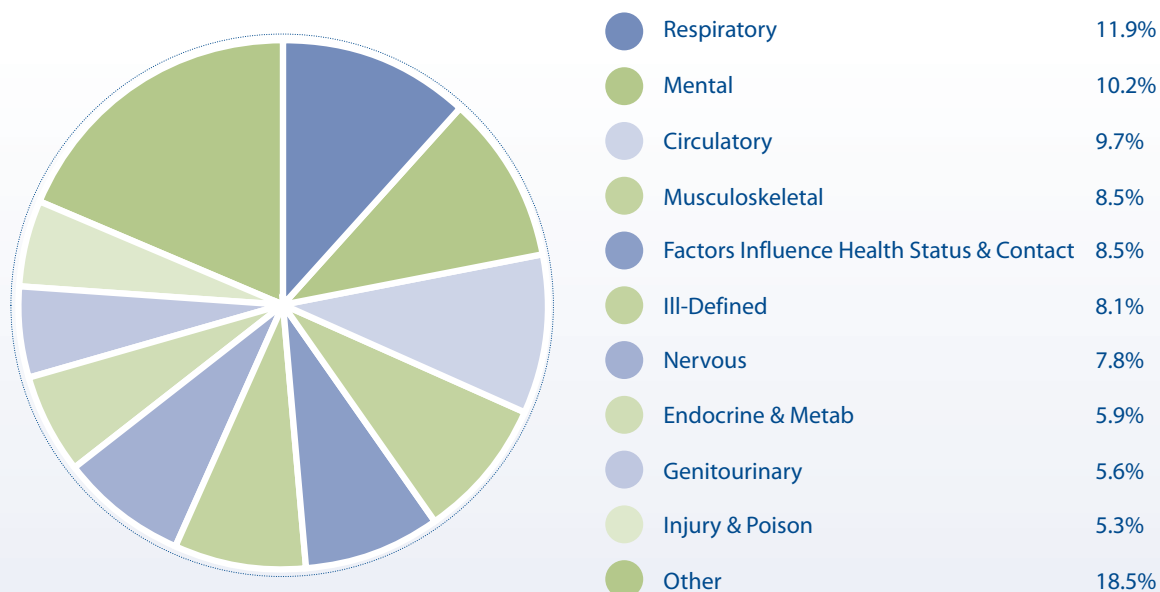


Figure 14.2: Physician Visits by Cause (percentage), Winnipeg 2005/06



Source: Manitoba Centre for Health Policy, 2009

## Hospital Days Used for Short Stays (<14 days):

The number of days used in 'short stay' hospitalizations. An inpatient hospitalization lasting from one day to 13 days is considered a short hospital stay. Newborn (birth) hospitalizations were excluded. All Winnipeg hospitals are included in the calculation of this indicator; PCHs and Long-term Care facilities were excluded (e.g., Deer Lodge and Riverview). The number of hospital days used in short stays (less than 14 days) per 1000 area residents per year. A resident having more than one short-stay hospitalization in the one-year periods reported contributed to the sum of all the days used for short stays. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.

Table 14.1

Hospital Days used for Short Stays (<14 days)					
Community Area	2000/01		2005/06		% Change
	Total Days/Year	Adjusted Rate/1000 residents	Total Days/Year	Adjusted Rate/1000 residents	
Fort Garry (1,2)	13727	241.7	13456	213.5	-8.0%
Assiniboine South (1,2)	8814	232.7	8692	225.7	-2.2%
St. Boniface (1,2)	12130	253.1	11418	230.9	-13.0%
St. Vital (1,2,t)	14817	252.4	13660	212.9	-9.1%
Transcona (1,2)	7869	275.9	7174	254.1	-8.7%
River Heights (1,2)	16396	265.7	14227	231.7	-12.0%
River East (1,2)	23987	262.5	23214	232.8	-5.3%
Seven Oaks (1,2)	14441	262.9	14511	235.1	-3.8%
St. James - Assiniboia (1,2)	17955	268.5	17681	259.2	0.3%
Inkster (2)	7520	294.7	7217	266.9	-4.7%
Downtown	23741	361.9	21576	320.4	-9.0%
Point Douglas	13904	367.8	13789	359.0	-4.5%
Winnipeg (1,2)	175301	269.6	166615	247.1	-6.9%
Manitoba	405691	352.2	380561	321.6	-8.1%

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.

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

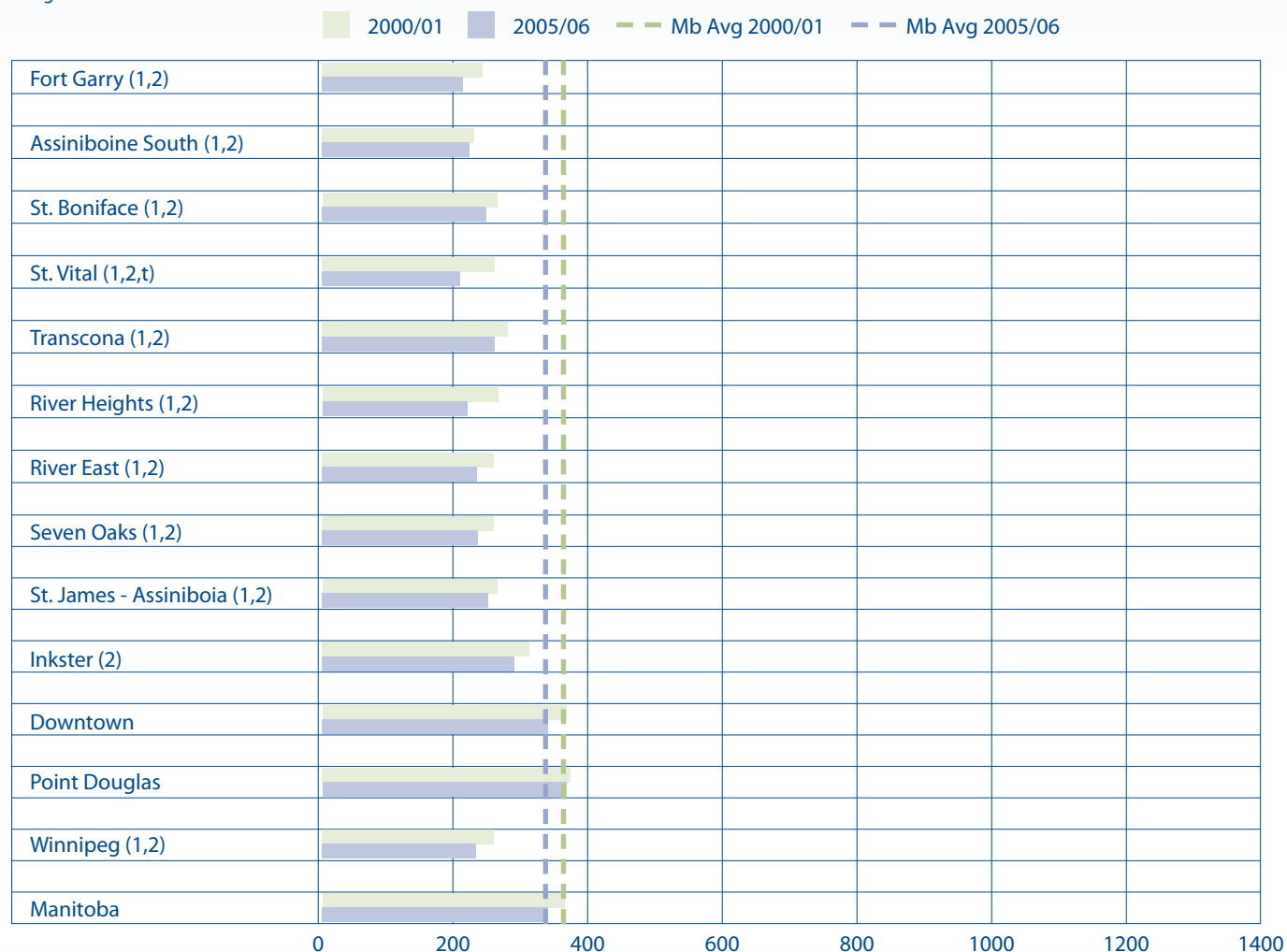
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## Hospital Days Used (Short Stays: < 14 days)

Age- & sex-adjusted rate of hospital days used in stays of less than 14 days, per 1000 residents

Figure 14.3



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



## Hospital Days Used for Long Stays (14+ days):

The number of days used in 'long-stay' hospitalizations. An inpatient hospitalization lasting 14 days or more is considered a long hospital stay. Newborn (birth) hospitalizations were excluded. All Winnipeg hospitals are included; PCHs and Long-term Care facilities were excluded (e.g., Deer Lodge and Riverview). The number of hospital days used in long stays (14 or more days) per 1,000 area residents per year. A resident having more than one long-stay hospitalization in the one-year periods contributed to sum of all the days used for long stays. However, each hospitalization was limited to 365 days as a maximum length of stay. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.

Table 14.2

Hospital Days used for Long Stays (14+ days)					
Community Area	2000/01		2005/06		% Change
	Total Days/Year	Adjusted Rate/1000 residents	Total Days/Year	Adjusted Rate/1000 residents	
Fort Garry (2)	23779	499.4	24679	367.2	-2.6%
Assiniboine South	16750	470.1	17985	403.2	6.5%
St. Boniface (t)	30392	712.9	23605	474.5	-28.2%
St. Vital	31878	571.5	29927	514.9	-7.5%
Transcona	13348	548.9	13200	639.2	-1.0%
River Heights	43891	679.4	36136	598.2	-16.5%
River East	58933	602.8	47155	446.8	-21.7%
Seven Oaks	40746	721.9	46849	751.2	10.1%
St. James - Assiniboia	42342	652.0	42411	629.2	2.0%
Inkster	13049	677.5	13772	672.2	4.8%
Downtown (1)	62359	1118.6	49154	888.9	-21.1%
Point Douglas	35198	941.0	32067	895.0	-12.2%
Winnipeg (1,2)	175301	269.6	166615	247.1	-10.5%
Manitoba	405691	352.2	380561	321.6	-8.9%

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.

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

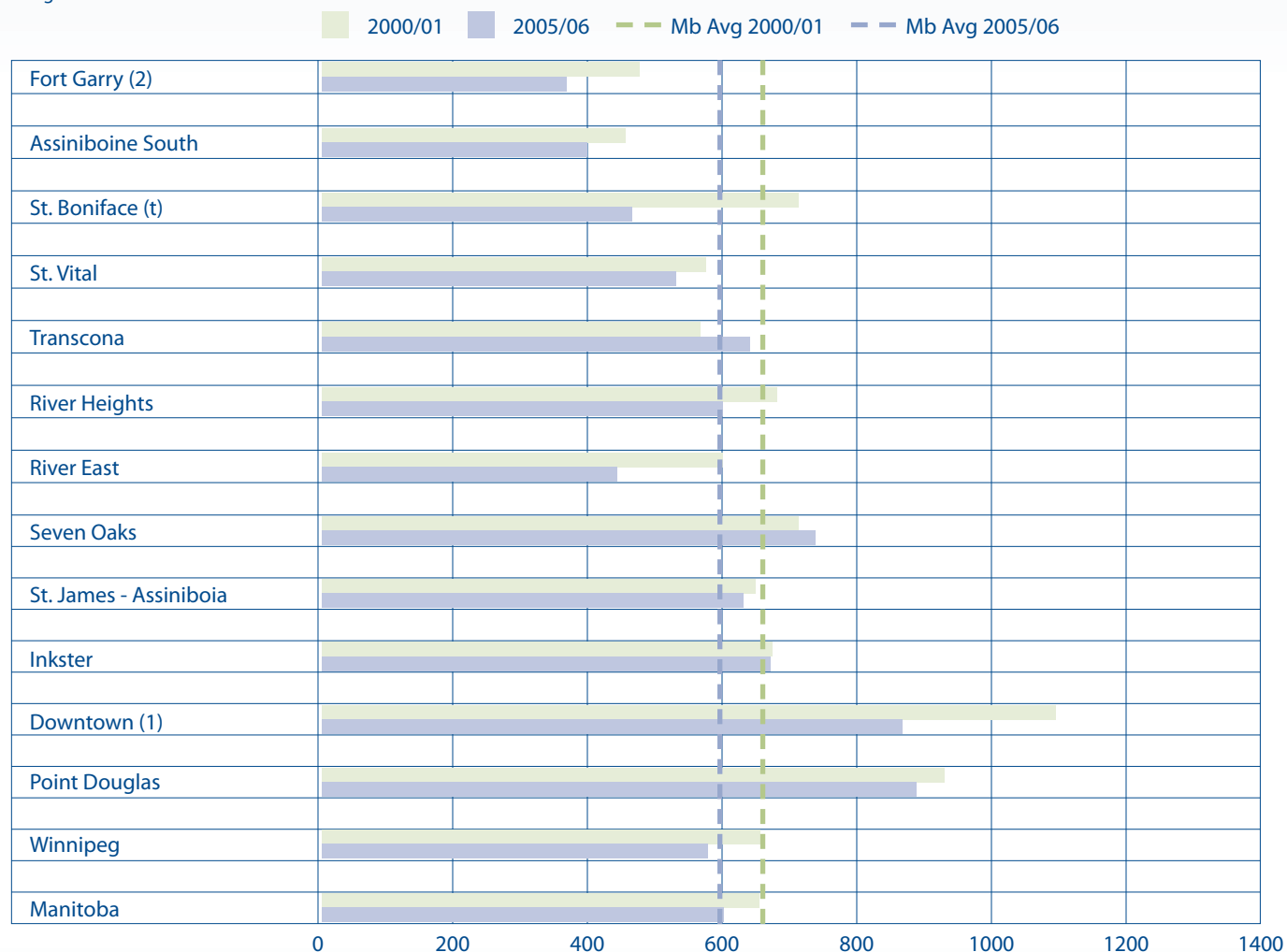
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## Hospital Days Used (Long Stays: + 14 days)

Age- & sex-adjusted rate of hospital days used in stays of 14 days or more, per 1,000 residents

Figure 14.4



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

## Cataract Surgery

Cataracts occur when the lens of the eye becomes cloudy and normal vision is impaired. The clouded lens is removed in its entirety by surgery and replaced with an intraocular lens made of plastic. This indicator describes the number of cataract replacement surgeries performed on area residents age 50 or older, per 1000 residents age 50 or older.

Cataract surgery was defined by a physician claim with tariff codes 5611, 5612 and tariff prefix 2 (surgery), or a hospital separation with ICD-9-CM procedure codes 13.11, 13.19, 13.2, 13.3, 13.41, 13.42, 13.43, 13.51, 13.59, or CCI code 1.CL.89. Additional cataract surgeries for Manitoba residents were added from medical reciprocal claims for out of province procedures, including Alberta (tariff code 27.72) and Saskatchewan (tariff codes 135S, 136S, 226S and 325S). Rates were calculated for 2000/01 and 2005/06 and age- & sex- adjusted to the Manitoba population age 50+ years in the first time period.

Table 14.3

Community Area	2000/01		2005/06		% Change
	Cataract Surgeries	Adjusted Rate/1000 residents 50+	Cataract Surgeries	Adjusted Rate/1000 residents 50+	
Fort Garry (t)	398	26.5	585	32.7	21.7%
Assiniboine South	255	25.1	339	27.8	14.3%
St. Boniface	422	30.6	466	31.0	-2.1%
St. Vital	504	29.5	560	30.4	-5.0%
Transcona	194	27.5	212	27.5	-2.3%
River Heights	636	30.6	594	29.6	-10.1%
River East	862	31.2	851	28.1	-13.1%
Seven Oaks	520	29.2	552	29.6	-5.6%
St. James - Assiniboia	615	27.6	724	30.5	13.6%
Inkster (2)	187	30.9	231	36.9	5.9%
Downtown	561	29.8	511	29.6	-12.3%
Point Douglas	381	32.5	303	28.4	-22.5%
Winnipeg	5535	29.5	5928	30.0	-3.5%
Manitoba	9185	27.7	9938	28.4	-2.0%

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.

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

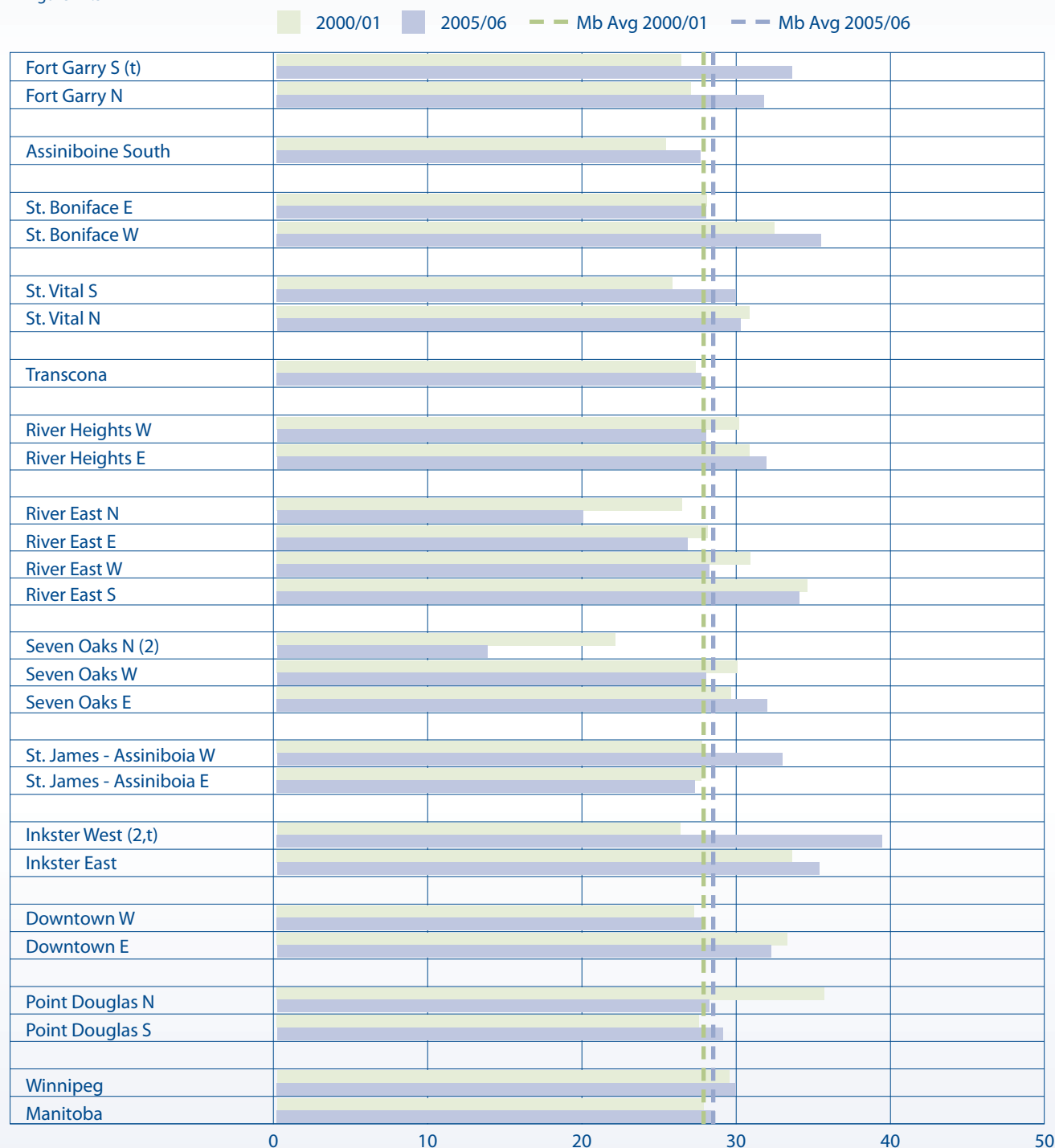
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Cataract Surgery

Age- & sex-adjusted annual rates per 1000 residents age 50 or over

Figure 14.5



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  
 '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

## Hip Replacement Surgery

Hip replacement surgery removes damaged or diseased parts of a hip joint and replaces them with new, man-made parts. The goals of this surgery are to: relieve pain, help the hip joint work better and improve walking and other movements. The most common reason for hip replacement surgery is osteoarthritis in the hip joint.

This indicator reports on the number of total hip replacements performed on area residents age 40 or older, per 1000 area residents age 40 or older. Hip replacements were defined by ICD-9-CM codes 81.50, 81.51, 81.53, or CCI code 1.VA.53 in any procedure field in hospital abstracts. Rates were calculated for two 5-year periods, 1996/97–2000/01 and 2001/02–2005/06, and age- & sex-adjusted to the Manitoba population age 40 or older in the first time period.

Table 14.4

Community Area	1996/97-2000/01	2001/02-2005/06	% Change
	Adjusted Rate per 1000 residents 40+	Adjusted Rate per 1000 residents 40+	
Fort Garry	2.1	2.1	3.2%
Assiniboine South (t)	1.7	2.6	67.7%
St. Boniface (t)	1.7	2.5	36.4%
St. Vital (t)	1.7	2.3	34.0%
Transcona (t)	1.5	2.1	36.8%
River Heights	2.0	2.3	10.7%
River East (t)	1.8	2.2	21.8%
Seven Oaks	1.7	1.9	9.9%
St. James - Assiniboia (t)	1.8	2.6	37.3%
Inkster (2)	1.2	1.4	9.7%
Downtown	1.7	1.9	2.4%
Point Douglas (2)	1.4	1.4	-10.0%
Winnipeg (t)	1.7	2.1	20.5%
Manitoba (t)	1.7	2.2	21.1%

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.

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

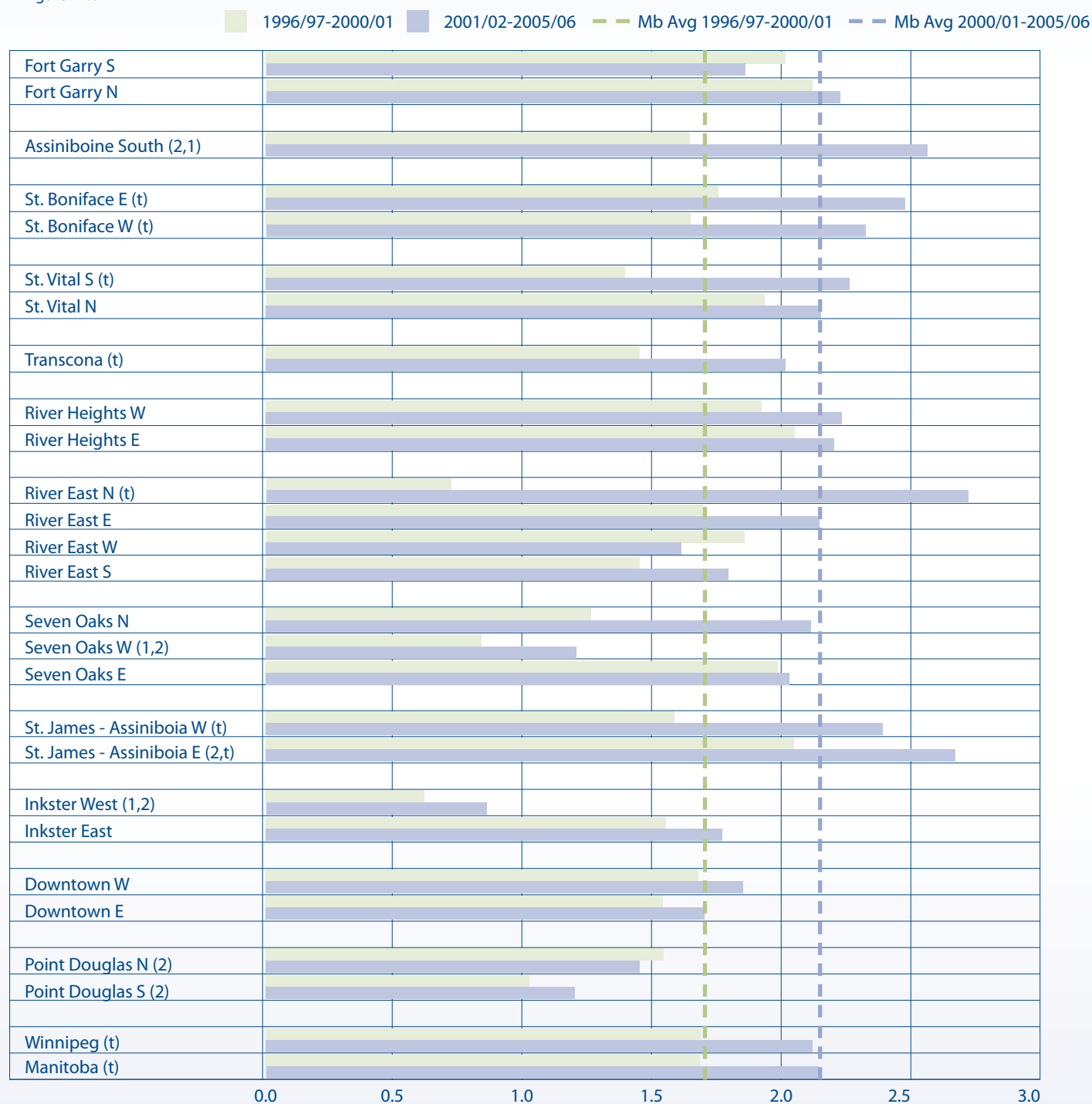
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Hip Replacement Surgery

Age- & sex-adjusted annual rates per 1000 residents age 40 or over

Figure 14.6



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

## Knee Replacement Surgery

Knee replacement is surgery for people with severe knee damage. Knee replacement surgery can relieve pain and allow persons to be more active. During a total knee replacement, the surgeon removes damaged cartilage and bone from the surface of the knee joint and replaces them with a man-made surface of metal and plastic. In a partial knee replacement, the surgeon only replaces one part of the knee joint.

This indicator reports on the total number of knee replacements performed on area residents age 40 or older, per 1000 area residents age 40 or older. Knee replacements were defined by ICD-9-CM codes 81.54, 81.55, or CCI code 1.VG.53 in any procedure field in hospital abstracts. Rates were calculated for two 5-year periods, 1996/97–2000/01 and 2001/02–2005/06, and age- & sex-adjusted to the Manitoba population age 40 or over in the first time period.

Table 14.5

Community Area	1996/97-2000/01	2001/02-2005/06	% Change
	Adjusted Rate per 1000 residents 40+	Adjusted Rate per 1000 residents 40+	
Fort Garry (t)	2.2	3.0	34.7%
Assiniboine South	2.4	3.0	35.8%
St. Boniface (t)	2.0	2.7	30.5%
St. Vital (t)	2.3	3.0	24.9%
Transcona (t)	2.5	3.3	26.8%
River Heights (t)	1.8	2.4	22.6%
River East (t)	2.4	3.1	17.2%
Seven Oaks (t)	1.8	2.5	31.6%
St. James - Assiniboia (t)	2.4	3.5	35.6%
Inkster (2)	1.5	2.0	32.3%
Downtown (1,2,t)	1.5	2.1	18.2%
Point Douglas	2.1	2.5	4.6%
Winnipeg (t)	1.7	2.1	25.7%
Manitoba (t)	1.7	2.2	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.

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

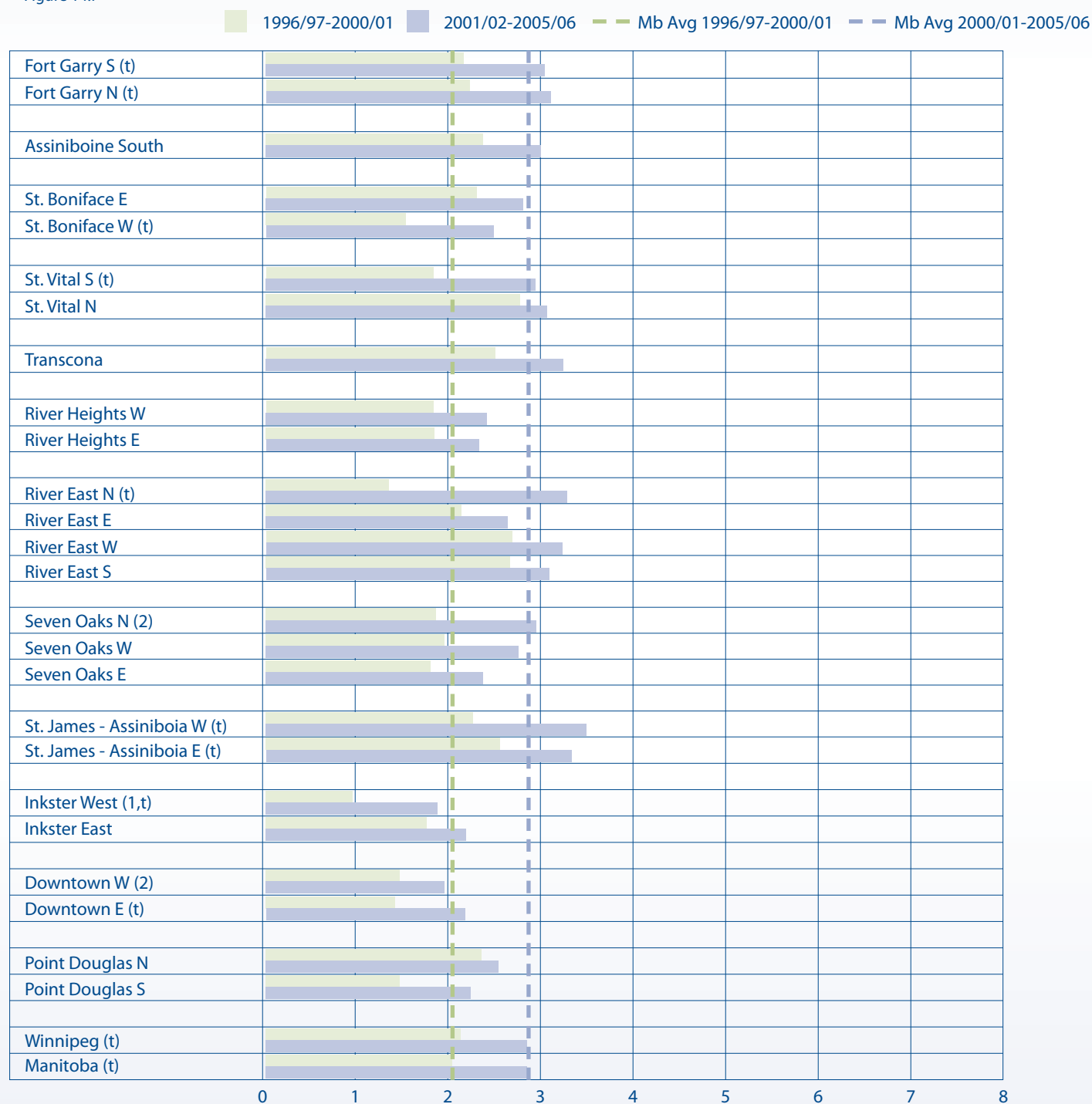
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Knee Replacement Surgery

Age- & sex-adjusted annual rates per 1000 residents age 40 or over

Figure 14.7



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



## Cardiac Catheterization (Diagnostic Angiogram)

Cardiac catheterization is the most accurate method for identifying the location and severity of coronary artery disease. A catheter is inserted into a groin or arm artery and advanced to the opening of the coronary arteries supplying blood to the heart with the help of a fluoroscope (an X-ray viewing instrument). The catheter is used to inject radiographic contrast into each cardiac artery and the images produced are called an angiogram.

This indicator describes the number of cardiac catheterizations performed on area residents age 40 or older, per 1000 residents age 40 or older. This includes ICD-9-CM procedure codes 37.21-37.23, 88.52-88.57, or CCI procedure codes 2.HZ.28, 3.IP.10 in any procedure field in a hospital abstract (inpatient or outpatient). Rates were calculated for two 3-year periods, 1998/99-2000/01 and 2003/04-2005/06, and age- & sex-adjusted to the Manitoba population 40+ in the first time period. Cardiac catheterizations were only performed at the two tertiary hospitals (Health Sciences Centre and St Boniface General Hospital), so only hospital separations from those two hospitals were included in the analysis in order to eliminate the potential for double-counting of procedures.

Table 14.6

Community Area	1998/99-2000/01	2003/04-2005/06	% Change
	Adjusted Rate per 1000 residents 40+	Adjusted Rate per 1000 residents 40+	
Fort Garry	6.7	6.8	2.7%
Assiniboine South (1,t)	8.3	6.8	-14.6%
St. Boniface	8.1	7.8	-4.0%
St. Vital	7.9	7.7	-0.3%
Transcona (1)	8.3	7.7	-5.6%
River Heights	7.1	6.9	-3.7%
River East	6.8	6.9	2.0%
Seven Oaks	7.6	7.2	-5.7%
St. James - Assiniboia (1,t)	9.0	7.3	-18.3%
Inkster	6.5	7.4	15.7%
Downtown	7.1	7.3	-2.0%
Point Douglas	7.3	8.0	4.1%
Winnipeg	7.4	7.2	-3.8%
Manitoba	6.8	6.9	0.1%

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.

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

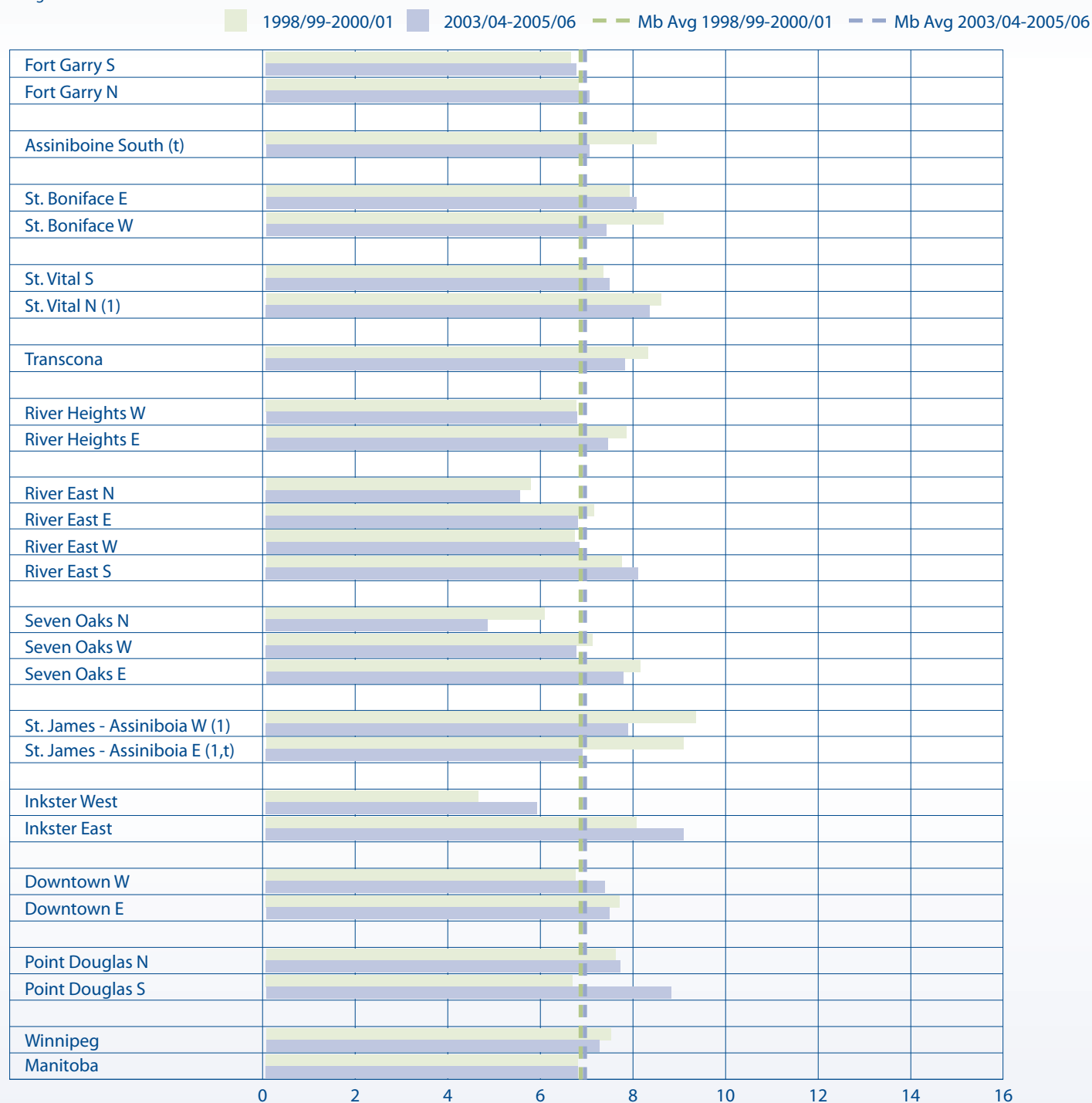
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Cardiac Catheterization (Diagnostic Angiogram)

Age- & sex-adjusted annual rates per 1000 residents age 40 or over

Figure 14.8



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

## Percutaneous Coronary Interventions (PCI): Angioplasty & Stent Insertion

Percutaneous coronary interventions are procedures that treat the narrowed coronary arteries of the heart found in people with coronary heart disease. These interventions include percutaneous transluminal coronary angioplasty (PTCA) procedures commonly known as 'angioplasty' or 'balloon angioplasty'. Angioplasty procedures use a balloon-tipped catheter to enlarge a narrowing in a coronary artery and, if necessary to insert a small lattice-shaped metal tube called a stent to hold the artery open so blood can flow through it more easily.

This indicator reports on the number of percutaneous transluminal coronary angioplasty procedures (with or without stent insertion) performed on area residents age 40 or older, per 1000 residents age 40 or older. This includes ICD-9-CM procedure codes 37.21-37.23, 88.52-88.57, or CCI procedure codes 1.JJ.50 and 1.JJ.57 in any procedure field in a hospital abstract (inpatient or outpatient). Rates were calculated for two 5-year periods, 1996/97-2000/01 and 2001/02-2005/06, and age- & sex- adjusted to the Manitoba population age 40 or more years in the first time period.

Table 14.7

Percutaneous Coronary Interventions (PCI): Angioplasty & Stent Insertion			
Community Area	1996/97-2000/01	2001/02-2005/06	% Change
	Adjusted Rate per 1000 residents 40+	Adjusted Rate per 1000 residents 40+	
Fort Garry (t)	1.6	2.2	39.8%
Assiniboine South	1.8	2.3	35.3%
St. Boniface	2.1	2.6	20.9%
St. Vital (t)	2.0	2.7	37.2%
Transcona (t)	2.0	2.8	39.7%
River Heights (t)	1.8	2.5	42.6%
River East (t)	1.5	2.3	54.6%
Seven Oaks (t)	1.6	2.5	55.4%
St. James - Assiniboia (t)	1.8	2.6	41.4%
Inkster (t)	1.8	2.5	40.3%
Downtown (t)	1.8	2.8	44.0%
Point Douglas (t)	1.7	2.9	64.5%
Winnipeg (t)	1.7	2.6	42.9%
Manitoba (t)	1.6	2.3	43.9%

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.

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

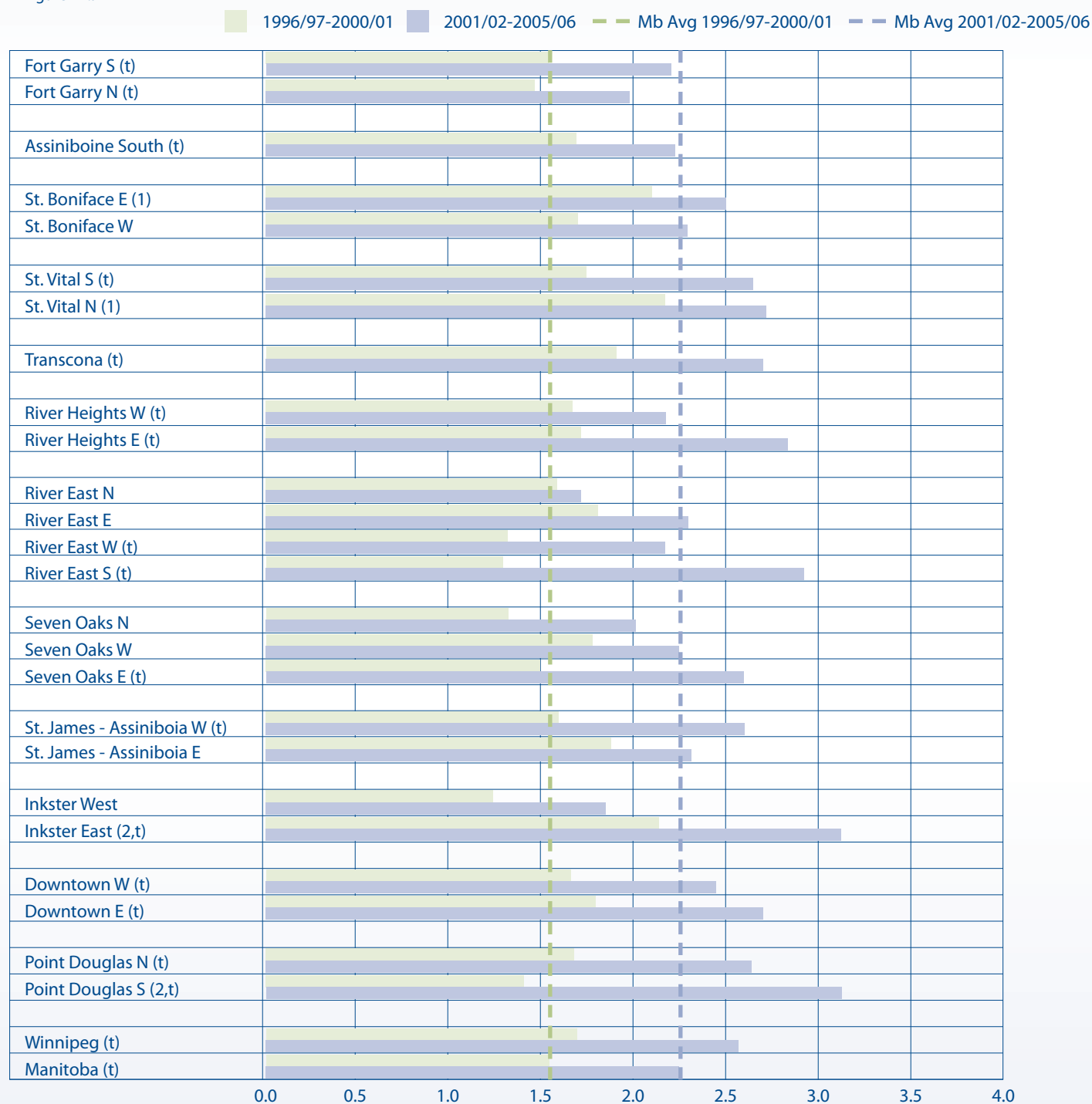
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Percutaneous Coronary Interventions (PCI): Angioplasty & Stent Insertion

Age- & sex-adjusted annual rates per 1000 residents age 40 or over

Figure 14.9



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

## Coronary Artery Bypass Graft (CABG) Surgery

Bypass surgery is performed on persons with significant narrowing or blockage of coronary arteries to replace narrowed and blocked segments, permitting increased blood flow to the deliver oxygen and nutrients to the heart muscles, thereby improving circulation throughout the body.

The number of bypass surgeries performed on area residents age 40 or older, per 1000 area residents age 40 or older. Bypass surgery is defined by ICD–9–CM procedure codes 36.1–36.16, 36.19, or CCI code 1.JJ.76 in any procedure field (these codes include all surgeries reported, regardless of the number of vessels affected). Rates were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and age– & sex–adjusted to the Manitoba population 40+ in the first time period. Bypass surgeries were only performed at the two tertiary hospitals (Health Sciences Centre and St Boniface General Hospital), so only hospital separations from those two hospitals were included in the analysis, in order to eliminate the potential for double–counting of procedures.

Table 14.8

Coronary Artery Bypass Graft (CABG) Surgery			
Community Area	1996/97–2000/01	2001/02–2005/06	% Change
	Adjusted Rate per 1000 residents 40+	Adjusted Rate per 1000 residents 40+	
Fort Garry (t)	1.8	1.3	-27.8%
Assiniboine South	1.8	1.3	-18.2%
St. Boniface	2.0	1.7	-15.5%
St. Vital	2.1	1.9	-4.6%
Transcona	1.9	1.7	-4.3%
River Heights	1.7	1.6	-7.2%
River East	1.5	1.6	8.1%
Seven Oaks (1)	2.1	1.7	-19.0%
St. James - Assiniboia	1.8	1.6	-11.7%
Inkster	1.8	1.7	-4.0%
Downtown	1.4	1.4	-8.0%
Point Douglas	1.9	1.6	-23.2%
Winnipeg (t)	1.8	1.5	-11.0%
Manitoba	1.8	2.0	-27.0%

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.

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

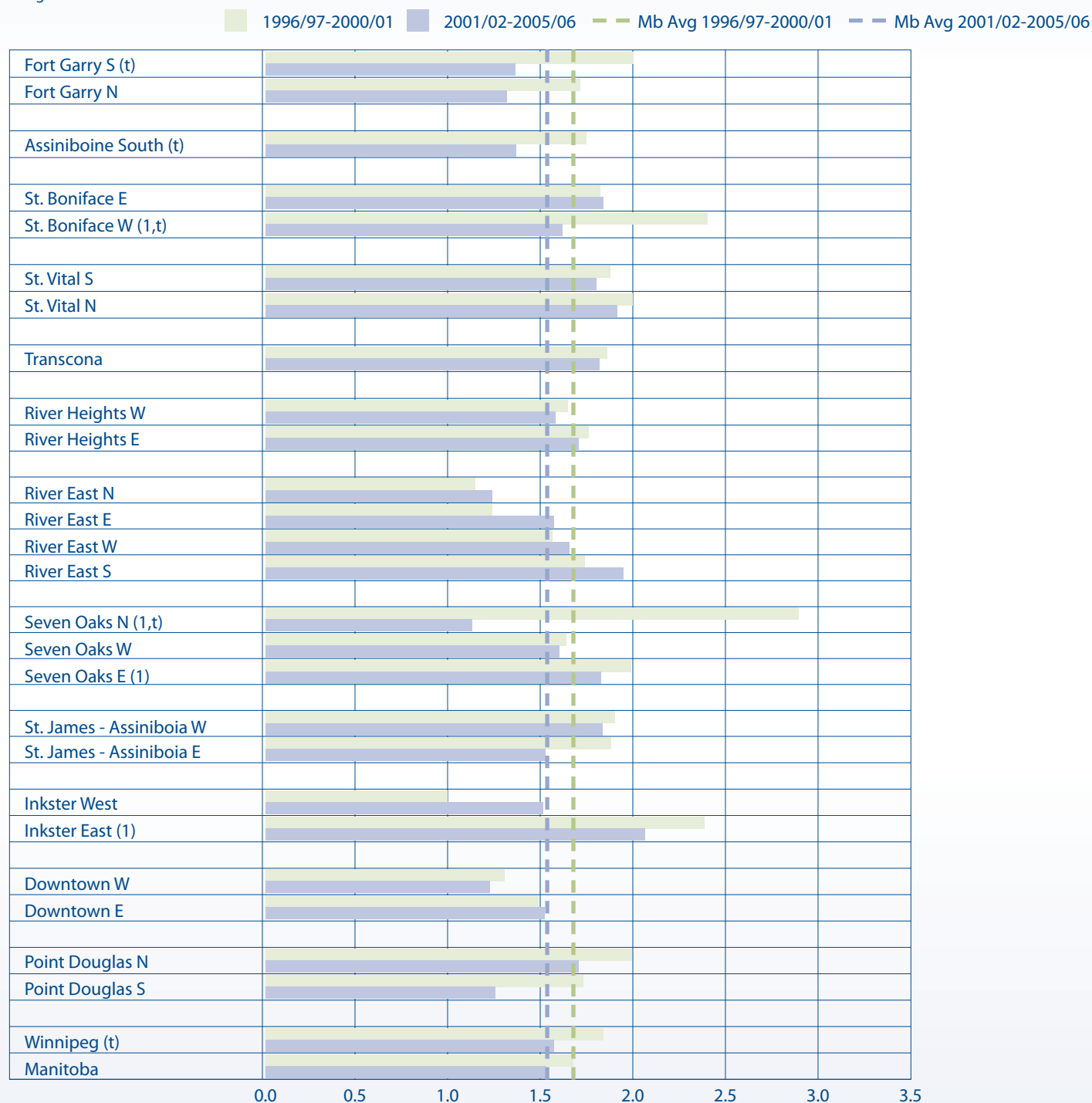
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Coronary Artery Bypass Graft (CABG) Surgery

Age- & sex-adjusted annual rates per 1000 residents age 40 or over

Figure 14.10



Source: Manitoba Centre for Health Policy, 2009

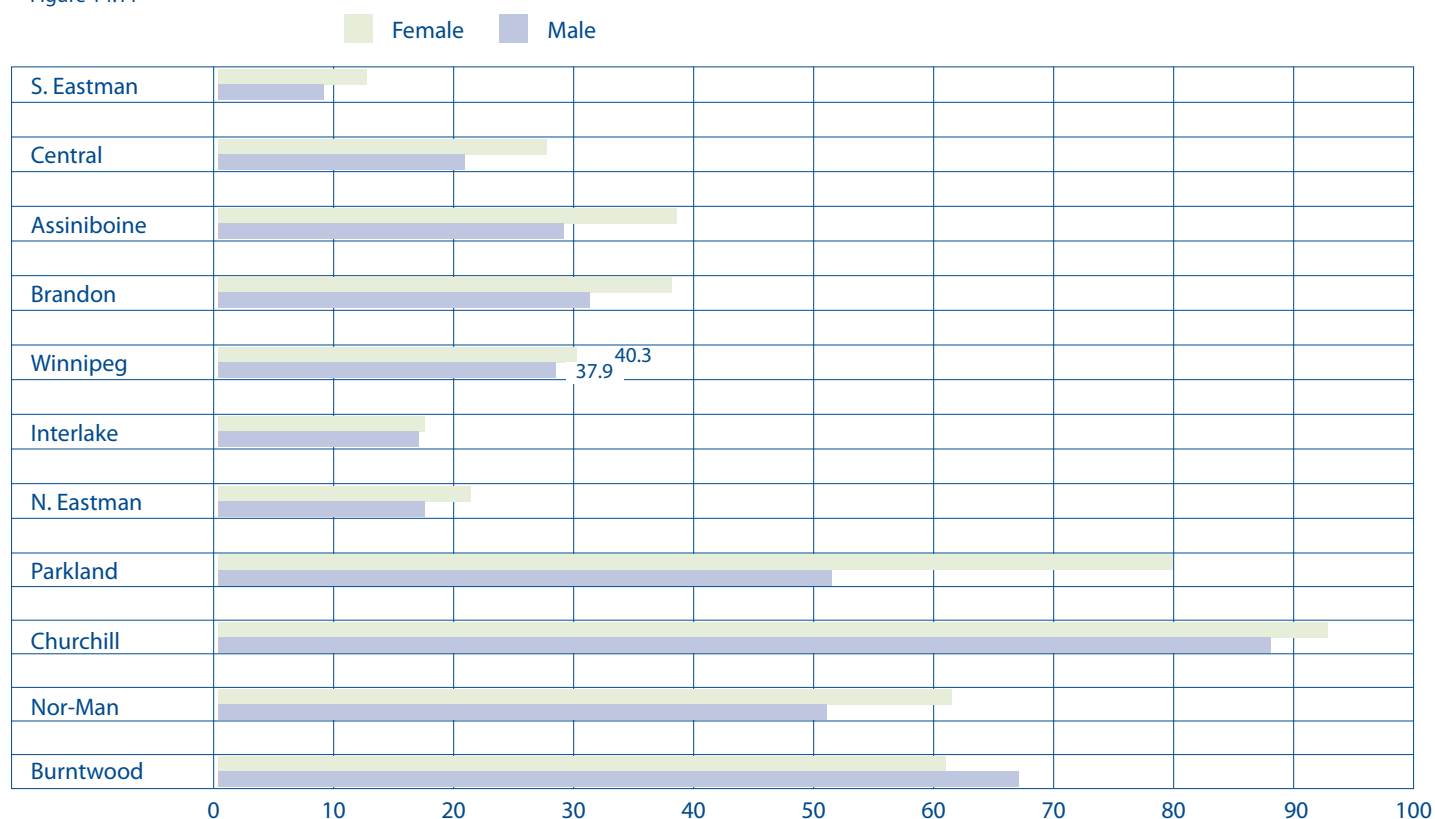
'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time  
 '2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time  
 't' indicates for that area, the change in rates from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

## Separations from Acute Care Hospitals with a Diagnosis “For” Mental Illness, 2003/04-2007/08

The number of hospitalizations in acute care hospitals, and in Mental Health Centres, per 1000 residents per year for which a mental illness disorder was coded as the ‘most responsible’ reason for the hospitalization.

The annual age-adjusted rate per 1000 residents is reported for FY 2003/04-2007/08 (5 years).

Figure 14.11



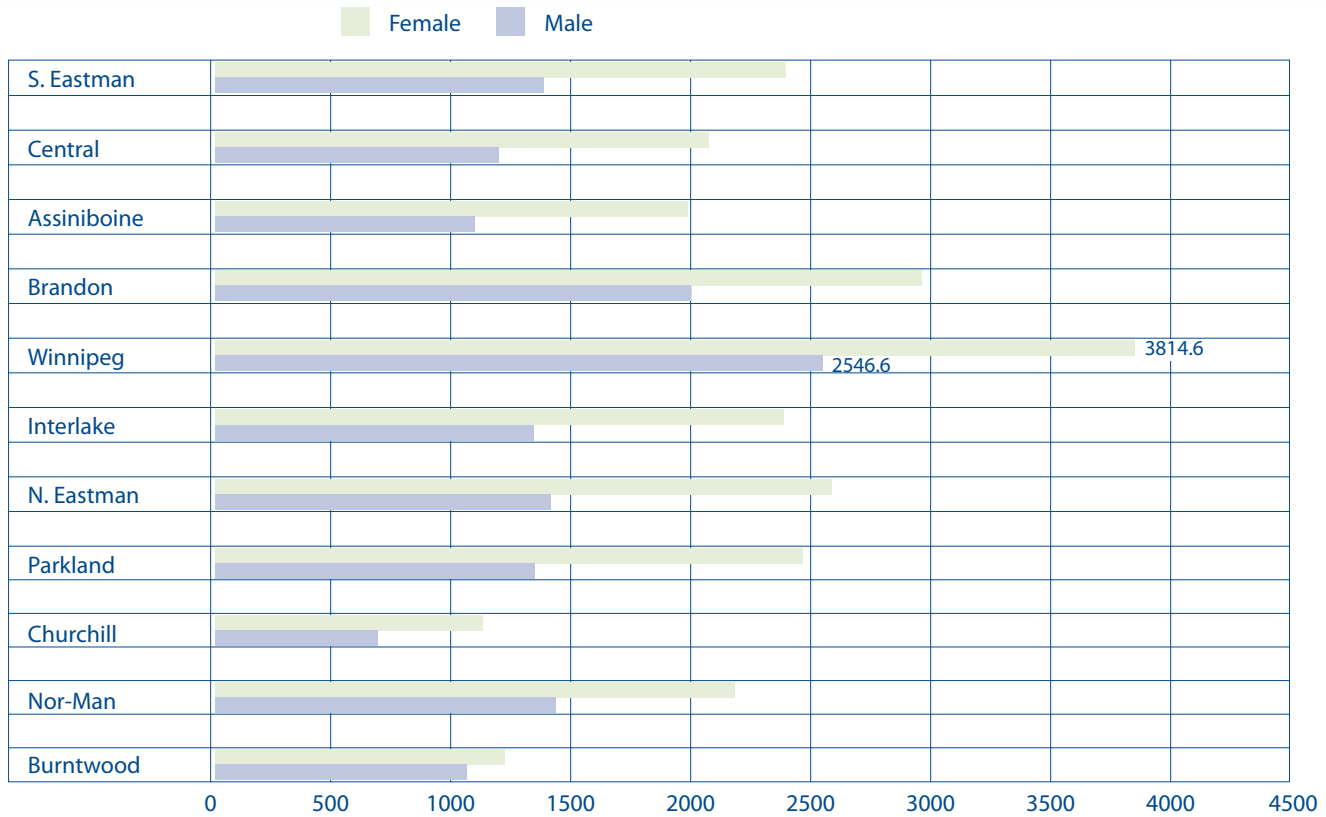
Source: RHA Profiles, 2009

## Medical Visits for Those with Mental Illness, 2003/2004-2007/2008

The annual rate of ambulatory visits per 1000 residents aged 10 years or more to all physicians (GP/FPs and specialists) for which a mental illness disorder was coded as the reason for the visit.

The annual age-adjusted rate per 1000 residents is reported for FY 2003/04-2007/08 (5 years).

Figure 14.12



Source: RHA Profiles, 2009



## Total Hospital Separation Rates

A separation from a health care facility occurs anytime a patient (or resident) leaves because of discharge, transfer, or death. The number of separations is the most commonly used measure of the utilization of hospital services.

The total number of inpatient and outpatient hospital separations (discharges) of area residents, per 1000 residents per year. In any given period, a resident could be hospitalized more than once, so this indicator shows the total number of separations from acute care facilities by all residents of the area. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01. All Manitoba hospitals were included; Personal Care Homes (PCH) and Long-term Care facilities were excluded (Riverview, Deer Lodge, Rehabilitation Centre for Children and Manitoba Adolescent Treatment Centre). Newborn (birth) hospitalizations were excluded but the mother's hospitalization was included.

Table 14.9

Total Hospital Separation Rates					
Community Area	2000/01		2005/06		% Change
	Total Separations/Year	Adjusted Rate/1000 residents	Total Separations/Year	Adjusted Rate/1000 residents	
Fort Garry (1,2,t)	6580	241.7	6428	213.5	-8.0%
Assiniboine South (1,2,t)	4264	232.7	3958	225.7	-2.2%
St. Boniface (1,2,t)	5675	253.1	5406	230.9	-13.0%
St. Vital (1,2,t)	7138	252.4	6571	212.9	-9.1%
Transcona (2,t)	3985	275.9	3572	254.1	-8.7%
River Heights (1,2,t)	7521	265.7	6392	231.7	-12.0%
River East (1,2,t)	11931	262.5	10812	232.8	-5.3%
Seven Oaks (1,2,t)	7109	262.9	6693	235.1	-3.8%
St. James - Assiniboia (1,2)	8379	268.5	7809	259.2	0.3%
Inkster (2,t)	3610	294.7	3222	266.9	-4.7%
Downtown (t)	10079	361.9	8923	320.4	-9.0%
Point Douglas	6169	367.8	5729	359.0	-4.5%
Winnipeg (1,2,t)	82440	269.6	75515	247.1	-6.9%
Manitoba	172679	352.2	162447	321.6	-7.8%

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.

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

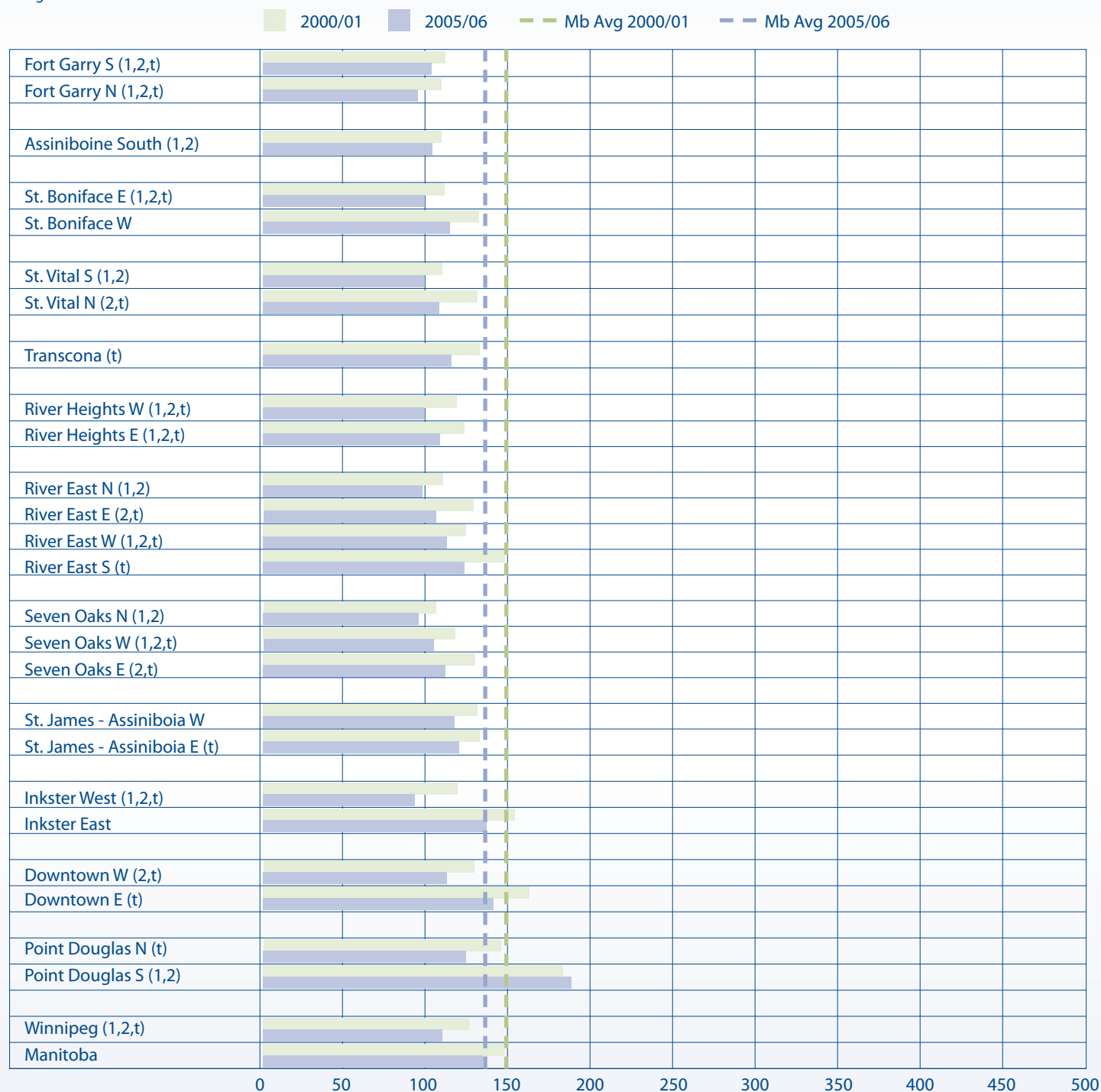
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Hospital Separations

Age- & sex-adjusted rate of hospital separations, per 1000 residents

Figure 14.13



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

## New Home Care Cases by Winnipeg Community Areas

The proportion (%) of the population (all ages) with a new home care case opened in a year (values shown are cases for a two-year period). Some home care clients had more than one case in a year, but were only counted once for this indicator. Rates were calculated for 1999/00–2000/01 and 2003/04–2004/05 and were age- and sex-adjusted to the Manitoba population in the first time period.

Table 14.10

Community Area	FY 1999/00-2000/01		FY 2003/04-2004/05		% Change
	Number of New Cases	Adjusted Rate	Number of New Cases	Adjusted Rate	
Fort Garry	1072	1.1%	1362	1.3%	22.0%
Assiniboine South (t)	760	1.1%	1009	1.3%	30.3%
St. Boniface	1224	1.4%	1312	1.5%	1.7%
St. Vital	1452	1.3%	1587	1.4%	8.6%
Transcona	599	1.3%	701	1.5%	17.2%
River Heights	1822	1.3%	1925	1.4%	6.2%
River East	2324	1.3%	2505	1.4%	5.7%
Seven Oaks	1493	1.3%	1632	1.4%	7.3%
St. James - Assiniboia (t)	1725	1.2%	1972	1.4%	15.7%
Inkster	500	1.2%	603	1.5%	20.2%
Downtown (1,2,t)	2084	1.7%	2263	2.0%	6.7%
Point Douglas (1,2,t)	1242	1.6%	1337	2.0%	4.5%
Winnipeg (t)	16297	1.2%	18208	1.5%	9.9%
Manitoba (t)	28008	1.2%	30235	1.4%	6.5%

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

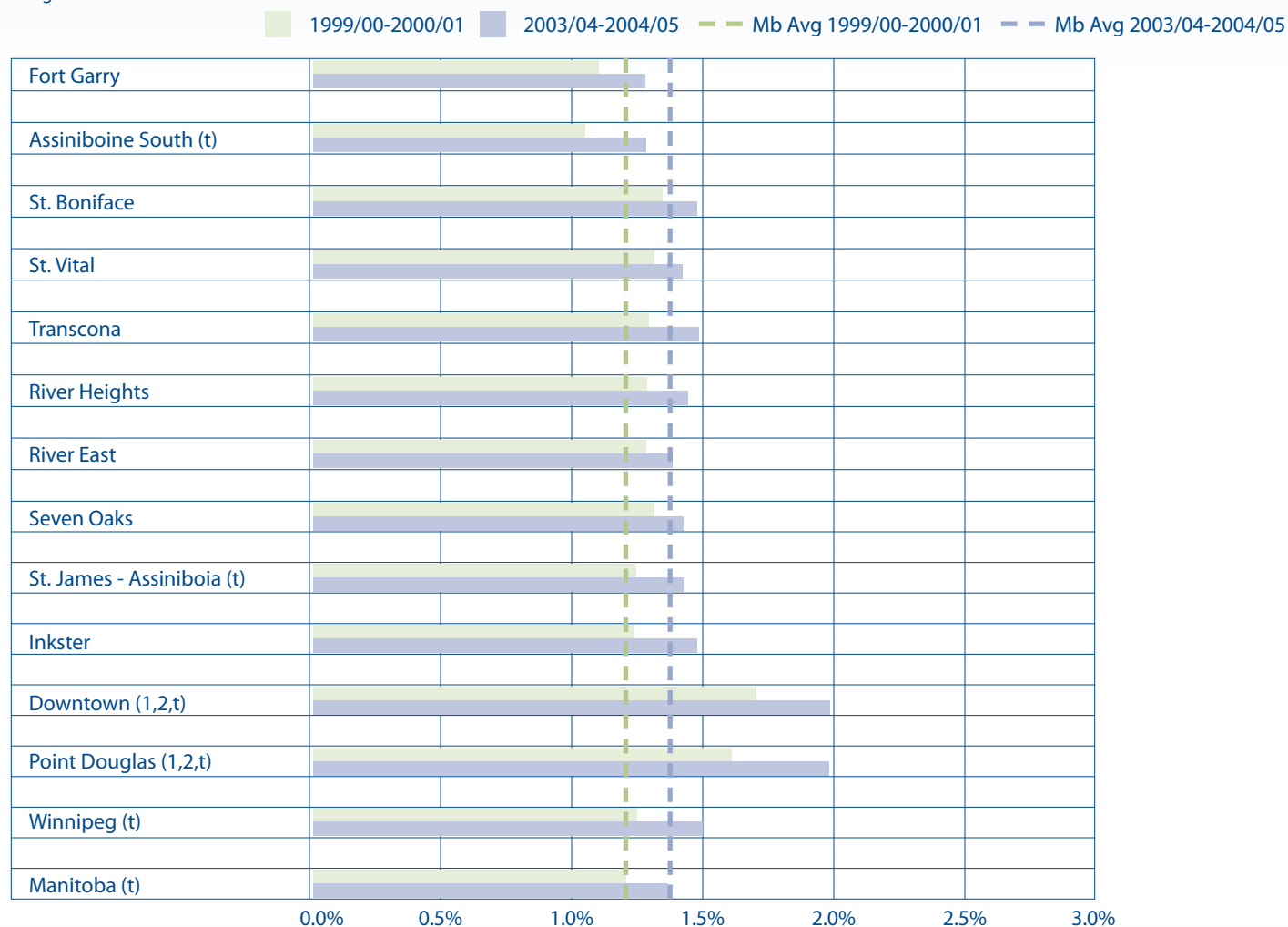
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# New Home Care Cases by Winnipeg Community Areas

Age- & sex-adjusted annual percentage of residents with a new home care case

Figure 14.14



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

## Open Home Care Cases by Winnipeg Community Areas

The proportion (%) of the population (all ages) with an open home care case during the year (values shown are for a two-year period). Rates were calculated for 1999/00 - 2000/01 and 2003/04 - 2004/05 and were age- and sex-adjusted to the Manitoba population in the first time period.

Table 14.11

Community Area	1999/00-2000/01		2003/04-2004/05		% Change
	Number of Cases	Adjusted Rate*	Number of Cases	Adjusted Rate*	
Fort Garry (1,2)	2195	2.4%	2823	2.7%	23.5%
Assiniboine South (1,t)	1686	2.4%	2344	2.9%	36.5%
St. Boniface (t)	2508	2.8%	2965	3.4%	12.1%
St. Vital	3104	2.9%	3446	3.1%	10.3%
Transcona	1291	3.0%	1430	3.3%	11.0%
River Heights (t)	4262	3.0%	4687	3.5%	10.5%
River East	5188	2.9%	5754	3.2%	8.8%
Seven Oaks (1,2)	3421	3.2%	3953	3.6%	13.5%
St. James - Assiniboia (t)	3710	2.7%	4292	3.2%	17.1%
Inkster (t)	1024	2.7%	1200	3.1%	16.8%
Downtown (1,2,t)	5003	4.0%	5456	4.8%	7.2%
Point Douglas (1,2,t)	2729	3.5%	2981	4.4%	6.0%
Winnipeg (t)	36121	2.8%	41331	3.4%	12.6%
Manitoba (t)	62842	2.7%	69340	3.2%	8.9%

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

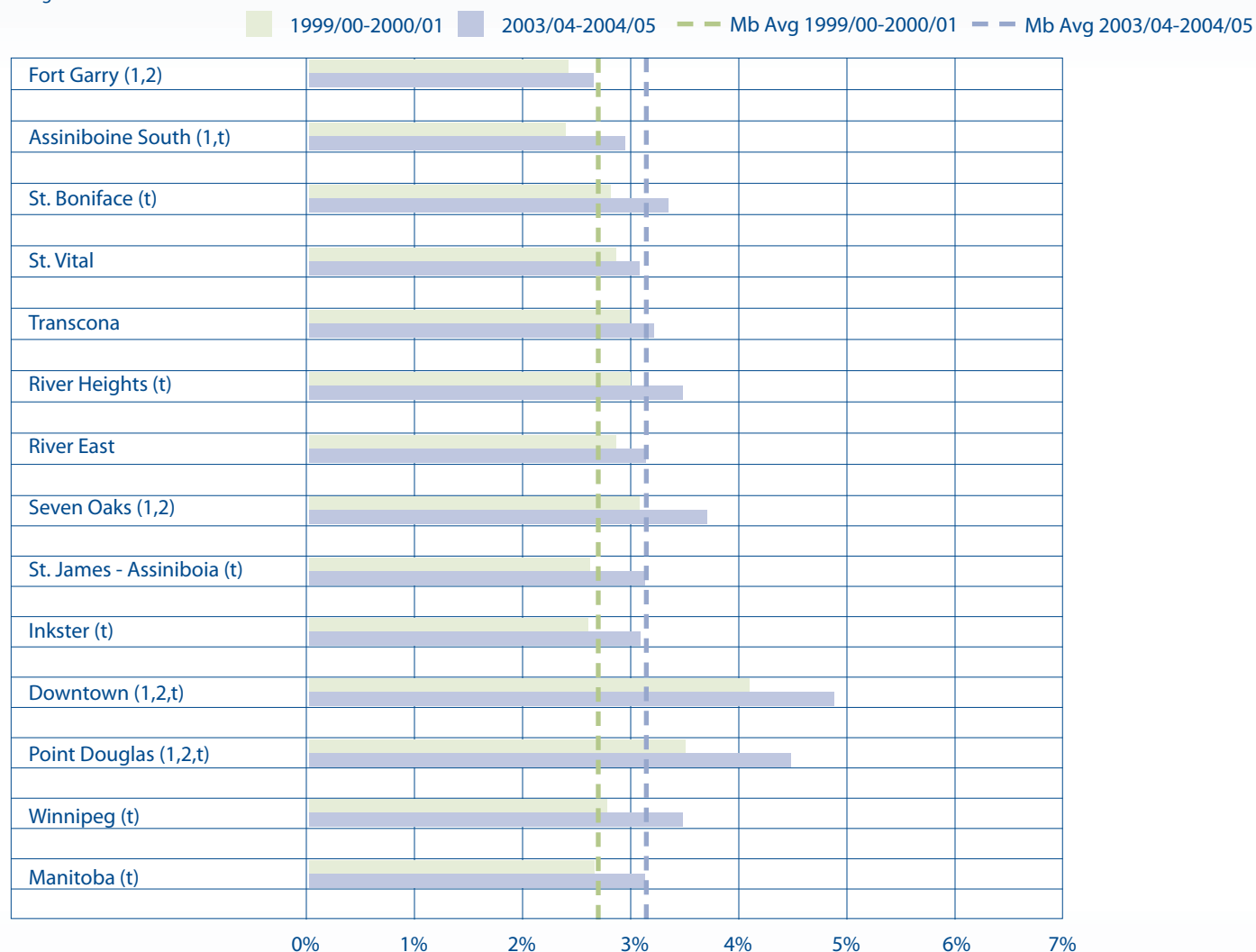
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Open Home Care Cases by Winnipeg Community Areas

Age- & sex-adjusted annual percentage of residents with an open home care case

Figure 14.15



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

## Home Care Case Closing Rates by Winnipeg Community Areas

The proportion (%) of the population (all ages) with closed home care case in a year (values shown are cases for a two-year period). Some home care clients had more than one case in a year, but were only counted once for this indicator. Rates were calculated for 1999/00–2000/01 and 2003/04–2004/05 and were age- and sex-adjusted to the Manitoba population in the first time period.

Table 14.12

Community Areas	1999/00-2000/01		2003/04-2004/05		% Change
	Number of Cases Closed	Adj Rate	Number of Cases Closed	Adj Rate	
Fort Garry	1139	1.2%	1497	1.4%	26.2%
Assiniboine South (t)	890	1.2%	1240	1.5%	36.8%
St. Boniface	1258	1.4%	1418	1.6%	6.9%
St. Vital	1513	1.4%	1766	1.6%	16.0%
Transcona	641	1.4%	730	1.6%	
River Heights (1,2)	2062	1.5%	2229	1.6%	8.6%
River East (1)	2566	1.4%	2810	1.6%	7.4%
Seven Oaks (1)	1782	1.6%	1904	1.6%	4.9%
St. James - Assiniboia (t)	1967	1.4%	2225	1.6%	14.5%
Inkster	560	1.4%	661	1.6%	17.6%
Downtown (1,2)	2393	1.9%	2410	2.0%	-1.0%
Point Douglas (1,2)	1431	1.8%	1440	2.1%	-2.4%
Winnipeg (2,t)	18202	1.4%	20330	1.6%	9.9%
Manitoba (t)	29624	1.3%	32352	1.5%	7.7%

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.

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

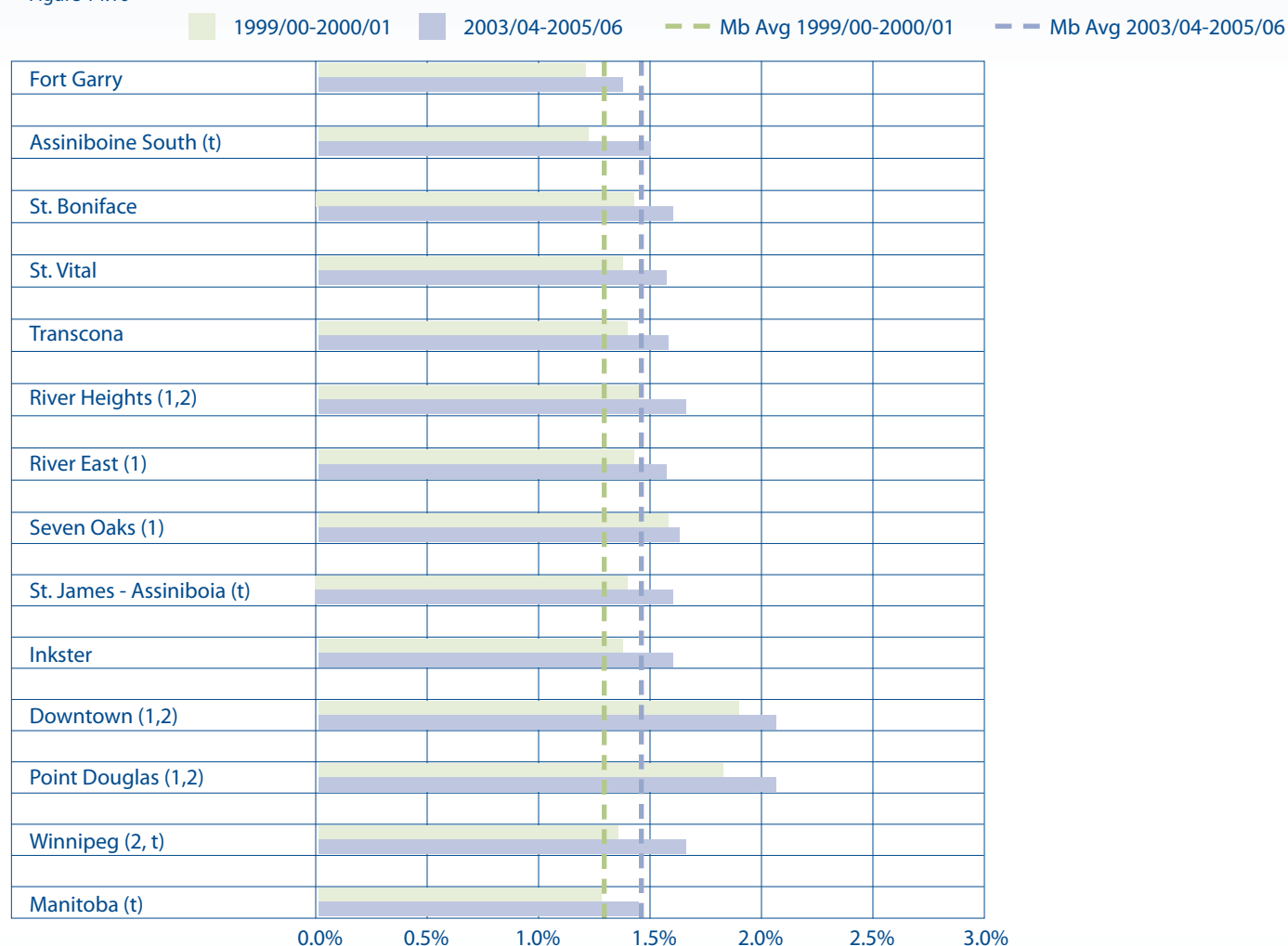
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

# Home Care Case Closing Rates by Winnipeg Community Areas

Age- & sex-adjusted annual percentage of residents with a closed home care case

Figure 14.16



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



## Average Length of Home Care Service (in days per case)

The average length (in days) of all home care cases open in a two-year period. A home care client may have more than one case in a period, and each would be counted as a separate case with a separate length of service. Rates were calculated for 1999/00–2000/01 and 2003/04–2004/05 and were age- and sex-adjusted to the Manitoba population in the first time period.

Table 14.13

Community Area	1999/00-2000/01		2003/04-2004/05		% Change
	Number of Days	Adj Rate/ case	Number of Days	Adj Rate/ case	
Fort Garry	228484	216.3	299808	222.6	2.9%
Assiniboine South	185138	234.7	256325	232.8	-0.8%
St. Boniface	271402	215.0	332913	224.7	4.5%
St. Vital	333863	211.3	369748	217.2	2.8%
Transcona	140812	233.9	149475	225.7	-3.5%
River Heights	484792	238.8	543299	233.9	-2.1%
River East	585474	215.9	642213	212.1	-1.7%
Seven Oaks	380225	246.8	455194	242.9	-1.6%
St. James - Assiniboia	400809	234.5	464432	221.8	-5.4%
Inkster	107366	228.7	118828	199.8	-12.6%
Downtown	579612	222.9	633376	234.4	5.1%
Point Douglas (2)	301268	209.4	324827	190.5	-9.0%
Winnipeg	3999251	226.9	4590434	221.6	-2.4%
Manitoba	6903453	219.7	7646424	222.0	1.1%

Source: Manitoba Centre for Health Policy, 2009

Adjusted rate per case estimates what an area's rate (in days/case) 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

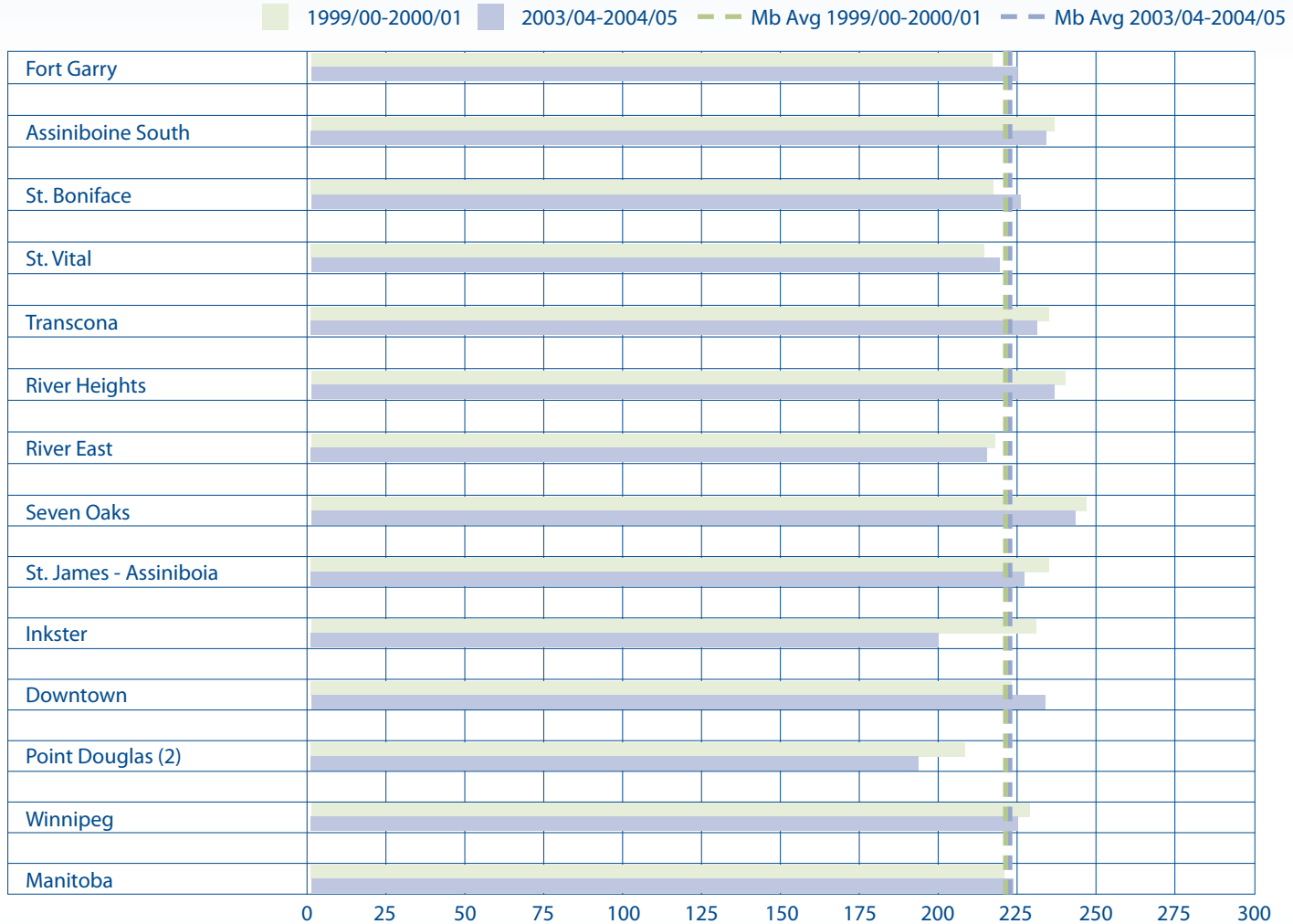
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## Average Length of Home Care Service (in days per case)

Age- & sex-adjusted annual mean length of home care cases (days) per case

Figure 14.17



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

## Admission to Personal Care Homes (PCH)

The percentage of area residents aged 75 and over and admitted to a PCH in a fiscal year (values shown are the annual average for a two-year period). Area of residence was assigned based on where people lived at the time, which is determined by the location of the PCH. Rates are shown for 1999/00–2000/01 and 2004/05–2005/06, and are age- and sex-adjusted to the population of Manitoba (aged 75 and over) in the first time period.

Table 14.14

Community Area	1999/00-2000/01		2004/05-2005/06		% Change
	Number of Cases	Adjusted %	Number of Cases	Adjusted %	
Fort Garry (1,2)	104	1.96%	124	1.62%	-7.5%
Assiniboine South (1,2)	275	5.32%	319	4.86%	-4.7%
St. Boniface (1,2)	84	1.42%	91	1.44%	2.2%
St. Vital (1,2)	130	1.77%	128	1.52%	-11.8%
Transcona (1,2)	42	1.79%	46	1.70%	-5.4%
River Heights (2,t)	380	3.26%	276	2.34%	-23.6%
River East (1,2,t)	278	2.37%	206	1.48%	-34.4%
Seven Oaks (1,2)	298	3.76%	342	3.68%	4.4%
St. James - Assiniboia (1,2,t)	435	4.40%	572	5.20%	23.8%
Inkster (1,2)	34	1.42%	37	1.34%	8.1%
Downtown (1,2,t)	470	4.50%	418	3.93%	-5.3%
Point Douglas (2,t)	174	2.66%	231	3.72%	46.4%
Winnipeg	2704	3.15%	2790	2.96%	-3.2%
Manitoba (t)	4661	3.06%	4810	2.87%	-1.7%

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.

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

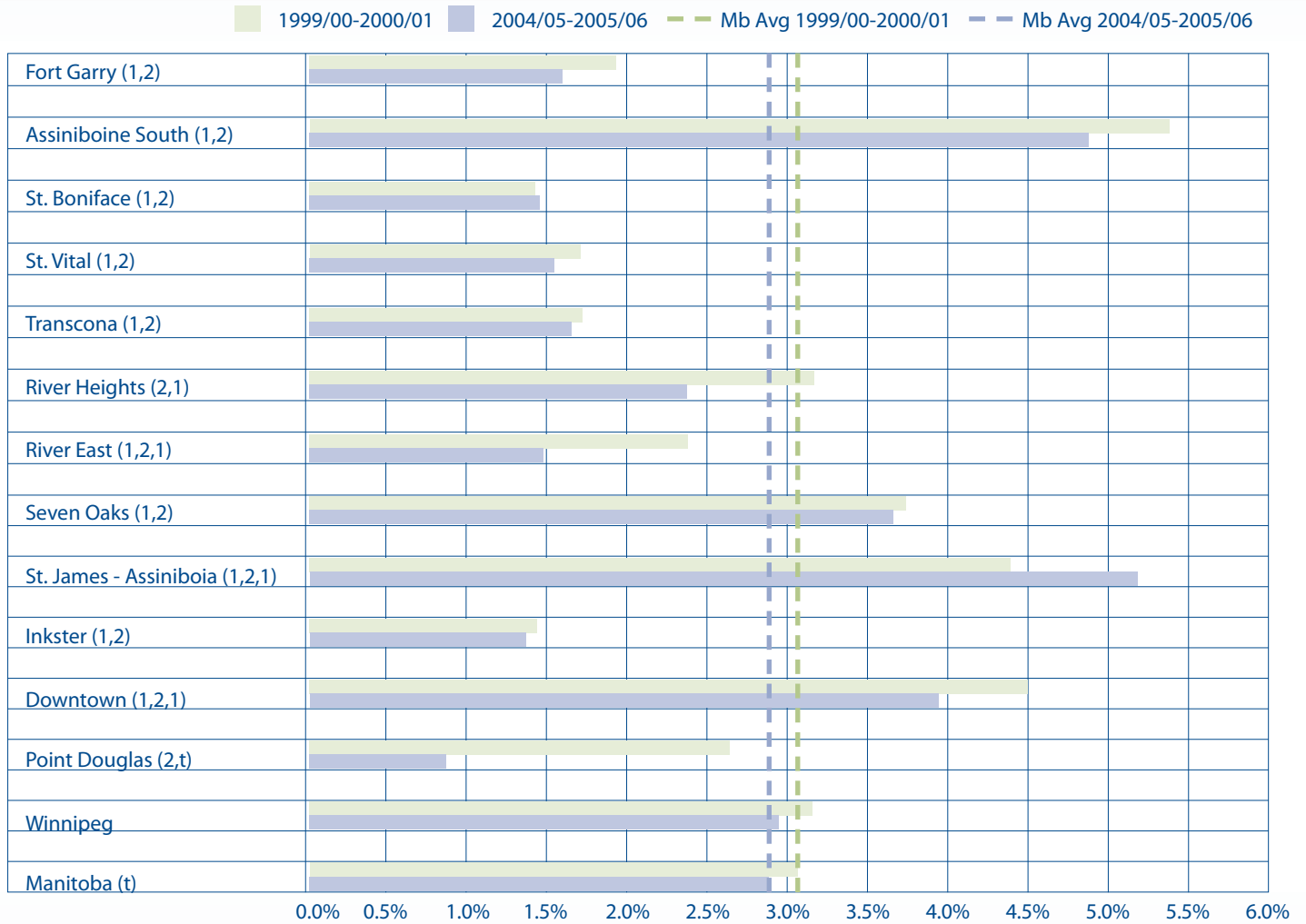
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

## Admission to Personal Care Homes (PCH)

Age – and sex – adjusted annual percentage of residents 75 and over and admitted to a PCH in a fiscal year.

Figure 14.18



## Level of Care on Admission to PCH

The distribution of levels of care assigned to PCH residents at the time of their admission. Level 1 represents the lowest level of need; Level 4 represents the highest. These are crude rates only; statistical testing was not done on these values. "00" reflects data from 1999/00-2000/01; "05" reflects data from 2004/05-2005/06.

Table 14.15

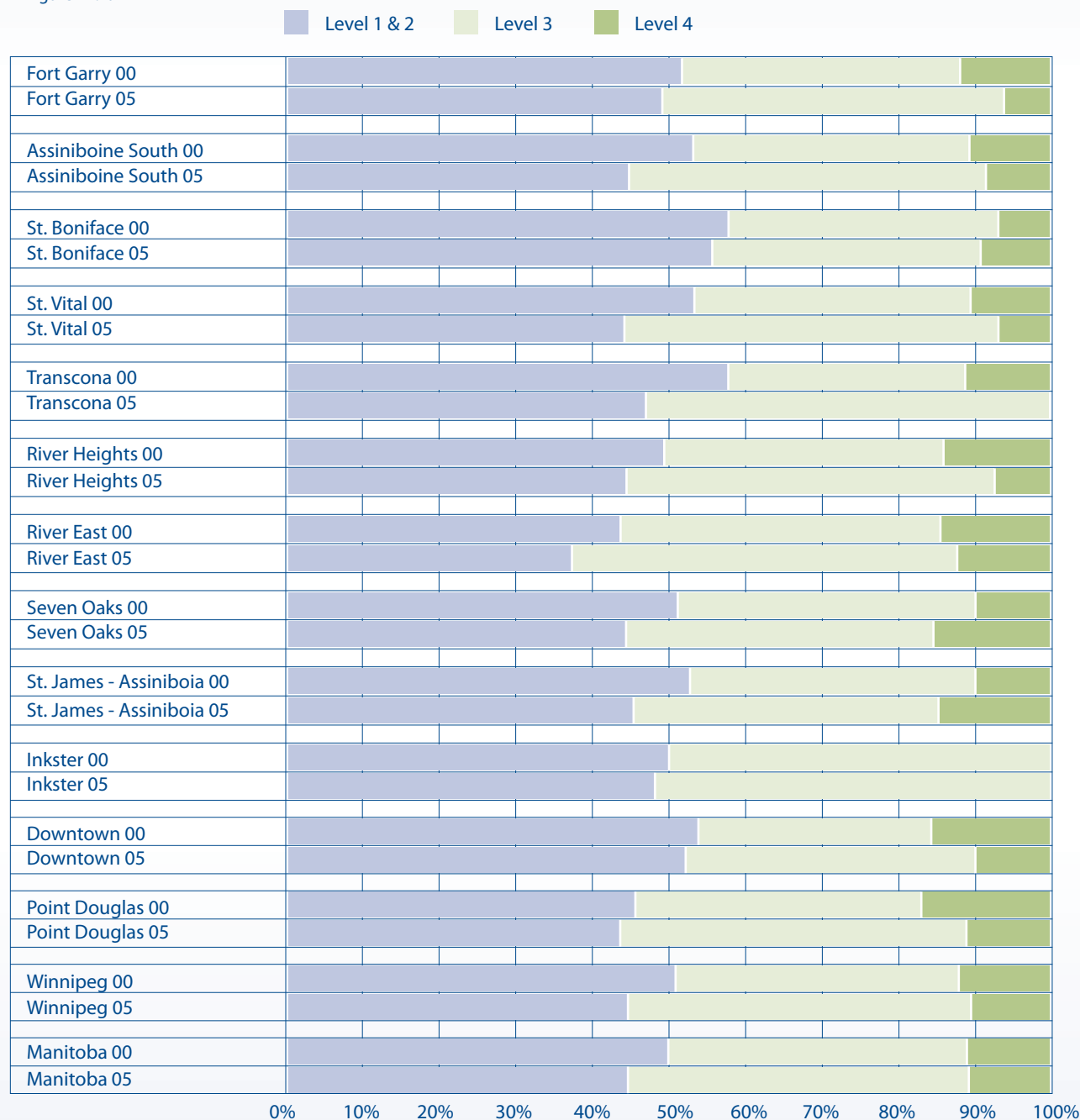
	Levels of Care			
	Levels 1 & 2	Level 3	Level 4	Levels 3&4
Fort Garry 00	51.7%	36.7%	11.6%	48.3%
Fort Garry 05	49.1%	44.7%	6.3%	50.9%
Assiniboine South 00	52.4%	36.9%	10.7%	47.6%
Assiniboine South 05	44.8%	46.8%	8.4%	55.2%
St. Boniface 00	57.4%	35.6%	6.9%	42.6%
St. Boniface 05	56.0%	34.8%	9.2%	44.0%
St. Vital 00	53.3%	36.3%	10.4%	46.7%
St. Vital 05	44.1%	48.0%	7.8%	55.9%
Transcona 00	58.5%	30.8%	10.8%	41.5%
Transcona 05	47.3%	52.7%		52.7%
River Heights 00	49.4%	37.8%	12.9%	50.6%
River Heights 05	44.6%	48.0%	7.4%	55.4%
River East 00	42.7%	42.7%	14.6%	57.3%
River East 05	37.9%	50.2%	11.9%	62.1%
Seven Oaks 00	50.9%	38.7%	10.3%	49.1%
Seven Oaks 05	44.2%	40.7%	15.1%	55.8%
St. James - Assiniboia 00	52.7%	37.3%	10.0%	47.3%
St. James - Assiniboia 05	45.9%	39.2%	14.8%	54.1%
Inkster 00	50.0%	50.0%		50.0%
Inkster 05	48.1%	51.9%		51.9%
Downtown 00	53.2%	32.1%	14.7%	46.8%
Downtown 05	52.2%	37.7%	10.0%	47.8%
Point Douglas 00	44.5%	38.4%	17.1%	55.5%
Point Douglas 05	43.3%	45.6%	11.1%	56.7%
Winnipeg 00	50.6%	37.2%	12.2%	49.4%
Winnipeg 05	45.7%	43.8%	10.5%	54.3%
Manitoba 00	49.7%	39.1%	11.2%	50.3%
Manitoba 05	43.6%	45.5%	10.9%	56.4%

Source: Manitoba Centre for Health Policy, 2009

## Level of Care on Admission to PCH by Winnipeg Community Areas

"00" reflects data from 1999/00-2000/01; "05" reflects data from 2004/05-2005/06

Figure 14.19



Source: Manitoba Centre for Health Policy, 2009

## Median Length of Stay (LOS) by Level of Care at Admission to PCH

The median length of stay (in years) of PCH residents, according to their level of care on admission. The median length of stay is the amount of time which half of all residents stayed. For example, in 1999/00–2000/01, the median was 2.33 years overall in Manitoba, so half of all residents stayed less than 2.33 years and half stayed longer. These are crude values only; statistical testing was not done on these values.

Level 1 represents the lowest level of need; Level 4 represents the highest.

"00" reflects data from 1999/00–2000/01; "05" reflects data from 2004/05–2005/06

Table 14.16

Community Area	All Levels	Level 1-2	Level 3	Level 4
Fort Garry 00	2.45	2.22	2.69	2.35
Fort Garry 05	1.85	1.95	1.54	4.16
Assiniboine South 00	2.31	2.60	2.04	0.33
Assiniboine South 05	1.64	1.91	1.41	0.75
St. Boniface 00	2.53	3.05	1.98	1.33
St. Boniface 05	2.36	2.51	2.44	1.68
St. Vital 00	2.35	3.15	1.93	1.88
St. Vital 05	1.93	2.23	1.36	1.13
Transcona 00	2.11	1.84	2.16	2.88
Transcona 05	1.20	1.77	1.03	0.56
River Heights 00	2.12	2.06	2.20	2.07
River Heights 05	1.79	1.96	1.66	1.06
River East 00	2.45	3.12	1.93	1.21
River East 05	1.87	2.42	1.57	0.95
Seven Oaks 00	2.28	3.05	1.52	1.86
Seven Oaks 05	1.55	1.88	1.47	0.70
St. James - Assiniboia 00	2.29	3.04	1.41	1.22
St. James - Assiniboia 05	1.61	1.98	1.57	0.72
Inkster 00	1.83	1.98	2.04	0.78
Inkster 05	1.96	3.24	1.11	4.67
Downtown 00	1.03	1.24	1.07	0.54
Downtown 05	1.63	2.00	1.57	0.80
Point Douglas 00	2.77	3.46	2.31	1.93
Point Douglas 05	2.24	3.06	2.06	1.10
Winnipeg 00	2.21	2.71	1.85	1.39
Winnipeg 05	1.74	2.16	1.56	1.03
Manitoba 00	2.33	2.91	1.88	1.53
Manitoba 05	1.89	2.42	1.59	1.21

Source: Manitoba Centre for Health Policy, 2009







Section D

## DEMOGRAPHICS



Winnipeg Regional  
Health Authority  
Caring for Health

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

The Winnipeg Health Region serves residents of the City of Winnipeg as well as the Rural Municipalities of East and West St. Paul. According to the Manitoba Health and Healthy Living (MHHL) registry, the population in Winnipeg Health Region in 2006 was 667,038. It shows an increase in population of 2% from 2001 when population was reported as 653,728. This section continues on to report detailed population characteristics about the Winnipeg Health Region (WHR) based on data from Manitoba Health and Healthy Living registry and Statistics Canada (census data).

Ten diverse demographic indicators are included:

- *Manitoba population*
- *Urban (Winnipeg) population*
- *Population density*
- *Population Pyramids by age & sex*
- *Population projection to 2036*
- *Child to elderly (dependency) ratio*
- *Percent of lone-parent families*
- *Aboriginal People (as a portion of the Winnipeg population)*
- *Most frequent languages spoken at home and,*
- *Internal migrant mobility (the extent to which Winnipeg residents move around from census to census)*

Winnipeg has the largest proportion of Manitoba's urban population. According to census data of 1996 and 2001, the urban population proportion has also slightly increased from 98.9% to 99.3%. In addition, the population density in the region increased from 1076 residents per square kilometre to 1106 residents per square kilometre between the 1996 and 2006 censuses. The community area of Downtown had the highest population density of 4014 residents per square kilometre in 2006. A population pyramid shows the age and sex composition of the population. The population pyramid of Winnipeg indicates that our population is aging. Winnipeg's population under 20 years of age accounts for a slightly lower percentage of the WHR population than in other Manitoba regions.

Canadians aged 65 and over and those under age 15 are more likely to be socially and/or economically dependent on working age Canadians, and may also put certain additional demands on health services. The Winnipeg dependency ratio of children and elderly persons to the working age group shows some variation between Winnipeg community areas from a low of 43.5% in River heights to a high of in St. James-Assinibioia 54.1%.

Additionally, the findings from Winnipeg's 2006 census data shows that: 83% of lone-parent families were headed by a female; Point Douglas, Downtown and Inkster had the highest percentage of aboriginal people; and, the 5-year and 1-year internal migrants were 7% and 2.2% in Winnipeg respectively.

## Manitoba Population

The number of people living in Manitoba by age and sex as of December 31, 2000 and 2005.

Province of Manitoba: Population Counts & Percentages by Age Group & Sex as of Dec 31, 2000 and 2005

Table 15.1

Manitoba Population: 2000 & 2005						
Age Groups	Population in 2000 (TOTAL=1,151,895)		Population in 2005 (TOTAL=1,175,235)			
	Male	Female	Male	% Male	Female	% Female
0-4	37989	35864	36408	-3.1%	34693	3.0%
5-9	42583	40759	38979	-3.3%	36815	3.1%
10-14	43077	40895	43435	-3.7%	41592	3.5%
15-19	41876	39652	43506	-3.7%	41693	3.5%
20-24	38528	37901	40428	-3.4%	39742	3.4%
25-29	37871	37875	37390	-3.2%	37552	3.2%
30-34	38734	38861	37815	-3.2%	38133	3.2%
35-39	46237	46221	38879	-3.3%	39097	3.3%
40-44	46382	45569	45944	-3.9%	46121	3.9%
45-49	41699	42053	45949	-3.9%	45183	3.8%
50-54	36581	37021	40785	-3.5%	41182	3.5%
55-59	27687	27742	35269	-3.0%	35950	3.1%
60-64	22173	22913	26048	-2.2%	26519	2.3%
65-69	19808	21297	20123	-1.7%	21568	1.8%
70-74	17359	20763	17158	-1.5%	19512	1.7%
75-79	13950	19917	13986	-1.2%	18286	1.6%
80-84	8684	14367	9863	-0.8%	16173	1.4%
85-89	4623	9279	5007	-0.4%	9890	0.8%
90 +	1895	5210	2270	-0.2%	6292	0.5%
TOTAL	567736	584159	579242		595993	

## Urban (Winnipeg) Population

Winnipeg is an urban area and most people living in the city are classified as "urban". An urban area is defined as having a minimum population of 1,000 and a population density of 400 people per square kilometer. Most of Winnipeg Health Region's rural population would come from East or West St. Paul.

Table 15.2

Urban (Winnipeg) Population, 1996-2001				
	1996		2001	
Winnipeg	Urban	Rural	Urban	Rural
	98.9%	1.1%	99.3%	0.7%

Source: Statistics Canada Census, 1996,2001

Winnipeg Health Region: Population Counts & Percentages by Age Group & Sex as of Dec 31, 2000 and 2005

Table 15.3

Winnipeg Health Region Population: 2000 & 2005								
Age Groups	Population 2000 (TOTAL=649,011)		Population 2005 (TOTAL=662,520)					
	Male	Female	Male	% Male Total	Male MB %	Female	% Female Total	Female MB %
0-4	19944	18524	18519	2.8%	3.1%	17595	2.7%	3.0%
5-9	21990	21224	20025	3.0%	3.3%	18755	2.8%	3.1%
10-14	22034	20886	22140	3.3%	3.7%	21419	3.2%	3.5%
15-19	21248	20408	22442	3.4%	3.7%	21812	3.3%	3.5%
20-24	21511	21973	22437	3.4%	3.4%	22979	3.5%	3.4%
25-29	22513	22927	22539	3.4%	3.2%	22911	3.5%	3.2%
30-34	23391	23348	22679	3.4%	3.2%	22881	3.5%	3.2%
35-39	27477	27242	23209	3.5%	3.3%	23227	3.5%	3.3%
40-44	27004	26907	26979	4.1%	3.9%	27029	4.1%	3.9%
45-49	24199	25297	26674	4.0%	3.9%	26591	4.0%	3.8%
50-54	21242	22406	23562	3.6%	3.5%	24656	3.7%	3.5%
55-59	15453	16023	20133	3.0%	3.0%	21409	3.2%	3.1%
60-64	11923	12909	14165	2.1%	2.2%	15068	2.3%	2.3%
65-69	10832	12292	10599	1.6%	1.7%	12111	1.8%	1.8%
70-74	9279	12334	9370	1.4%	1.5%	11379	1.7%	1.7%
75-79	7671	12026	7579	1.1%	1.2%	10984	1.7%	1.6%
80-84	4582	8364	5515	0.8%	0.8%	9825	1.5%	1.4%
85-89	2353	5374	2689	0.4%	0.4%	5798	0.9%	0.8%
90+	903	2998	1178	0.2%	0.2%	3658	0.6%	0.5%
TOTAL	315549	333462	322433			340087		

## Population Density

Number of people per square kilometer. This indicator is calculated by dividing the total population by land area.

Table 15.4

Population Density by Community Areas			
Community Area	1996	2001	2006
Fort Garry	777.4	810.1	862.2
Assiniboine South	590.6	602.3	600.2
St. Boniface	961.6	1004.3	1098.5
St. Vital	960.6	956.6	979.9
Transcona	1157.6	1141.2	1145.9
River Heights	3177.2	3114.8	3076.3
River East	1196.6	1220.8	1229.4
Seven Oaks	447.9	453.5	475.4
St. James - Assiniboia	1026.9	1005.1	987.1
Inkster	1735.1	1729.7	1767.2
Downtown	4575.8	4652.0	4625.6
Point Douglas	3950.5	3875.4	4014.4
Winnipeg	1076.0	1084.3	1106.4
Manitoba	2.1	2.1	2.2

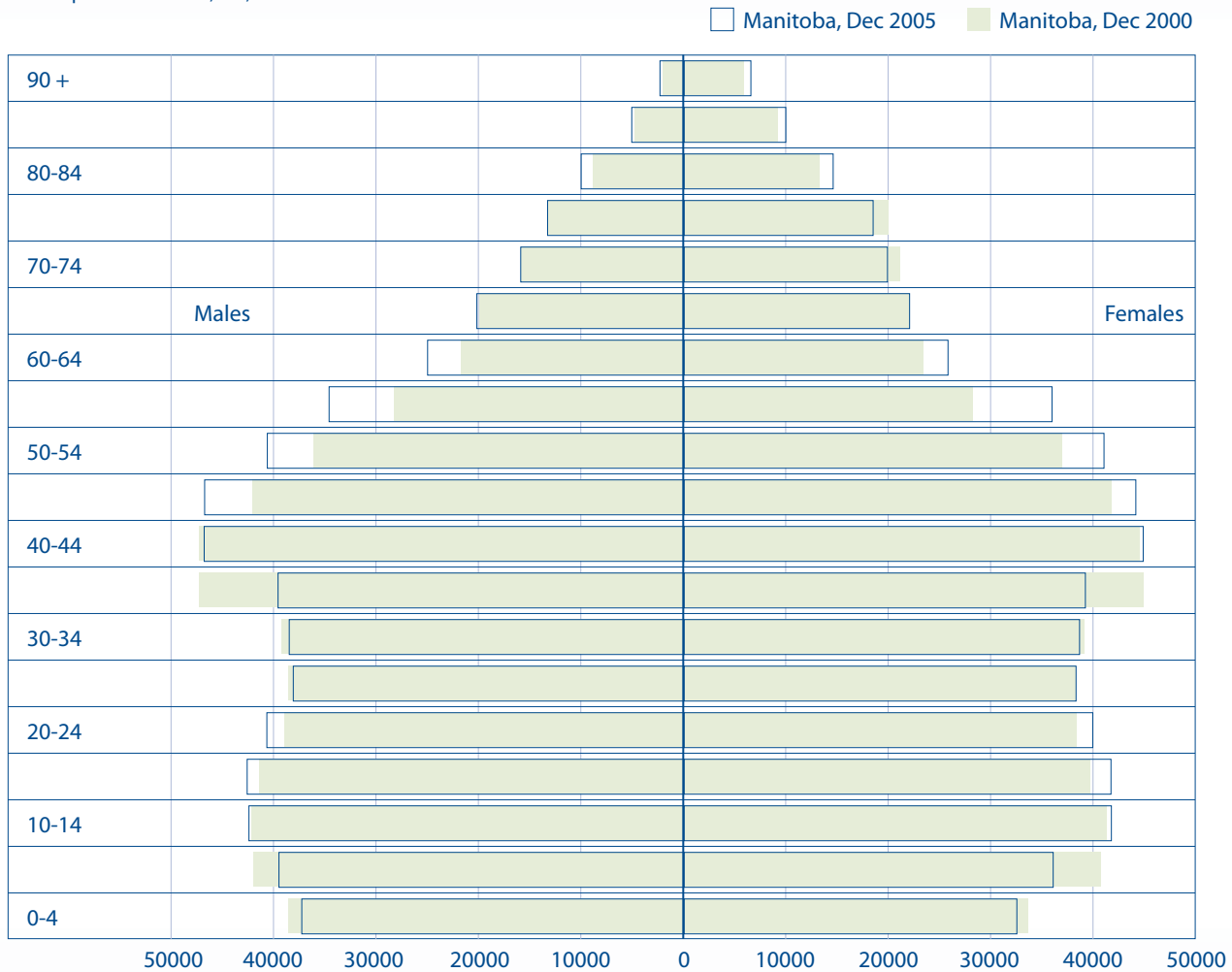
Source: Manitoba Health and Healthy Living Registry

# Population Pyramid

Figure 15.1: Age & Sex Profile of Manitoba, 2000 and 2005

Population 2000: 1,151,895

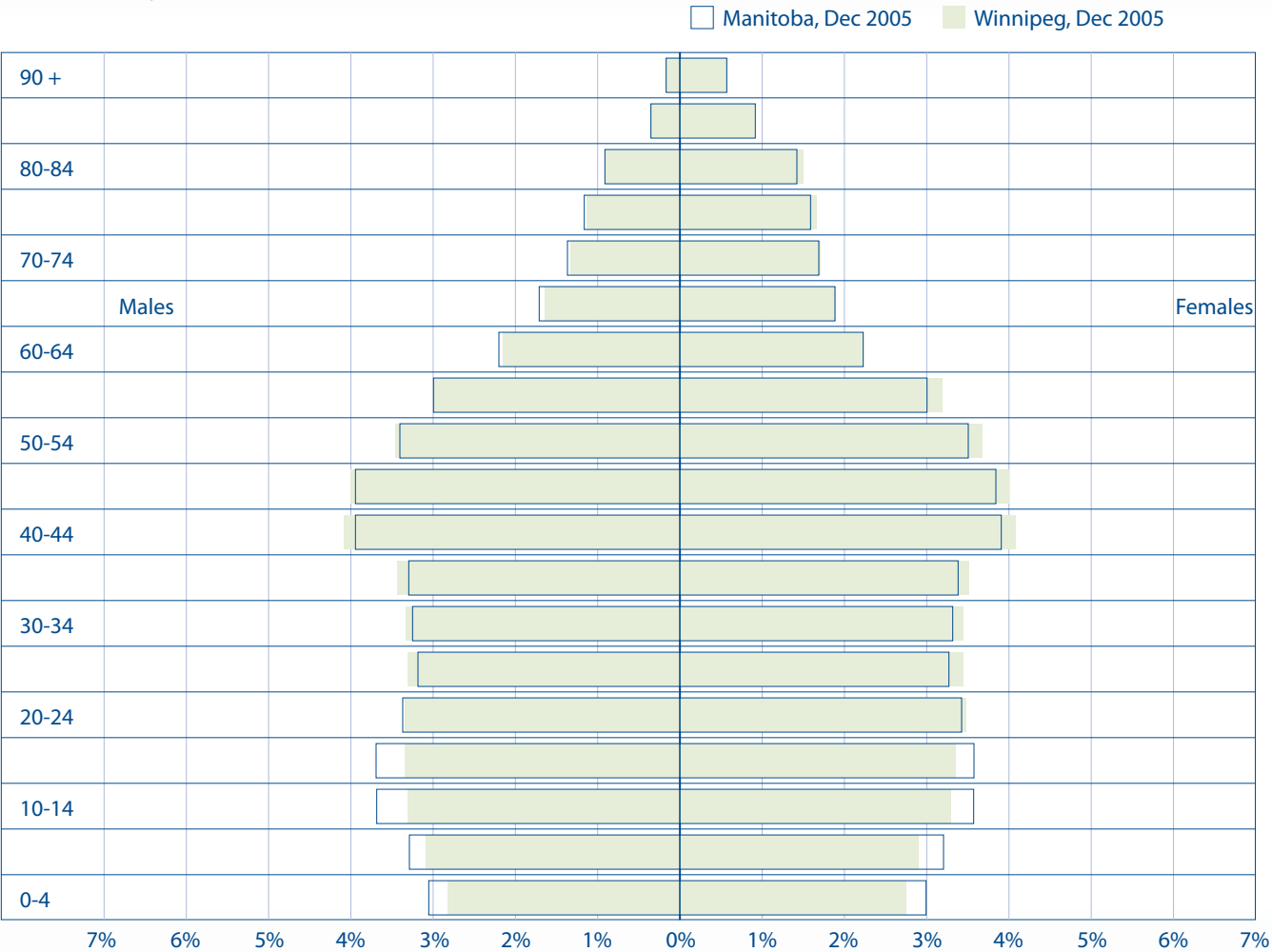
Population 2005: 1,175,235



Source: Manitoba Centre for Health Policy, 2009

# Population Pyramid

Figure 15.2: Age & Sex Profile of Winnipeg, 2005  
Winnipeg Population: 662,520  
Manitoba Population: 1,175,235

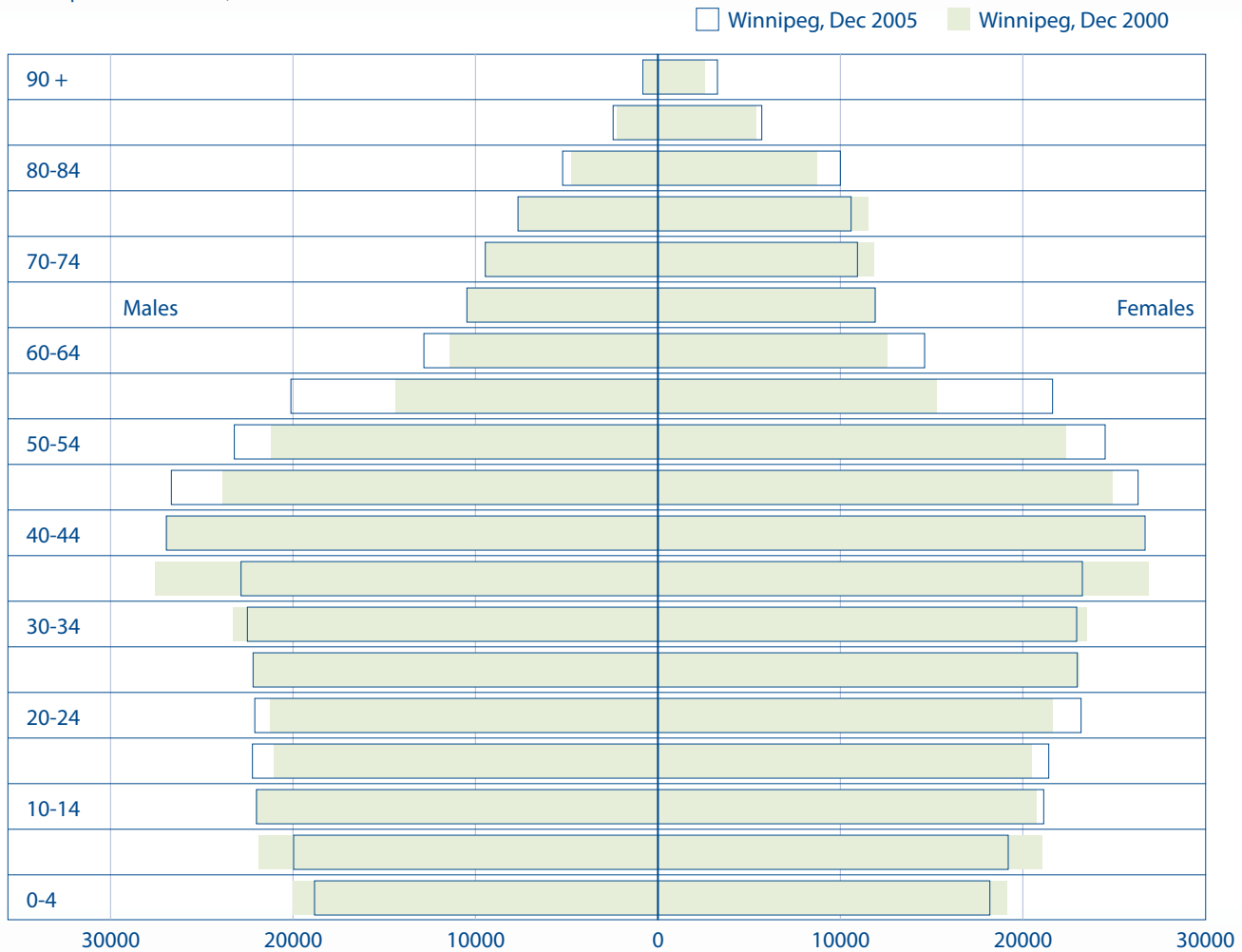


Source: Manitoba Centre for Health Policy, 2009

# Population Pyramid

Figure 15.3: Age & Sex Profile of Winnipeg, 2000 and 2005

Population 2000: 649,012  
Population 2005: 662,520



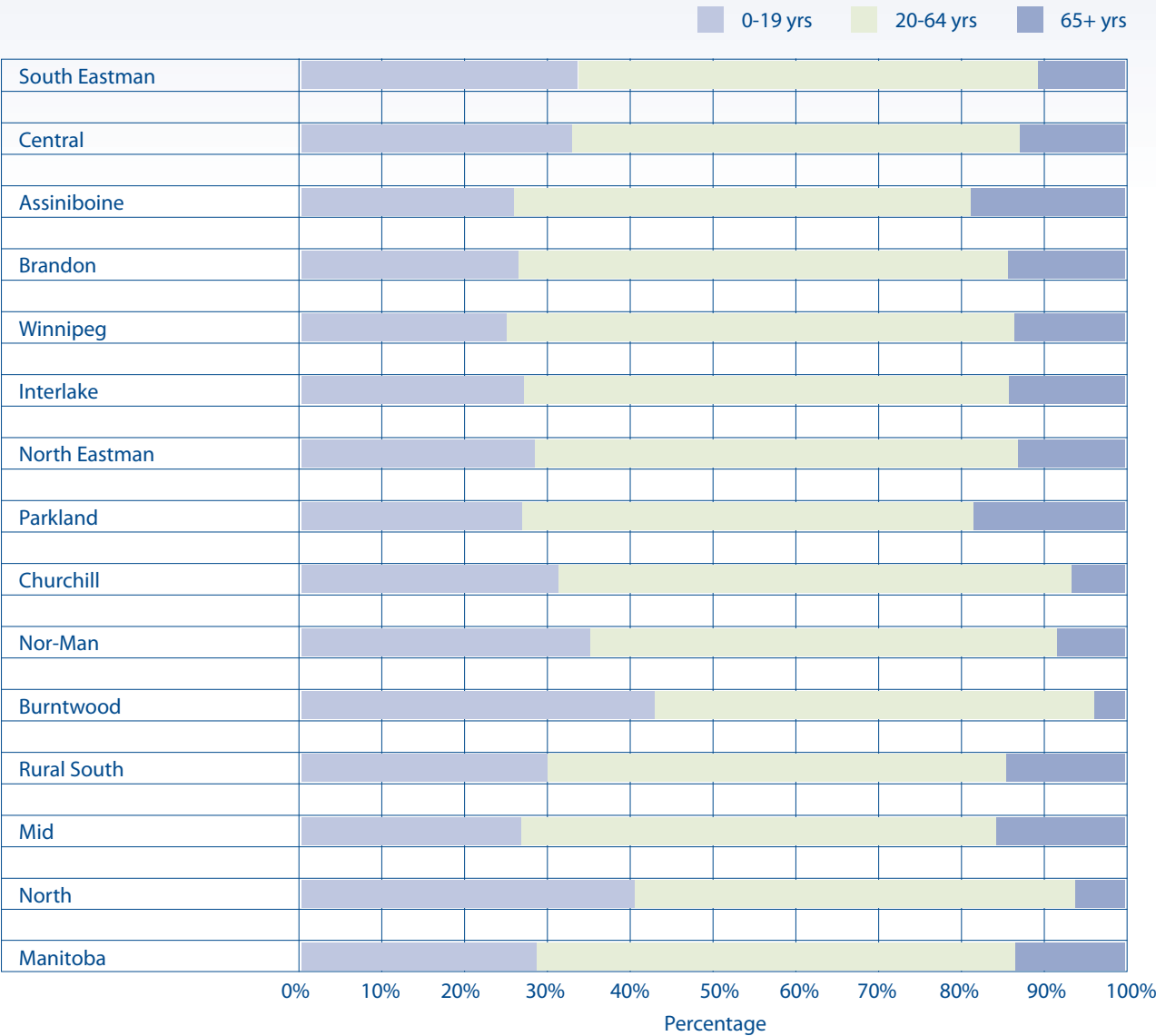
Source: Manitoba Centre for Health Policy, 2009



Table 15.5: Proportion of RHA population in each age group, 2005

	0-19 yrs	20-64 yrs	65+ yrs
South Eastman	32.4%	57.0%	10.6%
Central	31.6%	55.3%	13.2%
Assiniboine	25.8%	54.8%	19.4%
Brandon	26.3%	59.8%	14.0%
Winnipeg	24.6%	61.8%	13.7%
Interlake	26.9%	58.6%	14.5%
North Eastman	28.4%	58.1%	13.5%
Parkland	26.9%	54.4%	18.7%
Churchill	30.7%	63.3%	6.0%
Nor-Man	34.5%	57.2%	8.4%
Burntwood	43.7%	52.5%	3.7%
Rural South	30.1%	55.6%	14.3%
Mid	27.3%	57.3%	15.4%
North	40.4%	54.3%	5.3%
Manitoba	28.0%	58.3%	13.6%

Figure 15.4: Proportion of RHA population in each age group

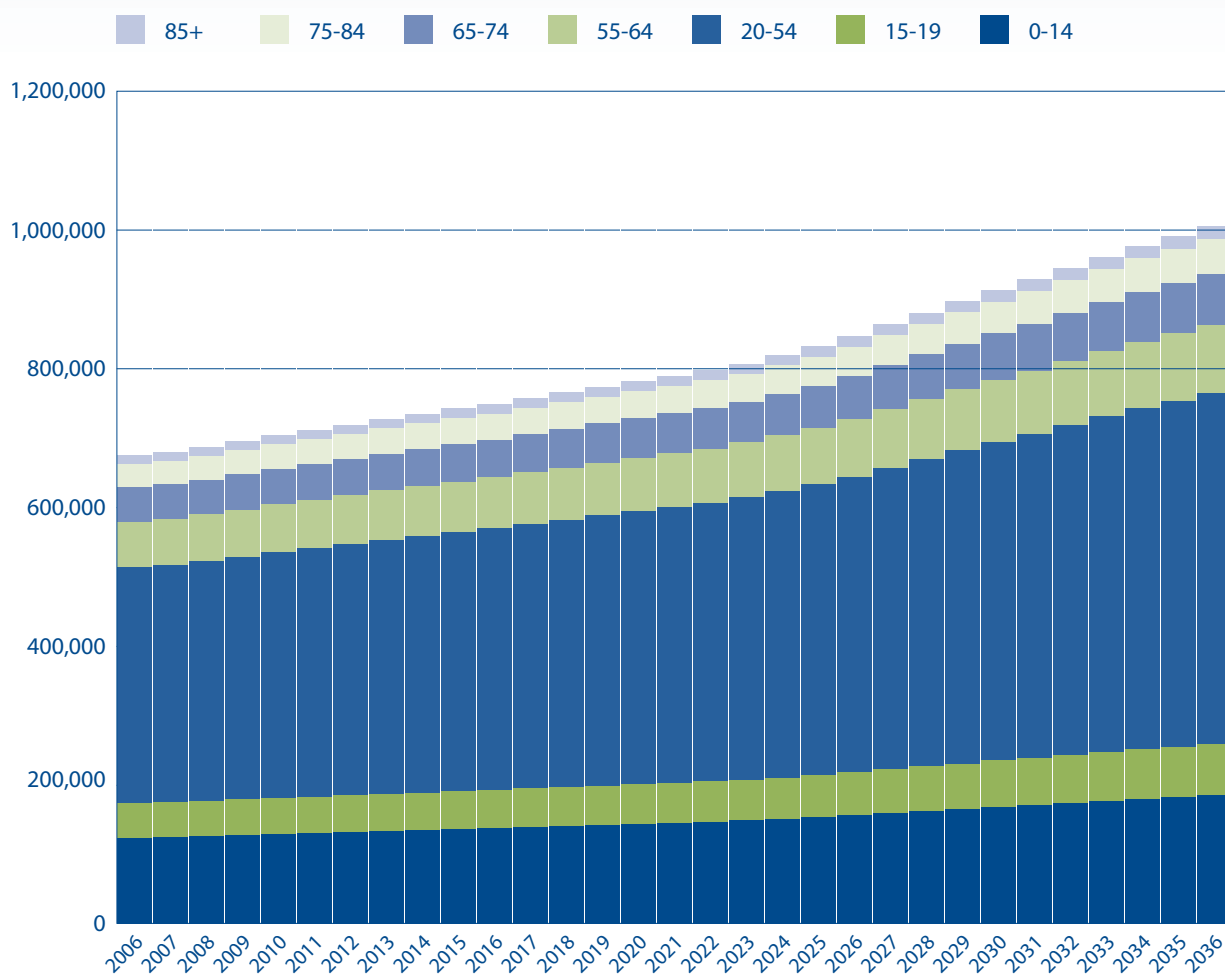


Source: Statistics Canada Census, 2001,2006

## Projected Winnipeg Population by Age Groups, 2006-2036

Number of people projected to be living in Winnipeg from 2006 to 2036. An Aboriginal peoples population projection is also provided for Winnipeg.

Figure 15.5

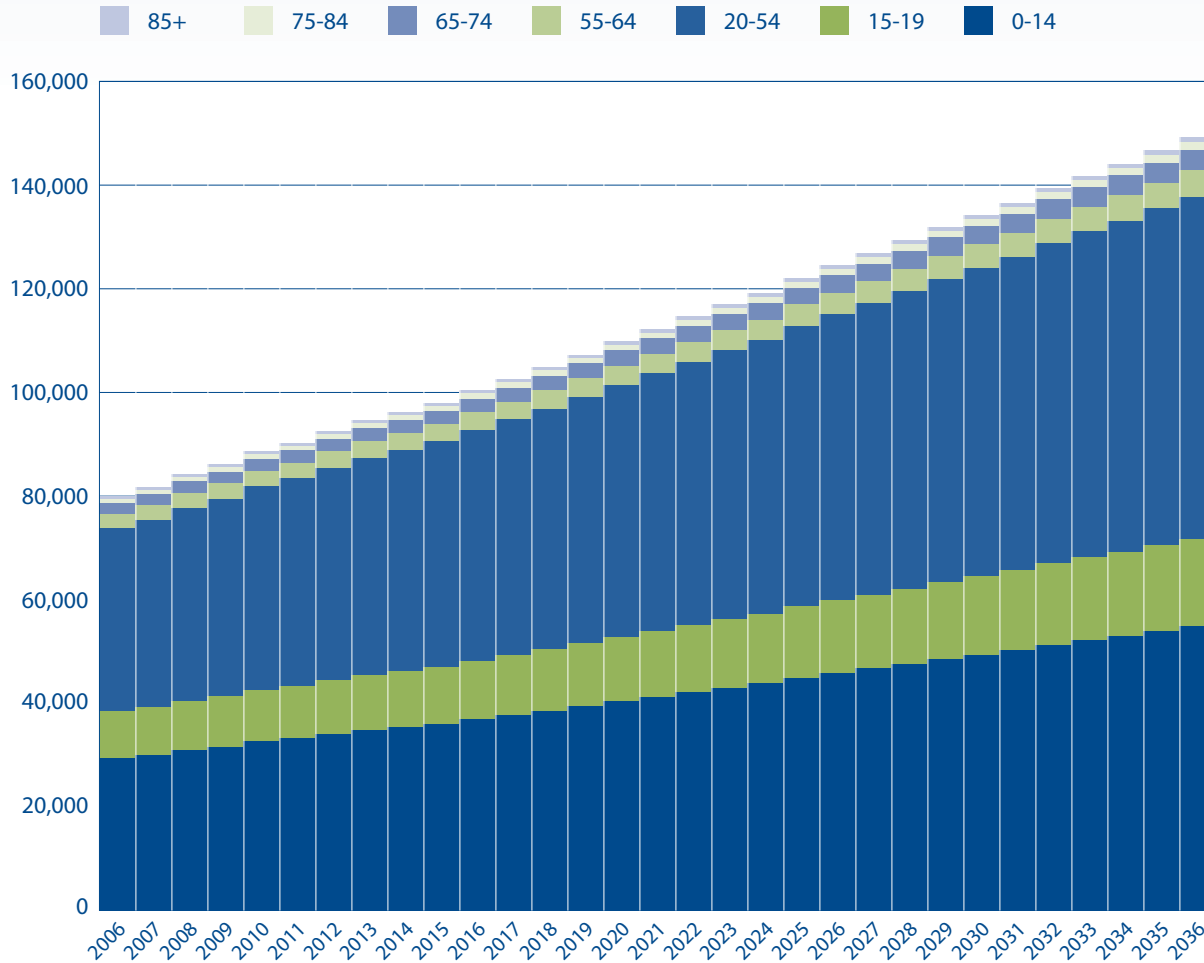


Note: A Projection year is June 1 to May 31.

Data Source: Manitoba Bureau of Statistics (MBS) Regional Health Authority Projections April 2008

## Projections for the Winnipeg Aboriginal Peoples Population by Age Group, 2006-2036

Figure 15.6

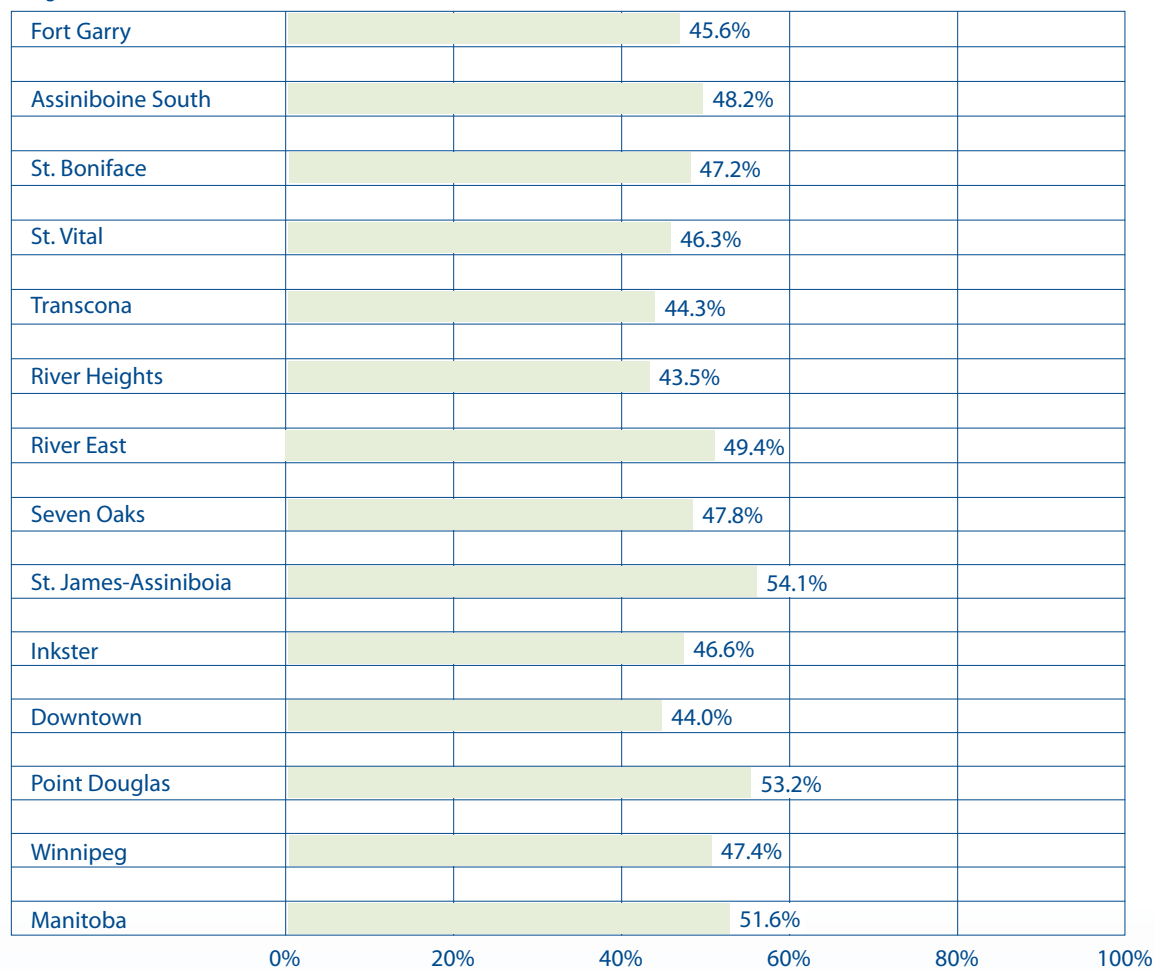


Note: A Projection year is June 1 to May 31.  
Data Source: MBS Regional Health Authority (First Nations) Projections, April 2008

## Dependency Ratio (Child & Elderly to Working Age Population Ratio)

The ratio of the combined child population (aged 0 to 14 years) and elderly population (aged 65 years and older) to the working age population (aged 15 to 64 years) according to the 2006 census. A region's dependency ratio is a reasonable measure of the likely demands on its health services since those residents under the age 15 and over the age of 64 are more likely to require health services. Children and the elderly are also more likely to be socially and/or economically dependent on those of working age. This ratio is usually presented as the number of dependents (%) for every 100 people in the working age population.

Figure 15.7



Source: Manitoba Health and Healthy Living Population Registry, 2008

## Percentage of Lone-Parent Families

The percentage (%) of lone-parent families among all census families living in private households. A census family refers to married or common-law couple or lone parent with at least one never-married son or daughter living in the same household.

Table 15.6

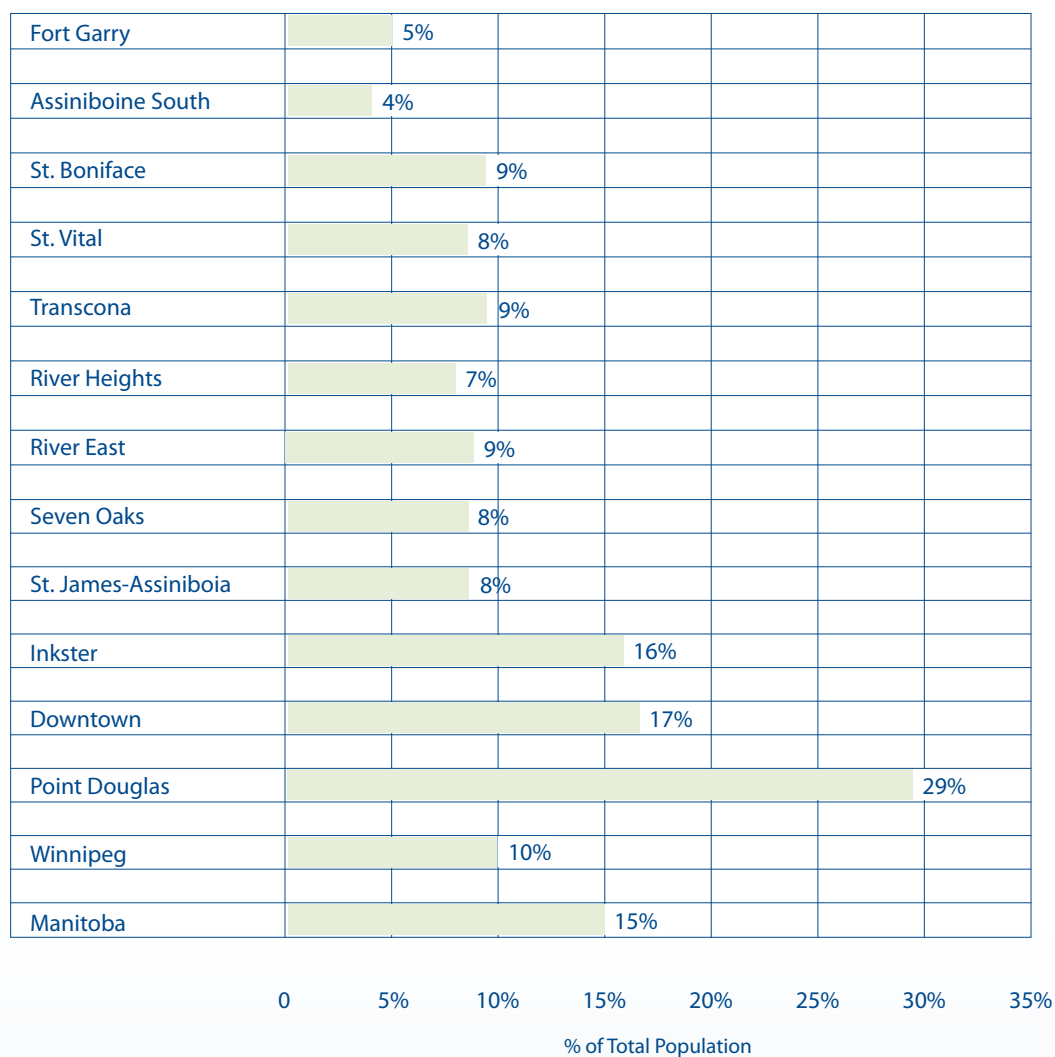
Community Area	2001		2006	
	Female Lone-Parent	Male Lone- Parent	Female Lone-Parent	Male Lone- Parent
Fort Garry	82%	18%	82%	18%
Assiniboine South	77%	23%	82%	18%
St. Boniface	79%	21%	82%	18%
St. Vital	86%	14%	82%	18%
Transcona	85%	15%	81%	19%
River Heights	82%	18%	82%	18%
River East	83%	17%	84%	16%
Seven Oaks	84%	17%	87%	13%
St. James - Assiniboia	85%	15%	81%	19%
Inkster	83%	17%	84%	16%
Downtown	87%	14%	83%	17%
Point Douglas	79%	21%	83%	17%
Winnipeg	83%	17%	83%	17%
Manitoba	82%	18%	81%	19%

Source: Statistics Canada Census, 2001,2006

## Aboriginal Peoples Living in a Geographic Area

Aboriginal status is a social determinant of health (e.g., rates of infant mortality, smoking and chronic disease are significantly higher among Aboriginal peoples). Knowing the proportion of people in a geographic area who are Aboriginal can help with health planning. Aboriginal peoples are those persons who report identifying with at least one Aboriginal group (e.g., North American Indian, Métis or Inuit and/or those who reported being a Treaty Indian or a Registered Indian as defined by the Indian Act and/or those who were members of an Indian Band or First Nation).

Figure 15.8: Aboriginal People Living in Winnipeg Community Areas as a proportion of the total population, 2006



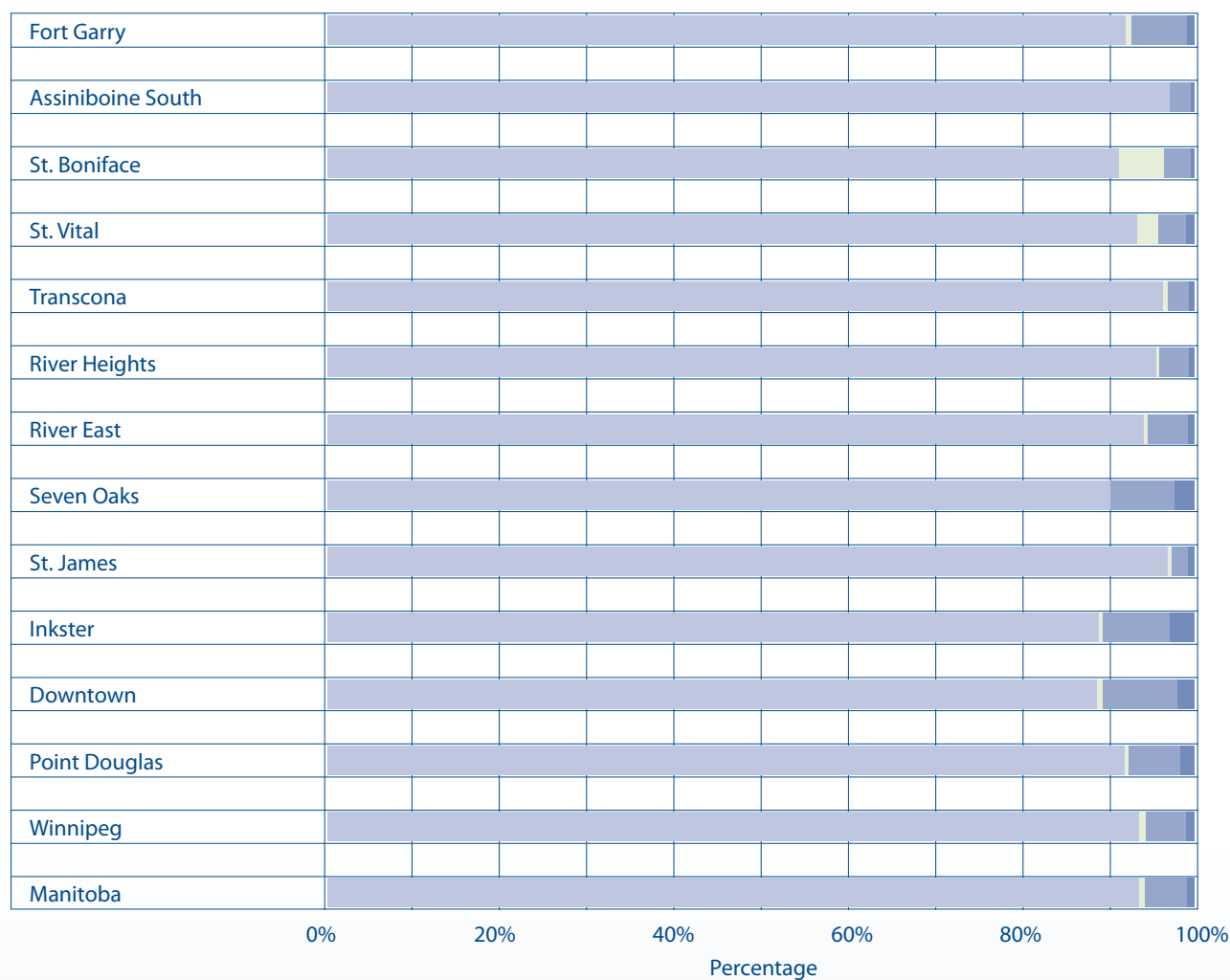
Source: Statistics Canada Census, 2006

## Most Frequent Language Spoken at Home

The language spoken most often or on a regular basis at home is recorded as part of the Statistics Canada Census. This indicator describes the language spoken most often or on a regular basis at home by individuals at the time of the most recent census (2006).

Figure 15.9

English   French   Non-Official Languages   English & French   English & non-official language(s)



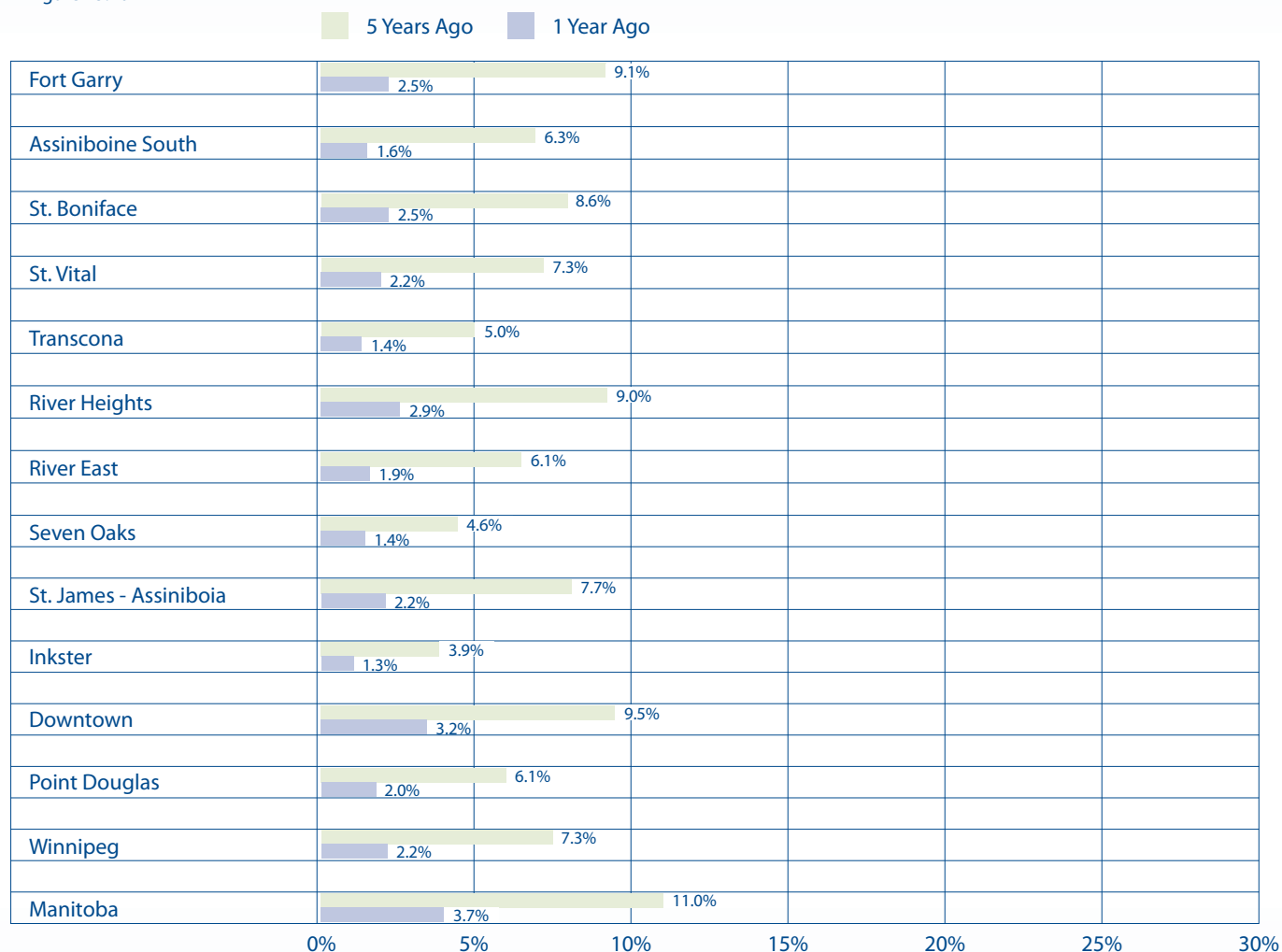
Source: Statistics Canada Census, 2006



## Internal Migrant Mobility

The population of Winnipeg and Manitoba does not move often. The percentage (%) of people that lived in a different Canadian municipality 5 years prior to the current census (2001, 5-year internal migrants) or one year before the current census (2006, 1-year internal migrants) are reported. External migrants who were living outside Canada are excluded.

Figure 15.10



Source: Statistics Canada Census, 2001 & 2006



## Appendix A

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index		Data Source Organization Report Name
			(Follows the Table of Contents)		
Definition					
A. Health Status					
1. General Status, Life Expectancy and Mortality					
Population Health <b>Mortality</b>  <b>Core</b>	D-12	<b>Life Expectancy</b>  -Life Expectancy (Female)	The expected length of life for females, 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.		Manitoba Health & Healthy Living (MHHL) and Health Information Management (HIM) Admin Data
	D-12	-Life Expectancy (Male)	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.		Manitoba Centre for Health Policy (MCHP) RHA Atlas 2009
Population Health <b>Health/ Social Conditions</b>  <b>Core</b>	D-15	<b>Premature Mortality (PMR)</b>	The number of deaths among an area’s residents under 75 years old, per 1000 residents under 75, 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.		MHHL (HIM) Admin Data  MCHP RHA Atlas 2009
Population Health <b>Mortality</b>  Non-Core	D-20	Potential Years of Life Lost (PYLL)	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 (aged 1-74) in the first time period.		MHHL (HIM) Admin Data  MCHP RHA Atlas 2009
Population Health <b>Mortality</b>  <b>Core</b>	D-2	<b>Infant Mortality</b>	The rate of death among infants under 1 year old (excludes stillbirths and infants weighing less than 500 grams or with a gestational age of 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.		Vital Statistics  Administrative Data
Population Health <b>Mortality</b>  <b>Core</b>	D-13	<b>Top 5 Causes of Mortality</b>	Percentage of deaths represented by the five most prevalent causes, by age and sex, for two, 5-year periods, 1996-2000 and 2001-2005. Deaths are shown for Manitoba and Winnipeg but not by neighbourhood clusters due to the relatively small number of deaths by cause in smaller geographic areas.		Vital Statistics  MHHL(HIM) RHA Profiles 2009
Population Health <b>Functional Status</b>  <b>Core</b>	B-2	<b>Health Status (self-rated)</b>	The age– and sex–adjusted proportion of participants who responded to each response category when answering the following question in the CCHS: “In general, would you say your health is: excellent, very good, good, fair, or poor?”. [A further 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.		Canadian Community Health Survey (CCHS) cycles 1.1 (2001), 2.1 (2003) and 3.1 (2005)  MCHP RHA Atlas 2009
Population Health <b>Functional Status</b>  <b>Core</b>	B-3	<b>Physical Functioning</b>	This indicator is based on calculating physical functioning scores derived from responses to SF–36 questions included in the CCHS. 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 are included.		CCHS cycles 2.1 (2003) and 3.1 (2005)  MCHP RHA Atlas 2009
Population Health <b>Functional Status</b>  <b>Core</b>	B-4	<b>Mental Health Status</b>	The general mental health scale is 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 percent of survey respondents in each group is shown. Results from cycles 2.1 (2003) and 3.1 (2005) were combined and included.		CCHS cycles 2.1 (2003) and 3.1 (2005)  MCHP RHA Atlas 2009

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index	Data Source Organization Report Name
			(Follows the Table of Contents)	
Definition				
A. Health Status				
2. Early Childhood and Maternal Health				
Determinants of Health & Social Well Being <i>Socio-Econ Cond</i>  Core	F-18	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 age-adjusted per 1,000 females aged 15-19 years.	MHHL (HIM) Admin Data  MCHP Child Health Atlas, 2008
Population Health <i>Health/Social Conditions</i>  Core	C-4	Pre-term Births	The proportion (%) of any live births where the gestational age was less than 37 weeks, divided by the total number of live births constitute this indicator. Values were calculated for two 5–year time periods, 1996/97–2000/01 and 2001/02–2005/06, and were sex–adjusted to the Manitoba population in the first time period.	MHHL (HIM) Admin Data  MCHP Child Health Atlas, 2008
Health System Performance <i>Accessibility</i>  Core	N-13	Maternal Alcohol Use Families First (FF)	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.	Healthy Child MB Admin Data  WRHA Families First Program Families First Screening Form 2003-2006
Health System Performance <i>Accessibility</i>  Core	N-13	Maternal Smoking (FF)	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.	Healthy Child MB Admin Data  WRHA Families First Program Families First Screening Form 2003-2006
Health System Performance <i>Accessibility</i>  Core	N-13	Maternal Depression & Maternal Anxiety Disorders Combined (FF)	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.	Healthy Child MB Admin Data  WRHA Families First (FF) Program. FF Screening Form 2003-2006
Health System Performance <i>Accessibility</i>  Core	N-13	Newborns born to families with Financial Difficulties (FF)	Proportion (%) of families of newborns experiencing financial difficulties as indicated on the Families First 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 monies available to meet basic needs. Counts and crude percentages are reported for four 1-year periods, 2003-2006.	Healthy Child MB Admin Data  WRHA Families First (FF) Program. FF Screening Form 2003-2006
Health System Performance <i>Accessibility</i>  Core	N-13	Newborns born to Mothers with less than Grade 12 education (FF)	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.	Healthy Child MB Admin Data  WRHA Families First (FF) Program. FF Screening Form 2003-2006
Health System Performance <i>Accessibility</i>  Core	N-13	Positive Families First Screen (FF)	The proportion (%) of families of newborns experiencing three or more risk factors as indicated on the Families First screening form. Counts and crude percentages are reported for four 1-year periods, 2003-2006.	Healthy Child MB Admin Data  WRHA Families First (FF) Program. FF Screening Form 2003-2006
Health System Performance <i>Accessibility</i>  Core	N-14	Screening For and Enrollment in the Families First Program	The percentage of Winnipeg’s regional post partum population screened and the percentage of those who screened positive who actually enrolled in the Families First program. Counts and crude percentages are reported for four 1-year periods, 2003-2006.	Healthy Child MB Admin Data  WRHA Families First (FF) Program. FF Screening Form 2003-2006

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)	Data Source Organization Report Name
			Definition	
A. Health Status				
3. Chronic Diseases				
Population Health <b>Health/Social Conditions</b>  <b>Core</b>	C-13	<b>Diabetes</b>	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.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <b>Health/Social Conditions</b>  <b>Core</b>	C-15	<b>Hypertension</b>	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. Values were calculated for two 1-year periods, 2000/01 and 2005/06, and were age- and sex-adjusted to the Manitoba population (19+) in the first time period.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <b>Health/Social Conditions</b>  <b>Core</b>	C-17	<b>Ischemic Heart Disease</b>	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 were calculated for two 5-year periods, 1996–2000 and 2001–2005, and were age- and sex-adjusted to the Manitoba population (19+) in the first time period.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <b>Health/Social Conditions</b>  <b>Core</b>	C-18	<b>Stroke</b>	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 were calculated for two 5-year periods, 1996–2000 and 2001–2005, and were age- and sex-adjusted to the Manitoba population (40+) in the first time period.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <b>Health/Social Conditions</b>  <b>Core</b>	C-6	<b>Arthritis</b>	The proportion (%) of residents age 19 or older who received treatment for arthritis (rheumatoid or osteoarthritis) 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. Values were calculated for two 2-year periods, 1999/00–2000/01 and 2004/05–2005/06, and were age- and sex-adjusted to the Manitoba population (19+) in the first time period.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <b>Health/Social Conditions</b>  <b>Core</b>	C-7	<b>Osteoporosis</b>	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. Values were calculated for two 3-year periods, 1998/99–2000/01 and 2003/04–2005/06, and were age- and sex-adjusted to the Manitoba population (50+) in the first time period.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <b>Health/Social Conditions</b>  <b>Core</b>	C-9	<b>Total Respiratory Morbidity</b>	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, 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	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)		Data Source Organization Report Name
			Definition		
A. Health Status					
3. Chronic Diseases					
Population Health <i>Health/Social Conditions</i>  Core	C-8	Asthma  -All ages	The proportion (%) of residents (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.		MHHL (HIM) Administrative Data  MHHL RHA Profiles 2009
		-Child	The proportion (%) of Winnipeg children age 5 to 19 who received treatment for asthma in a two-year period. Rates were calculated for two, 2-year time 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.		MHHL (HIM) Administrative Data  MCHP Child Health Atlas, 2008
Population Health <i>Health/Social Conditions</i>  Core	C-10	Cancer  -Cancer Incidence	The 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 (earlier) 3-year periods: 2000-2002 and 2003-2005. CancerCare Manitoba Administrative Data		MHHL RHA Profiles 2008 Health System Performance Effectiveness
	T-6	-Cancer Survival	Five-year relative survival ratios (percentage) for cancers (all, lung, colorectal, prostate (males), breast & cervical (females) and melanoma) are from Manitoba Cancer Registry data. All ratios (percentages) are age-standardized for cancer (all sites combined), for two, 3-year periods: 2000-2002 and 2005-2007.		CancerCare Manitoba Administrative Data  MHHL RHA Profiles 2008

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)	Data Source Organization Report Name
			Definition	
A. Health Status A. Health Status				
4. Mental Health				
Population Health <i>Health/Social Conditions</i>  Core	C-23	Mood disorders and/or Use of Antidepressants/ Mood Stabilizers	The proportion (%) of residents age 10 or older who received treatment for mood disorders 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. (Found under the title: DEPRESSION, RHA Atlas 2009)	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <i>Health/Social Conditions</i>  Core	C-24	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.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <i>Health/Social Conditions</i>  Core	C-25	Substance Abuse	The proportion (%) of residents age 10 or older who received treatment for 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 nondependent 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.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <i>Health/Social Conditions</i>  Core	C-26	Personality 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.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <i>Health/Social Conditions</i>  Core	C-27	Schizophrenia	The proportion (%) of residents age 10 or older who received treatment for schizophrenia (ICD–9–CM code 295; ICD–10–CA codes F20, F21, F23.2, and F25) in hospital abstracts or physician visits. Values were calculated for two 5-year periods, 1996/97– 2000/01 and 2001/02–2005/06. Within each period, record 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. Values were age- and sex-adjusted to the Manitoba population (10+) in the first time period.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <i>Health/Social Conditions</i>  Core	C-22	Cumulative Mental Illness	The proportion (%) of the population aged 10 or greater who received treatment for one or more of the following mental illnesses: 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.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <i>Health/Social Conditions</i>  Core	C-29	Teenagers prescribed SSRI Antidepressants	The proportion (%) of the population aged 10-19 years having at least one SSRI (selective serotonin reuptake inhibitor) prescription in a fiscal year. 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.	MHHL (HIM) Administrative Data  MCHP Child Health Atlas, 2008
Population Health <i>Health/Social Conditions</i>  Core	C-28	Dementia (age 55 and over)	Dementia is a loss of brain function. It is not a single disease. Instead, dementia refers to a group of illnesses that involve memory, behaviour, learning, and communication problems. The problems are progressive, which means they get worse overtime.  The proportion of residents age 55 or older with at least one physician visit or hospitalization for any of the following codes: 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). 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.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

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			(Follows the Table of Contents)	
Definition				
A. Health Status A. Health Status				
5. Injuries				
Population Health <i>Health/Social Conditions</i>  Core	C-19	Injury Hospitalization Rates (0-19 years)	<p>The number of hospital separations of area residents for which any injury code was included as one of the diagnoses (not necessarily the Most Responsible), per 1000 residents 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). 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.</p> <p>Hospitalizations were defined as any inpatient hospitalization with an external cause of injury diagnosis code (also known as an E-code), ICD–9 CM codes E800–E999*; ICD–10–CA codes V01–Y89. Excluded from the count of hospitalizations due to injury are those related to medical error or drug complications, as follows:</p> <ul style="list-style-type: none"><li>• misadventures during surgical or medical care, ICD–9–CM codes E870–E876; ICD–10–CA codes Y60–Y69, Y88.1</li><li>• reactions or complications due to medical care, ICD–9–CM codes E878–E879; ICD–10–CA codes Y70–Y84, Y88.2, Y88.3</li><li>• adverse effects due to drugs, ICD–9–CM codes E930–E949; ICD–10–CA codes Y40–Y59, Y88.0</li></ul> <p>Transfers between hospitals were tracked and only hospital episodes were counted, not individual separations, to reduce double-counting injuries. All Manitoba hospitals were included; PCHs and Long-Term Care facilities were excluded (Riverview, Deer Lodge, Rehabilitation Centre for Children and Adolescent Treatment Centre). Newborn birth injuries or deaths, stillbirths and brain deaths were excluded.</p>	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Population Health <i>Mortality</i>  Core	D-9	Unintentional Injury Deaths	<p>Rates per 100,000 population of death from unintentional injuries are reported. Unintentional injuries include injuries due to causes such as motor vehicle collisions, falls, drowning, burns and poisoning, but not “intentional” injuries (e.g., suicide or violence) or medical misadventures/complication. Age-standardized rates are reported for five 1-year periods, 2002-2006. Since the annual number of unintentional injury deaths is small, changes in rates from year to year should be interpreted with caution Rates are not available for individual community areas, again because of small numbers.</p>	MHHL (HIM) Vital Statistics  MHHL RHA Profiles 2009



Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index		Data Source Organization Report Name
			(Follows the Table of Contents)		
Definition					
A. Health Status					
5. Injuries					
Population Health <b>Mortality</b>  <b>Core</b>	D-10	<b>Suicide Rates</b>	<p>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. Results are shown by Community Area but not by Neighborhood Cluster, due to the relatively small number of suicides in smaller areas. Rates were adjusted to the Manitoba population in the first time period.</p> <p>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.</p> <p>Suicides were defined as any death record in Vital Statistics data with any of the following causes:</p> <ul style="list-style-type: none"><li>• accidental poisoning, ICD–9–CM codes E850–E854, E858, E862, E868; ICD–10–CA codes X40–X42, X46, X47</li><li>• poisoning with undetermined intent, ICD–10–CA codes Y10–Y12, Y16, Y17</li><li>• self–inflicted poisoning, ICD–9–CM codes E950–E952; ICD–10–CA codes X60–X69</li><li>• self–inflicted injury by hanging, strangulation and suffocation, ICD–9–CM code E953; ICD–10–CA code X70</li><li>• self–inflicted injury by drowning, ICD–9–CM code E954; ICD–10–CA code X71</li><li>• self–inflicted injury by firearms and explosives, ICD–9–CM code E955; ICD–10–CA codes X72–X75</li><li>• self–inflicted injury by smoke, fire, flames, steam, hot vapours and hot objects, ICD–9–CM codes E958.1, E958.2; ICD–10–CA codes X76, X77</li><li>• self–inflicted injury by cutting and piecing instruments, ICD–9–CM code E956; ICD–10–CA codes X78, X79</li><li>• self–inflicted injury by jumping from high places, ICD–9–CM code E957; ICD–10–CA code X80</li><li>• self–inflicted injury by jumping or lying before a moving object, ICD–9–CM code E958.0; ICD–10–CA code X81</li><li>• self–inflicted injury by crashing of motor vehicle, ICD–9–CM code E958.5; ICD–10–CA code X82</li><li>• self–inflicted injury by other and unspecified means, ICD–9–CM codes E958.3, E958.4, E958.6–E958.9; ICD–10–CA codes X83, X84</li><li>• late effects of self–inflicted injury, ICD–9–CM code E959</li></ul>		MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)		Data Source Organization Report Name
			Definition		
A. Health Status A. Health Status					
6. Sexually Transmitted Infections					
Determinants of Health and Social Well Being <i>Health Behaviours</i>  Core	E-13	Chlamydia	Chlamydia is defined as a laboratory-confirmed episode of genital, rectal or oropharyngeal infection with Chlamydia trachomatis. Crude Rate (per 100,000) of laboratory-confirmed Chlamydia Infections was calculated in the Winnipeg Health Region by age group and sex for 2008.		Communicable Disease Control Branch, Public Health Division, Manitoba Health, 2009  MHHL RHA Profiles 2009
Determinants of Health and Social Well Being <i>Health Behaviours</i>  Core	E-14	Gonorrhea	Gonorrhea is defined as a laboratory- confirmed episode of genital or extra-genital infection with Neisseria gonorrhoeae. Crude Rate (per 100,000) of laboratory-confirmed Gonorrhea Infections was calculated in the Winnipeg Health Region by age group and sex for 2008.		Communicable Disease Control Branch, Public Health Division, Manitoba Health, 2009  MHHL RHA Profiles 2009

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)		Data Source Organization Report Name
			Definition		
B. Determinants of Health and Well-being					
7. Preventive Health Interventions					
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-10	<b>Adult Pneumococcal Immunization</b>	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.		MIMS  MCHP RHA Atlas 2009
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-9	<b>Adult Influenza Immunization Rates</b>	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.		MIMS  MCHP RHA Atlas 2009
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-8	<b>Childhood Immunization Rates</b>			
		<b>-1 year olds</b>	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).		MIMS  MCHP Child Health Atlas, 2008
		<b>-2 year olds</b>	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 include additional doses of DaPTP and HiB, as well as the measles, mumps and rubella (MMR) vaccine.		MIMS  MCHP Child Health Atlas, 2008
		<b>-7 year olds</b>	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. 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).		MIMS  MCHP Child Health Atlas, 2008
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-17	<b>Cervical Cancer Screening</b>	(PAP Test) The proportion of women age 18–69 who received at least one Pap test in a three–year period. This was defined 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.		MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-16	<b>Breast Cancer Screening (Mammogram)</b>	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.		MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)		Data Source Organization Report Name
			Definition		
B. Determinants of Health and Well-being					
8. Health Risk Factors					
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-4	<b>Smoking</b>	The proportion (%) of the population 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). Note that these rates may no longer reflect current behaviour.		CCHS cycles 1.1 (2001) 2.1 (2003) & 3.1 (2005)  MCHP RHA Atlas 2009
Determinants of Health and Social Well Being <b>Environmental Factors</b>  <b>Core</b>	G-1	<b>Second-Hand Smoke Exposure</b>	Second-hand smoke is the ambient smoke from a burning cigarette, pipe or cigar, and/or the smoke exhaled by a smoker. People who are in proximity to a person who is smoking inhale 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 ‘No Exposure to Second–Hand Smoke’ based on their answer to the question above.  The indicator reports on the proportion (%) of respondents aged 12 and over in each of the two categories. The age- and sex– adjusted proportion of respondents in each group is shown. Rates were calculated using data from CCHS cycles 2.1 (2003) and 3.1 (2005).		CCHS cycles 2.1 (2003) & 3.1 (2005)  MCHP RHA Atlas 2009
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-1	<b>Body Mass Index (BMI)</b>	Body Mass Index (BMI) is a statistical measure used to classify and compare individuals according to their height and weight. BMI is calculated as weight (in kilograms) divided by height (in metres) squared and typically ranges from 15 to 45.  BMI for respondents aged 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 over age 18 in each group is shown. Rates were calculated using data from CCHS cycles 1.1 (2001), 2.1 (2003), and 3.1 (2005).		CCHS cycles 1.1 (2001) 2.1 (2003) & 3.1 (2005)  MCHP RHA Atlas 2009
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-5	<b>Total Activity Level</b>	This index was created to calculate total energy expenditure levels for respondents to the Canadian Community Health Survey (CCHS) aged 15–75. It is based on physical activity undertaken during both work–time and leisure–time activities in the previous three months. 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 data from CCHS cycles 1.1 (2001), 2.1 (2003), and 3.1 (2005).		CCHS cycles 1.1 (2001) 2.1 (2003) & 3.1 (2005)  MCHP RHA Atlas 2009
Determinants of Health and Social Well Being <b>Health Behaviours</b>  <b>Core</b>	E-2	<b>Nutrition: Fruit and Vegetable Consumption</b>	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 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.		CCHS cycles 1.1 (2001) 2.1 (2003)  MCHP RHA Atlas 2009

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			Definition		
B. Determinants of Health and Well-being					
9. Socio-Economic Conditions					
Determinants of Health and Social Well Being <i>Socio-Economic Conditions</i>  Non-core	F-11	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 grad 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.		Department of Education Enrollment Administrative Data  MCHP Child Health Atlas, 2008
Determinants of Health and Social Well Being <i>Socio-Economic Conditions</i>  Core	F-12	Education	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.		Statistics Canada, 2006 Census  MHHL (HIM) 2006 Census of Canada  Special Purchase, Manitoba Statistics Canada Data Consortium
Determinants of Health and Social Well Being <i>Socio-Economic Conditions</i>  Core	H-6	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 10th percentile of EDI scores) for school and ‘very ready for school’ (top 30th percentile of EDI scores) as determined from the Early Development Instrument (EDI) administered to all kindergarten children.  Percentages are shown for the school years 2005/06 and 2006/07		EDI (Early Development Instrument)  Healthy Child Manitoba , 2008

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)		Data Source Organization Report Name
			Definition		
B. Determinants of Health and Well-being					
9. Socio-Economic Conditions					
Determinants of Health and Social Well Being <i>Socio-Economic Conditions</i>  Core	H-9	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).		Department of Education Enrollment Administrative Data  MCHP Child Health Atlas, 2008
Determinants of Health and Social Well Being <i>Socio-Economic Conditions</i>  Core	F-2	LICOs (low income cut-offs)  -Individuals  -Economic families	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). This indicator reports the proportion of persons in each category of “household” with 2001 and 2005 incomes below the Statistics Canada low-income cut-off (LICO) as determined from census data.		Statistics Canada, 2006 Census  MHHL (HIM) 2006 Census of Canada  Special Purchase, Manitoba Statistics Canada Data Consortium
Determinants of Health and Social Well Being <i>Socio-Economic Conditions</i>  Core	F-3	Median Income of Individuals & Households	The dollar amount that marks the midpoint of a distribution of individuals, with income, ranked by size of income. Median individual income is that amount which divides the income size distribution of the group into two halves, i.e. the incomes of the first half of households are below the median, while those of the second half are above the median. Median individual income is calculated using the total income (pre-tax, post-transfer) for persons aged 15 and over who reported income in the Census of Canada. Median household income is calculated for all household units in the Census of Canada, whether or not they reported income.		Statistics Canada, 2006 Census  MHHL (HIM) 2006 Census of Canada Special Purchase, Manitoba Statistics Canada Data Consortium
Determinants of Health and Social Well Being <i>Socio-Economic Conditions</i>  Core	F-9	Unemployment rates	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. Unemployment crude rates are shown for two 1-year periods: 2001 and 2006		Statistics Canada, 2006 Census  MHHL (HIM) 2006 Census of Canada  Special Purchase, Manitoba Statistics Canada Data Consortium
Determinants of Health and Social Well Being <i>Socio-Economic Conditions</i>  Core	F-13	Housing affordability	The percentage of the population who reported spending 30% or more of total household income on shelter costs from the Census of Canada. 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. Band housing on First Nations reserves was not included in this calculation.  Data are shown for two 1-year period: 2001 and 2006. Statistics Canada, 2006 Census		MHHL (HIM) 2006 Census of Canada  Special Purchase, Manitoba Statistics Canada Data Consortium

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			Definition	
C. Health System Performance				
10. Fiscal				
Health System Characteristics <i>Fiscal</i>  Core	Y-1	Percent Operating Budget Spent on Acute, PCH and Community Costs	The percentage of the total operating budget going to acute care, long term care and community care costs, 2003/04 to 2007/08.	MIS  MHHL(HIM) RHA Profiles 2009

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Definition				
C. Health System Performance				
11. Accessibility				
Health System Performance <b>Accessibility</b>  <b>Core</b>	N-11	<b>Location of Visits to General &amp; Family Practitioners</b>	The proportion of visits to General and Family Practitioners (GPs/FPs) which took place within the resident's District, elsewhere in their RHA, in another RHA, or in Winnipeg. In Winnipeg and Brandon, all visits within the RHA were considered 'in District.' Churchill results are not shown because of incomplete data for physician claims. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Performance <b>Accessibility</b>  <b>Core</b>	N-6	<b>Use of Physicians</b>	The proportion of an area's residents who received at least one ambulatory visit in a fiscal year. Ambulatory visits include virtually all contacts with physicians, except during inpatient hospitalization. Values were calculated for 2000/01 and 2005/06 and were age-and sex-adjusted to the Manitoba population in 2000/01.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Performance <b>Accessibility</b>  <b>Core</b>	N-7	<b>Ambulatory Care Visit Rate</b>	This is the average number of visits to physicians per resident per year. Ambulatory visits include almost all contacts with physicians (general and family practitioners and specialists): office visits, walk-in clinics, home visits, nursing home visits, visits to outpatient departments, and some emergency room visits (where data are recorded). Excluded are services provided to patients while admitted to hospital and visits for prenatal care. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Performance <b>Accessibility</b>  <b>Core</b>	N-8	<b>Ambulatory Care Consultation Rates</b>	This is the average number of ambulatory consultations per resident per year. 'Consultations' are a subset of ambulatory visits: they occur when one physician refers a patient to another physician (usually a specialist or surgeon) because of the complexity, obscurity, or seriousness of the condition, or when the patient requests a second opinion. The consult rate is the best indicator of access to specialist care. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Performance <b>Accessibility</b>  <b>Core</b>	N-11	<b>Location Of Visits To Specialists</b>	The proportion of visits to specialist physicians which took place within the resident's District, elsewhere in their RHA, in another RHA, or in Winnipeg. In Winnipeg and Brandon, all visits within the RHA were considered 'in District.' Churchill results are not shown because of incomplete data for physician claims. Rates were calculated for 2000/01 and 2005/06 and were age- and sex-adjusted to the Manitoba population in 2000/01.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Performance <b>Accessibility</b>  <b>Core</b>	N-15	<b>Supply of PCH Beds</b>	The number of PCH beds per thousand residents aged 75+. Bed counts were taken from the Manitoba Health and Healthy Living PCH bed map. Data are shown for two 2-year periods: 1999/00-2000/01 and 2004/05-2005/06.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009



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C. Health System Performance					
11. Accessibility					
Health System Performance <b>Accessibility</b>  <b>Core</b>	N-1	<b>Operational Hospital Beds</b>	The number of beds in acute care hospitals within each RHA, divided by the population of the RHA. The beds counts come from the “setup beds” data kept by Manitoba Health and Healthy Living for 2000/01 and 2005/06. These values need to be interpreted with caution because the actual number for beds in use in each hospital varies through the year and beds can be used for “non-acute” care. The values are shown to provide an overall indication of the relative supply of beds across the province, and to track major changes over time.		MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Performance <b>Accessibility</b>  <b>Core</b>	N-5	<b>In &amp; Out Flow of RHA Inpatients</b>	The in and out flow of the Winnipeg Region’s residents in measuring:  • Catchment: where RHA hospital inpatients came from based on hospital separations, and • Location: where RHA residents went for hospital separations.  We report on Hospital Catchment: Where Patients Using WRHA Hospitals Came From of all separations from all hospitals in each RHA. This is the proportion of hospitalizations that was provided to WHR residents, residents of other RHAs, Winnipeg residents, or out-of-province residents. Over 97% of residents of Winnipeg attend hospitals in the region (location). Less than 1.5% of WHR residents use out-of-province hospitals.		MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

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C. Health System Performance					
12. Effectiveness					
Health System Performance <i>Effectiveness</i>  Core	T-17	Tonsillectomy/ Adenoidectomy	The number of tonsillectomy and/or adenoidectomy procedures performed per 1,000 residents aged 0 to 14 years, by area of residence, regardless of location of provision. Rates of tonsillectomy and/or adenoidectomy (T/A) for children 0 to 14 years of age were calculated for two different five fiscal-year time periods: 1996/97–2000/01 and 2001/02–2005/06. Both inpatient and outpatient T/A procedures were captured in the analysis.		MHHL (HIM) Administrative Data  MCHP Child Health Atlas 2008
Health System Performance <i>Effectiveness</i>  Core	T-16	Hysterectomy	A hysterectomy is a surgical operation to remove the uterus and, sometimes, the cervix. Removal of the body of the uterus without removing the cervix is referred to as a subtotal (or partial) hysterectomy. Concerns have been voiced that hysterectomy is used too often as a first line of treatment and is not necessarily always appropriate. The WHR is encouraging the use of less invasive methods to manage discretionary indications for hysterectomy.  Hysterectomy rates were calculated for woman age 25 or older for fiscal years 1984/85–2003/04. Hysterectomy was defined as any hospitalization for a hysterectomy surgery. These were identified by ICD–9–CM procedure codes of 68.4, 68.5 or 68.9 in any procedure field. (Note: this excludes procedure codes for radical hysterectomies typically associated with cancer cases, i.e., codes 68.6 and 68.7). The age-adjusted number of hysterectomies performed per 1,000 women aged 25 or older, by area of residence, regardless of location of provision.		MHHL (HIM) Administrative Data  MCHP What works? 2008

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C. Health System Performance				
12. Effectiveness				
Health System Performance <b>Effectiveness</b>  <b>Core</b>	T-9	<b>Caesarean Section</b>	<p>A C-section is a procedure in which a baby, rather than being born vaginally, is surgically extracted (removed) from the uterus. This type of delivery can have an impact on the newborn’s health. Babies delivered via Caesarean section (C–Section) are at increased risk of a number of complications including respiratory problems and difficulties breastfeeding.<sup>9</sup> C–Sections are also more costly than vaginal births (CIHI, 2006) and increase the risk of complications to the mother.<sup>10</sup></p> <p>The C– Section rates for women of child–bearing age (in this case 12 to 51 years) are calculated by taking the ratio of the number of women giving birth by C–Section to the total number of women giving birth. Data come from the hospital records. Values were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age–adjusted to the Manitoba population in the first time period.</p>	<p>MHHL (HIM) Administrative Data</p> <p>MCHP Child Health Atlas 2008</p>
Health System Performance <b>Effectiveness</b>  <b>Core</b>	T-10	<b>Vaginal Birth after Caesarian Section</b>	<p>This indicator is limited to women who have previously given birth by C–Section. Vaginal birth after Caesarean Section (VBAC) is an important indicator of the effort to reduce unnecessary C–Sections when there is no indication for a C–Section and evidence that C–Sections may increase complications for the newborns. VBACs also tend to carry lower health risks to the mother and require shorter hospital stays than C–Sections.<sup>11</sup></p> <p>The percent of women giving birth vaginally who had previously had at least one delivery by C–Section; the data come from the hospital records. Values were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and were age–adjusted percent of deliveries to the Manitoba population in the first time period.</p>	<p>MHHL (HIM) Administrative Data</p> <p>MCHP Child Health Atlas 2008</p>
Health System Performance <b>Effectiveness</b>  <b>Core</b>	T-1	<b>Ambulatory Care Sensitive Conditions</b>	<p>Ambulatory Care Sensitive (ACS) conditions are a set of medical conditions or diagnoses “for which timely and effective outpatient care can help to reduce the risks of hospitalization by either preventing the onset of an illness or condition, controlling an acute episodic illness or condition, or managing a chronic disease or condition.”<sup>12</sup> ACS is a grouping comprised of 17 diseases/diagnoses, including asthma, angina, gastro-enteritis, and congestive heart failure, created by Billings and colleagues.<sup>13</sup> The idea behind this measure was that if people receive an adequate level of good quality primary care, they should not need to be hospitalized for these conditions.</p> <p>This indicator describes the rate at which an area’s residents were hospitalized for Ambulatory Care Sensitive (ACS) Conditions, per 1000 residents per year. The crude and adjusted rate of hospitalizations for ACS conditions per 1000 residents age 0-74 was measured over two fiscal years: 2000/01 and 2005/2006. The conditions making up this indicator are listed in Appendix A. For all ACS conditions, the ACS condition must have been coded as the “most responsible diagnosis” on the hospital discharge. All Winnipeg hospitals are included; PCHs and personal care homes including Deer Lodge and Riverview were excluded. Individuals who died in hospital were excluded from the numerator. The denominator includes all residents of the WHR age 0-74 as of December 31, 2000 and 2005.</p>	<p>MHHL (HIM) Administrative Data</p> <p>MCHP RHA Atlas 2009</p>
Health System Performance <b>Effectiveness</b>  <b>Core</b>	T-7	<b>Unplanned Readmission Following Discharge For Acute Myocardial Infarction (AMI)</b>	<p>Readmission after acute myocardial infarction (AMI) has been targeted for public reporting because it is a common, costly, and often preventable outcome. This indicator is the risk-adjusted rate of unplanned readmissions for selected reasons within 28 days following discharge for a heart attack in Manitoba. To enable comparison across regions, a statistical model was used to adjust for differences in age, sex and co–morbidities (co-existing illness). Due to small numbers, the Canadian Institute for Health Information’s Health Indicators 2008 report data is used. Results are based on three years of pooled data, 2004/2005-2006/2007.</p>	<p>CIHI Administrative Data</p> <p>CIHI Health Indicators 2009</p>



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C. Health System Performance				
13. Continuity of Services				
Health System Performance <b>Continuity of Services</b>  <b>Core</b>	R-1	<b>Continuity of Care</b>	The percentage of residents receiving at least 50% of their ambulatory visits over a two-year period from the same physician. For children 0 to 14, it could be a GP/FP or a Pediatrician; for those 15 to 59, only GP/FPs were used; for those 60+, it could be a GP/FP or an Internal Medicine specialist. Residents with less than three ambulatory visits over the two-year period were excluded. Values were calculated 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.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Performance <b>Continuity of Services</b>  <b>Core</b>	R-2	<b>Antidepressant follow-up</b>	The proportion of patients with a new prescription for antidepressants and a physician diagnosis of depression who had at least three physician visits within four months of the prescription being filled. Crude rates were calculated for two 3-year periods, 1998/99–2000/01 and 2003/04–2005/06.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

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C. Health System Performance				
14. Utilization				
Health System Characteristics <i>Utilization</i>  Core	V-1	Ambulatory Visits To All Physicians By Category Of Illness	The distribution of diagnoses (illness categories) as attributed during ambulatory visits (one diagnosis code is recorded for each physician visit). Visits are grouped according to the 19 chapters of the International Classification of Diseases system (ICD–9–CM), and the top 10 reasons for a visit to a physician in Winnipeg are shown for each 5-year time period, 2000/01 and 2005/06.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Characteristics <i>Utilization</i>  Core	V-2	Physician Visits “For” Mental Illness	The annual rate of ambulatory visits per resident aged 10 years or more to all physicians (General Practitioners / Family Physicians and Specialists) for which a Mental Illness was coded as the reason for the visit.  Age-adjusted annual rate of Physician visits “for” mental Illness in Winnipeg were calculated for one 3 fiscal-year time period: 1997/98-2001/02.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Characteristics <i>Utilization</i>  Core	V-10	Hospital Days Used		
		-Short-stay Days	Hospital Days used for Short Stays (1–13 days): The number of days used in ‘short’ hospitalizations. An inpatient hospitalization lasting one day to 13 days is considered a short hospital stay in this study. Newborn (birth) hospitalizations were excluded. All Manitoba hospitals were included; PCHs and Long–term Care facilities were excluded (e.g., Deer Lodge and Riverview). The number of hospital days used in short stays (less than 14 days) per 1,000 area residents per year. If a resident had more than one short hospitalization in the period, then the days used in all short hospitalizations were summed. Rates were calculated for 2000/01 and 2005/06 and were age– and sex–adjusted to the Manitoba population in 2000/01.	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
		-Long-stay Days	Hospital Days used for Long Stays (14+ days): The number of days used in ‘long’ hospitalizations. An inpatient hospitalization lasting 14 days or more was considered a long hospital stay in this study. Newborn (birth) hospitalizations were excluded. All Manitoba hospitals were included; PCHs and Long–term Care facilities were excluded (e.g., Deer Lodge and Riverview). The number of hospital days used in long stays (14 or more days) per 1,000 area residents per year. If a resident had more than one long hospitalization in the period, then the days used in all long hospitalizations were summed. Each hospitalization was limited to 365 days maximum length of stay. Hospitalizations in long term care facilities were excluded (e.g., Deer Lodge and Riverview).	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

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Definition				
C. Health System Performance				
14. Utilization				
Health System Characteristics <i>Utilization</i>  Core	V-14	Cataract Surgery	<p>Cataracts occur when the lens of the eye becomes cloudy and normal vision is impaired. The clouded lens is removed in its entirety by surgery and replaced with an intraocular lens made of plastic. This indicators describes the number of cataract replacement surgeries performed on area residents age 50 or older, per 1,000 residents age 50 or older.</p> <p>Cataract surgery was defined by a physician claim with tariff codes 5611, 5612 and tariff prefix 2 (surgery), or a hospital separation with ICD–9–CM procedure codes 13.11, 13.19, 13.2, 13.3, 13.41, 13.42, 13.43, 13.51, 13.59, or CCI code 1.CL.89. Additional cataract surgeries for Manitoba residents were added from medical reciprocal claims for out of province procedures, including Alberta (tariff code 27.72) and Saskatchewan (tariff codes 135S, 136S, 226S and 325S). Rates were calculated for 2000/01 and 2005/06 and age– &amp; sex– adjusted to the Manitoba population age 50+ years in the first time period.</p>	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Characteristics <i>Utilization</i>  Core	V-15	Hip Replacement Surgery	<p>Hip replacement surgery removes damaged or diseased parts of a hip joint and replaces them with new, man-made parts. The goals of this surgery are to: relieve pain, help the hip joint work better and improve walking and other movements. The most common reason for hip replacement surgery is osteoarthritis in the hip joint.</p> <p>This indicator reports on the number of total hip replacements performed on area residents age 40 or older, per 1,000 area residents age 40 or older. Hip replacements were defined by ICD–9–CM codes 81.50, 81.51, 81.53, or CCI code 1.VA.53 in any procedure field in hospital abstracts. Rates were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and age– &amp; sex–adjusted to the Manitoba population age 40 or older in the first time period.</p>	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Characteristics <i>Utilization</i>  Core	V-16	Knee Replacement Surgery	<p>Knee replacement is surgery for people with severe knee damage. Knee replacement surgery can relieve pain and allow persons to be more active. During a total knee replacement, the surgeon removes damaged cartilage and bone from the surface of the knee joint and replaces them with a man-made surface of metal and plastic. In a partial knee replacement, the surgeon only replaces one part of the knee joint.</p> <p>This indicator reports on the total number of knee replacements performed on area residents age 40 or older, per 1,000 area residents age 40 or older. Knee replacements were defined by ICD–9–CM codes 81.54, 81.55, or CCI code 1.VG.53 in any procedure field in hospital abstracts. Rates were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and age– &amp; sex–adjusted to the Manitoba population age 40 or over in the first time period.</p>	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Characteristics <i>Utilization</i>  Core	V-17	Cardiac Catheterizations	<p>Cardiac catheterization is the most accurate method for identifying the location and severity of coronary artery disease. A catheter is inserted into a groin or arm artery and advanced to the opening of the coronary arteries supplying blood to the heart with the help of a fluoroscope (and X-ray viewing instrument). The catheter is used to inject radiographic contrast into each cardiac artery and the images produced are called an angiogram.</p> <p>This indicator describes the number of cardiac catheterizations performed on area residents age 40 or older, per 1,000 residents age 40 or older. This includes ICD–9–CM procedure codes 37.21–37.23, 88.52–88.57, or CCI procedure codes 2.HZ.28, 3.IP.10 in any procedure field in a hospital abstract (inpatient or outpatient). Rates were calculated for two 3–year periods, 1998/99–2000/01 and 2003/04–2005/06, and age– &amp; sex–adjusted to the Manitoba population 40+ in the first time period. Cardiac catheterizations were only performed at the two tertiary hospitals (Health Sciences Centre and St Boniface General Hospital), so only hospital separations from those two hospitals were included in the analysis in order to eliminate the potential for double–counting of procedures.</p>	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)	Data Source Organization Report Name
			Definition	
C. Health System Performance				
14. Utilization				
Health System Characteristics <b>Utilization</b>  <b>Core</b>	V-20	<b>Percutaneous Coronary Interventions</b>	<p>Percutaneous coronary interventions are procedures that treat the narrowed coronary arteries of the heart found in people with coronary heart disease. These interventions include percutaneous transluminal coronary angioplasty (PTCA) procedures commonly known as ‘angioplasty’ or ‘balloon angioplasty’. Angioplasty procedures use a balloon-tipped catheter to enlarge a narrowing in a coronary artery and, if necessary to insert a small lattice-shaped metal tube called a stent to hold the artery open so blood can flow through it more easily.</p> <p>This indicator reports on the number of percutaneous transluminal coronary angioplasty procedures (with or without stent insertion) performed on area residents age 40 or older, per 1,000 residents age 40 or older. This includes ICD–9–CM procedure codes 37.21–37.23, 88.52–88.57, or CCI procedure codes 1.IJ.50 and 1.IJ.57 in any procedure field in a hospital abstract (inpatient or outpatient). Rates were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and age– &amp; sex– adjusted to the Manitoba population age 40 or more years in the first time period.</p>	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Characteristics <b>Utilization</b>  <b>Core</b>	V-21	<b>Coronary Artery Bypass Graft (CABG)</b>	<p>Surgeries Bypass surgery is performed on persons with significant narrowing or blockage of coronary arteries to replace narrowed and blocked segments, permitting increased blood flow to the deliver oxygen and nutrients to the heart muscles, thereby improving circulation throughout the body.</p> <p>The number of bypass surgeries performed on area residents age 40 or older, per 1,000 area residents age 40 or older. Bypass surgery is defined by ICD–9–CM procedure codes 36.1–36.16, 36.19, or CCI code 1.IJ.76 in any procedure field (these codes include all surgeries, regardless f the number of vessels affected). Rates were calculated for two 5–year periods, 1996/97–2000/01 and 2001/02–2005/06, and age– &amp; sex–adjusted to the Manitoba population 40+ in the first time period. Bypass surgeries were only performed at the two tertiary hospitals (Health Sciences Centre and St Boniface General Hospital), so only hospital separations from those two hospitals were included in the analysis, in order to eliminate the potential for double–counting of procedures.</p>	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009
Health System Characteristics <b>Utilization</b>  <b>Core</b>	V-7	<b>Separations from Acute Care Hospitals with a Diagnosis “For” Mental Illness</b>	<p>The number of hospitalizations in acute care hospitals, and in Mental Health Centres, per 1,000 residents per year for which a Mental Illness Disorder was coded as the ‘most responsible’ cause of the hospitalization.</p> <p>Age standardized rate per 1000 were calculated for two 1 year periods: 2000/3/2004-2007/2008.</p>	MHHL (HIM) Administrative Data  MHHL RHA Profiles 2009
Health System Characteristics <b>Utilization</b>  <b>Core</b>	V-4	<b>Total hospital separation rates</b>	<p>A separation from a health care facility occurs anytime a patient (or resident) leaves because of discharge, transfer, or death. The number of separations is the most commonly used measure of the utilization of hospital services.</p> <p>The total number of inpatient and outpatient hospital separations (discharges) of area residents, per 1000 residents per year. In any given period, a resident could be hospitalized more than once, so this indicator shows the total number of separations from acute care facilities by all residents of the area. Rates were calculated for 2000/01 and 2005/06 and were age– and sex-adjusted to the Manitoba population in 2000/01. All Manitoba hospitals were included; Personal Care Homes (PCH) and Long–term Care facilities were excluded (Riverview, Deer Lodge, Rehabilitation Centre for Children and Manitoba Adolescent Treatment Centre). Newborn (birth) hospitalizations were excluded but the mother’s hospitalization was included.</p> <p>Rates were calculated for 2000/01 and 2005/06 and were age– and sex-adjusted to the Manitoba population in 2000/01.</p>	MHHL (HIM) Administrative Data  MCHP RHA Atlas 2009

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index	Data Source Organization Report Name
			(Follows the Table of Contents)	
Definition				
C. Health System Performance				
14. Utilization				
Health System Characteristics <b>Utilization</b>	V-22	<b>New Home Care Cases</b>	The percentage of the population (all ages) with a new home care case opened in a year (values shown are the annual average for a two-year period). Some home care clients had more than one case in a year, but were only counted once for this indicator. Rates were calculated for 1999/00–2000/01 and 2003/04–2004/05 and were age– and sex–adjusted to the Manitoba population in the first time period.	MHHL (HIM) Administrative Data
<b>Core</b>				MCHP RHA Atlas 2009
Health System Characteristics <b>Utilization</b>	V-23	<b>Open Home Care Cases</b>	The percentage of the population (all ages) with an open home care case in a year (values shown are the annual average for a two-year period). Some home care clients had more than one case in a year, but were only counted once for this indicator. Rates were calculated for 1999/00–2000/01 and 2003/04–2004/05 and were age– and sex–adjusted to the Manitoba population in the first time period.	MHHL (HIM) Administrative Data
<b>Core</b>				MCHP RHA Atlas 2009
Health System Characteristics <b>Utilization</b>	V-24	<b>Home Care Case Closures</b>	The percentage of the population (all ages) with a home care case which closed during the year (values shown are the annual average for a two-year period). Some home care clients had more than one case in a year, but were counted only once for this indicator. Rates were calculated for 1999/00–2000/01 and 2003/04–2004/05 and were age– and sex–adjusted to the Manitoba population in the first time period.	MHHL (HIM) Administrative Data
<b>Core</b>				MCHP RHA Atlas 2009
Health System Characteristics <b>Utilization</b>	V-25	<b>Average Length of Home Care Cases</b>	The average length (in days) of all home care cases open in a two-year period. A home care client may have more than one case in a period, and each would be counted as a separate case with a separate length of service. Rates were calculated for 1999/00–2000/01 and 2003/04–2004/05 and were age– and sex–adjusted to the Manitoba population in the first time period.	MHHL (HIM) Administrative Data
<b>Core</b>			For residents with more than one home care case, days in home care were counted for each case open in the fiscal year. If the case was open prior to the start of the fiscal year, the case was assigned April 1st as the start date; and similarly, if the case was not closed prior to the end of the fiscal year, the case was assigned March 31st as the end date.	MCHP RHA Atlas 2009
Health System Characteristics <b>Accessibility</b>	N-16	<b>Admissions to PCH</b>	The percentage of area residents age 75+ admitted to a PCH in a year (values shown are the annual average for a two-year period). Area of residence was assigned based on where people lived at the time, which is determined by the location of the PCH. Rates are shown for 1999/00–2000/01 and 2004/05–2005/06, and are age– and sex–adjusted to the population of Manitoba (75+) in the first time period.	MHHL (HIM) Administrative Data
Non-core				MCHP RHA Atlas 2009
Health System Characteristics <b>Utilization</b>	V-27	<b>Level of Care on Admission to PCH</b>	The distribution of levels of care assigned to PCH residents at the time of their admission. Level 1 represents the lowest level of need; Level 4 represents the highest. These are crude rates only; statistical testing was not done on these values.	MHHL (HIM) Administrative Data
<b>Core</b>				MCHP RHA Atlas 2009
Health System Characteristics <b>Utilization</b>	V-28	<b>Median Length of Stay by Level of Care at Admission to PCH</b>	The median length of stay (in years) of PCH residents, according to their level of care on admission. The median length of stay is the amount of time which half of all residents stayed. For example, in 1999/00–2000/01, the median was 2.33 years overall in Manitoba, so half of all residents stayed less than 2.33 years and half stayed longer. Level 1 represents the lowest level of need; Level 4 represents the highest. Crude values are reported only and statistical testing was not done on these values for two 2-years time periods of 1999/00–2000/01; and 2004/05–2005/06.	MHHL (HIM) Administrative Data
<b>Core</b>				MCHP RHA Atlas 2009

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)		Data Source Organization Report Name
			Definition		
D. Demographics					
Health System Characteristics <i>Demographics</i>	U-1	Manitoba Population	The number of people living in Manitoba by age and sex as of December 31, 2000 and 2005.		MHHL Population Registry
Core					MCHP RHA Atlas 2009
Health System Characteristics <i>Demographics</i>	U-10	Winnipeg Population	Winnipeg is an urban area and most people living in the city are classified as “urban”. An urban area is defined as having a minimum population of 1,000 and a population density of 400 people per square kilometer. Most of Winnipeg Health Region’s rural population would come from East or West St. Paul. Population Counts & Percentages by Age Group & Sex are reported as of Dec 31, 2000 and 2005.		MHHL Population Registry
Core					Statistics Canada, 2006 Census MHHL (HIM) 2006 Census of Canada Special Purchase, Manitoba Statistics Canada Data Consortium
Health System Characteristics <i>Demographics</i>	U-11	Population Density	Number of people per square kilometer. This indicator is calculated by dividing the total population by land area.		MHHL Population Registry
Core					Statistics Canada, 2006 Census MHHL (HIM) 2006 Census of Canada Special Purchase, Manitoba Statistics Canada Data Consortium
Health System Characteristics <i>Demographics</i>	U-2	Population Pyramids By Age & Sex	A population pyramid is a graph showing the age and sex composition of the population. The percentage (or actual number) of residents within each five–year age group (0–4, 5–9, etc, up to 90+ years old) is shown for both males (on the left side of the graph) and females (on the right side). In this report, there are two types of population pyramids shown for Winnipeg Health Region:  a. The first pyramid is a comparison of Winnipeg to the Manitoba population on December 31, 2005 showing the percentage of males and females in each five–year age categories. For Winnipeg and for Manitoba, the male plus female bars add up to 100%. b. The second pyramid shows how Winnipeg has changed over time. The Winnipeg population on December 31, 2000 is compared with that on December 31, 2005, showing the actual number of males and females in each five–year age category (males on the left, females on the right). The numbers in each of the bars add up to the total population for Winnipeg in each year.		MHHL Population Registry
Core					MCHP RHA Atlas 2009
Health System Characteristics <i>Demographics</i>	U-3	Population Projections	Number of people projected to be living in Winnipeg from 2006 to 2036. A First Nations population projection is also provided for Winnipeg.		MHHL Population Registry
Core					Statistics Canada, 2006 Census MHHL (HIM) 2006 Census of Canada Special Purchase, Manitoba Statistics Canada Data Consortium

Dimension Category Core vs. Non-Core	CHAN Ref No.	Indicator Title	2009/2010 WRHA CHA Report Indicator Index (Follows the Table of Contents)		Data Source Organization Report Name
			Definition		
D. Demographics					
Health System Characteristics <i>Demographics</i>  Core	U-4	Population Attributes:			
		Dependency Ratio (Child & Elderly to Working Age Population Ratio)	The ratio of the combined child population (aged 0 to 14 years) and elderly population (aged 65 years and older) to the working age population (aged 15 to 64 years). A region's dependency ratio is a reasonable measure of the likely demands on its health services since those residents under the age 15 and over the age of 64 are more likely to require health services. Children and the elderly are also more likely to be socially and/or economically dependent on those of working age. This ratio is usually presented as the number of dependents for every 100 people in the working age population.	MHHL Population Registry  Statistics Canada, 2006 Census MHHL (HIM) 2006 MB Stats Can Data Consortium	
	U-6	Lone-Parent Families Living in Winnipeg	The percentage (%) of lone-parent families among all census families living in private households. A census family refers to married or common-law couple or lone parent with at least one never-married son or daughter living in the same household.	MHHL Population Registry  Statistics Canada, 2006 Census MHHL (HIM) 2006 Census of Canada Special Purchase, Manitoba Statistics Canada Data Consortium	
	U-7	Aboriginal Peoples Living In Community Areas	Aboriginal status is a social determinant of health (e.g., rates of infant mortality, smoking and chronic disease are significantly higher among Aboriginal peoples). Knowing the proportion of people in a geographic area who are Aboriginal can help with health planning. Aboriginal peoples are those persons who report identifying with at least one Aboriginal group (e.g., North American Indian, Métis or Inuit and/or those who reported being a Treaty Indian or a Registered Indian as defined by the Indian Act and/or those who were members of an Indian Band or First Nation).		
	U-8	Most Frequent Language Spoken At Home	The language spoken most often or on a regular basis at home is recorded as part of the Statistics Canada Census. This indicator describes the language spoken most often or on a regular basis at home by individuals at the time of the census (1996, 2001, 2006).		
	U-9	Internal Migrant Mobility	The population of Winnipeg and Manitoba does not move often. The percentage (%) of people that lived in a different Canadian municipality at the time of the previous census (5-year internal migrants) or one year before the current census (1-year internal migrants) are reported to show this for the 2006 Census. External migrants who were living outside Canada are excluded.		

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## ACKNOWLEDGEMENTS

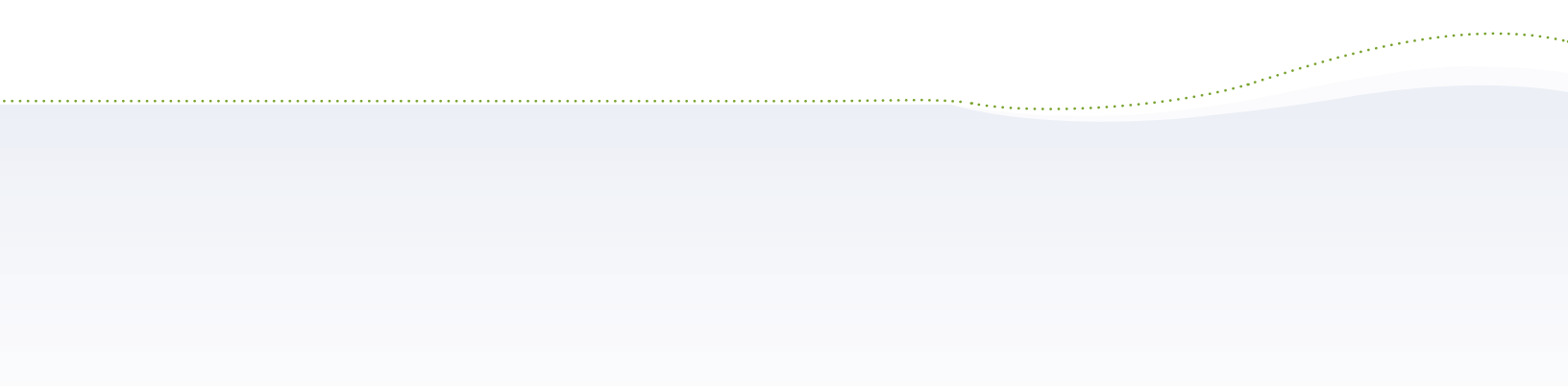
Community Health Assessment (CHA) is an ongoing activity of the Winnipeg Regional Health Authority (WRHA) and directed by an Advisory Committee. The purpose is to identify community health assets and issues, set health objectives and monitor progress towards those objectives. WRHA planners, program teams and others regularly use this information to identify priorities and to develop and support action plans in their daily work. This report is but one part of the CHA process and its production relied on the efforts of many people, including those listed below (with apologies to those whose names have been inadvertently omitted).

First and foremost, we thank all of those who work outside the WRHA and whose efforts were fundamental to the completion of this report:

- Manitoba Health and Healthy Living (MHHL) members: Della Beattie, Sonia Busca Owczar, Patricia Caetano, Lorraine Dacombe Dewar, Deborah Malazdrewicz and Heather Sparling.
- Manitoba Centre for Health Policy researchers and staff: Randy Fransoo, Patricia Martens, Marni Brownell, Elaine Burland, Heather Prior, Charles Burchill, Jennifer Schultz and the Need to Know Team
- The Community Health Assessment Network (CHAN) involves representatives from every Regional Health Authority in Manitoba. A sub-committee of CHAN derived the master list of required indicators for CHA reporting to MHHL. We thank all of these participants as well.

Many other persons within the WRHA worked behind the scenes to write, edit and offer comment on drafts of the report. The Medical Officers of Health were involved in writing and editing the sections' text. A significant number of others throughout the region were involved as secondary reviewers and were key to providing the "Additional Information" sections throughout the report. These persons were from: Population and Public Health, Mental Health, Nutrition and Food Services, Women's Health programs, the Chronic Disease Collaborative and Community Area Directors and staff.

We also appreciate the staff of the WRHA Research and Evaluation Unit who helped to produce the report by preparing tables and charts, reviewing and editing the indicators and supporting text (alphabetically): Sunita Bapuji, Paul Beaudin, Carlos Campos, Catherine Charette, Yang Cui, Judy Li, M.Nawal Lutfiyya, Colleen Metge (Director, 2009- ) and Liping Zhang.



This report is produced and published by the Winnipeg Regional Health Authority (WRHA).  
It is also available in PDF format on the WRHA website at:  
<http://www.wrha.mb.ca/research/cha2009/index.php>

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Suggested citation:  
Winnipeg Regional Health Authority. Community Health Assessment 2009/2010. Winnipeg MB: WRHA  
Research & Evaluation Unit, October 2010.

