



Indicator: Diabetes Prevalence

DEFINITION: The proportion of persons aged 19 years and older determined to be persons treated for diabetes (type 1 or 2) within a three year period as defined by:

- at least one hospitalization with a diagnosis of diabetes, or
- at least two physician visits with diabetes, or
- at least one prescription for diabetes medication

NUMERATOR: Number of persons treated with diabetes (aged 19 years and older) in a three year period.

DENOMINATOR: All residents aged 19 years and older living in the Winnipeg Regional Health Authority (the Region) during the period.

CALCULATION: Prevalence was age- and sex-adjusted to the Manitoba population aged 19 years and older in the first time period (i.e., 2004/05–2006/07 Manitoba population as the standard population for 2004/05–2006/07 and 2009/10–2011/12; 1998/99–2000/01 Manitoba population as the standard population for 1998/99–2000/01 and 2003/04–2005/06).

DATA SOURCES: Manitoba Centre for Health Policy (MCHP), 2009 & 2013

KEY FINDINGS:

- Diabetes prevalence increased over time in the Region, from 5.8% in 1998/99–2000/01 to 9.2% in 2009/10–2011/12.
- Winnipeg diabetes prevalence has been consistently lower than Manitoba's diabetes prevalence.
- Diabetes prevalence varied across the Region, with Churchill having the highest prevalence (16.1% in 2009/10–2011/12). There was nearly 3-fold difference across the Region neighborhood clusters (NC), with the highest prevalence in Point Douglas South (15.8% in 2009/10–2011/12) and the lowest in River East North (5.8% in 2009/10–2011/12).
- There was a trend that lower income areas had higher diabetes prevalence, according to household income. In 2009/10–2011/12, diabetes prevalence in the lowest income NC was 2.72 times higher than that in the highest income NC; and those in the lowest income quintile had 1.78 times higher diabetes prevalence than those in the highest income quintile.

WHAT DO THE FINDINGS MEAN TO COMMUNITIES?

- While diabetes incidence remained relatively stable during 2004/05–2011/12 (see Diabetes Incidence), prevalence increased. In Canada, diabetes prevalence increased by 21% from 2002/03 to 2006/07, with an average annual increase of 4%.¹
- The increase in diabetes prevalence might be attributable to more patients being identified as having diabetes, with receiving treatment and persons with diabetes surviving longer.²
- Diabetes and other endocrine and metabolic diseases accounted for 4.8% of deaths in Manitoba during 2007–2011.¹
- Diabetes can lead to a number of medical complications including cardiovascular diseases, kidney disease, nerve dysfunction and loss of vision. It can also cause economic burden; that is, annual per capita health care costs are three to four times greater in a population with diabetes compared to a population without the disease.³

¹ Public Health Agency of Canada. Report from the National Diabetes Surveillance System: Diabetes in Canada, 2009.

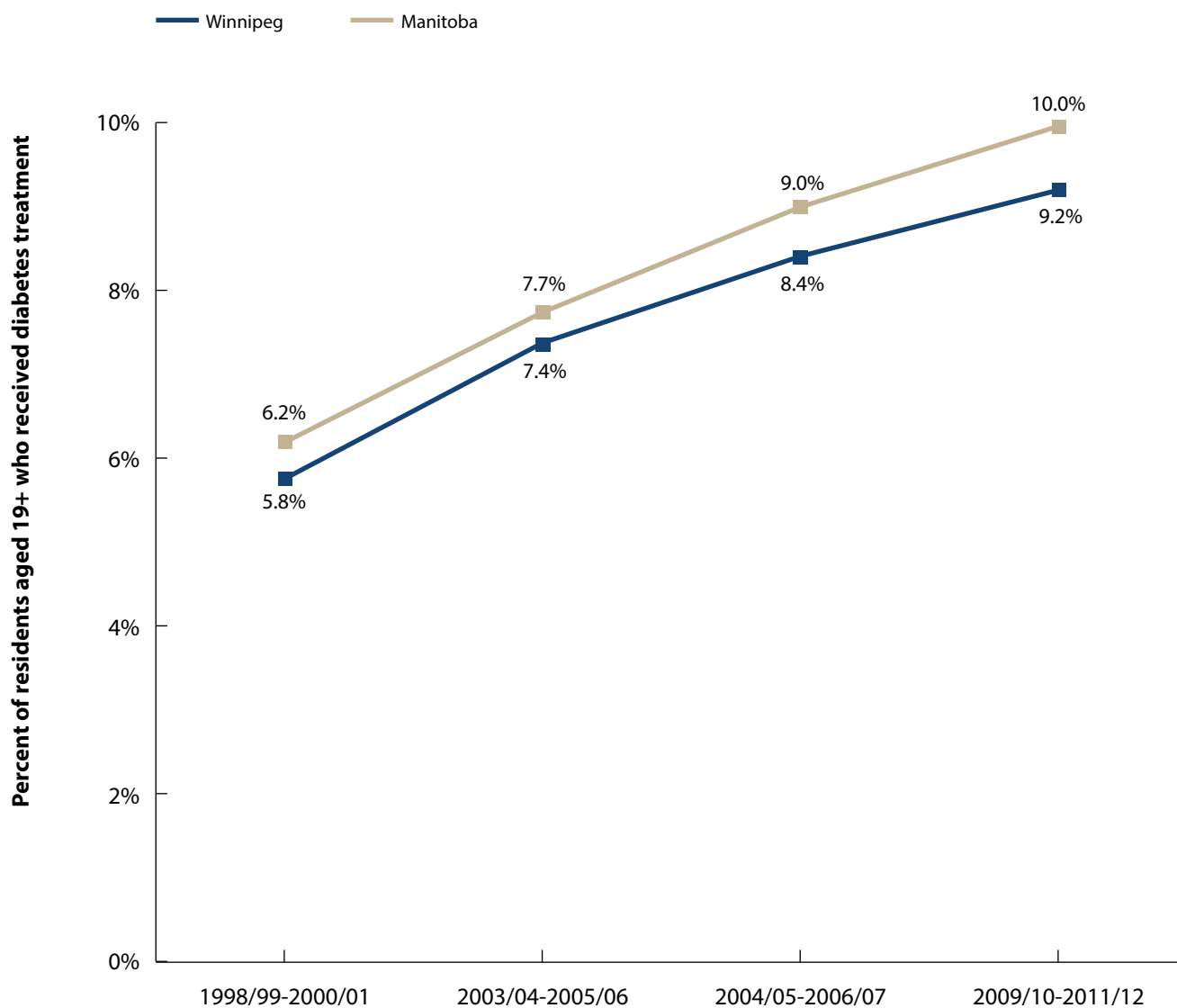
² Fransoo R, Martens P, The Need To Know Team, Prior H, Burchill C, Koseva I, Bailly A, Allegro E. The 2013 RHA Indicators Atlas. Winnipeg, MB. Manitoba Centre for Health Policy, October 2013.

³ Public Health Agency of Canada, Diabetes in Canada: Facts and figures from a public health perspective. Ottawa, 2011.

Figure A3.3.3.b1

Trends in Diabetes Prevalence in Winnipeg & Manitoba

Age- & sex-adjusted percent of residents aged 19+ who received treatment for diabetes, 1998/99–2011/12



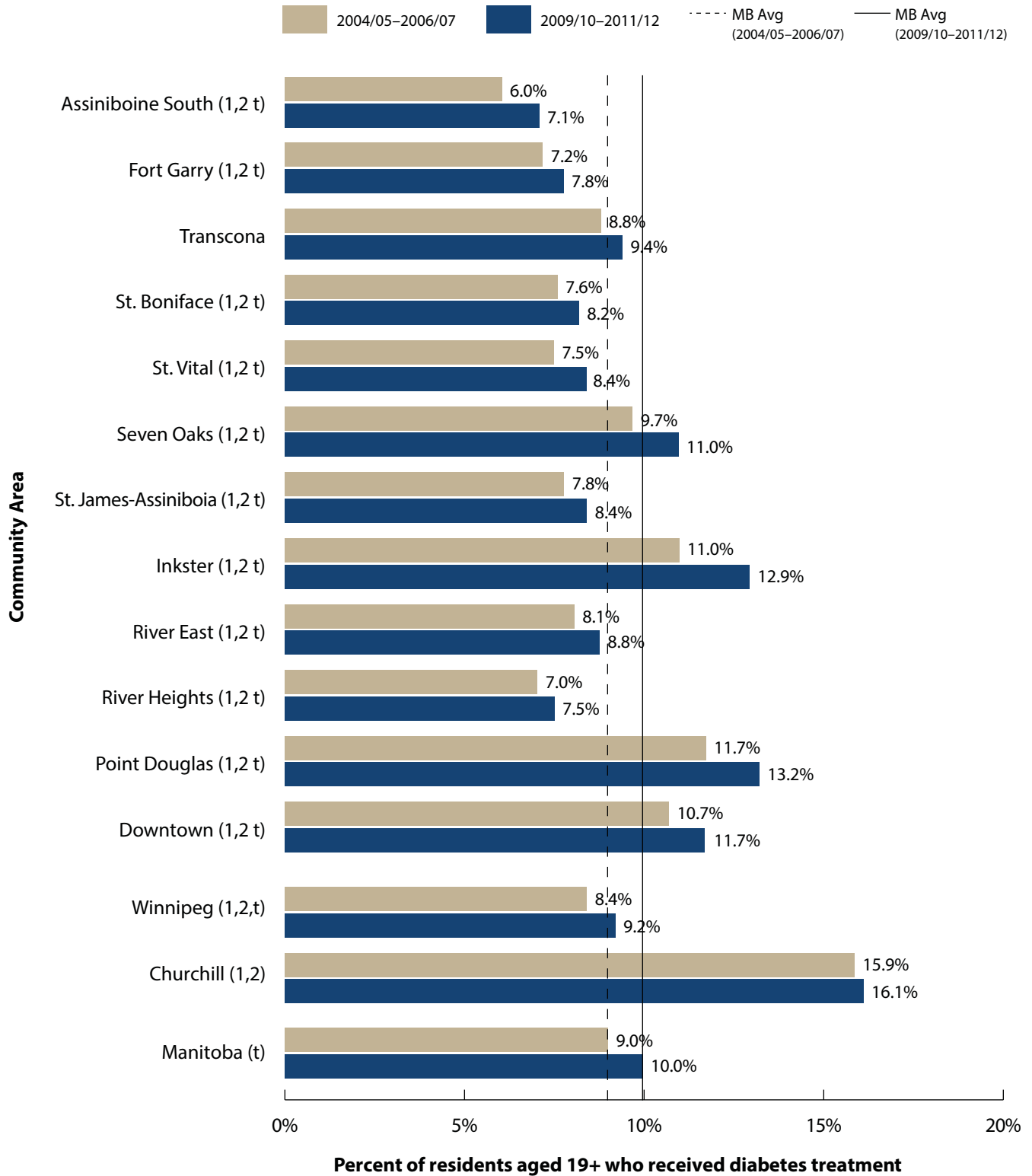
Sources: Manitoba Centre for Health Policy, 2009 & 2013

**The following charts of Community Area & Neighborhood Cluster are ordered by decreasing median household income.

Figure A3.3.3.b2

Diabetes Prevalence by Winnipeg Community Area

Age- & sex-adjusted percent of residents aged 19+ who received treatment for diabetes, 2004/05–2006/07 & 2009/10–2011/12



Source: Manitoba Centre for Health Policy, 2013

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

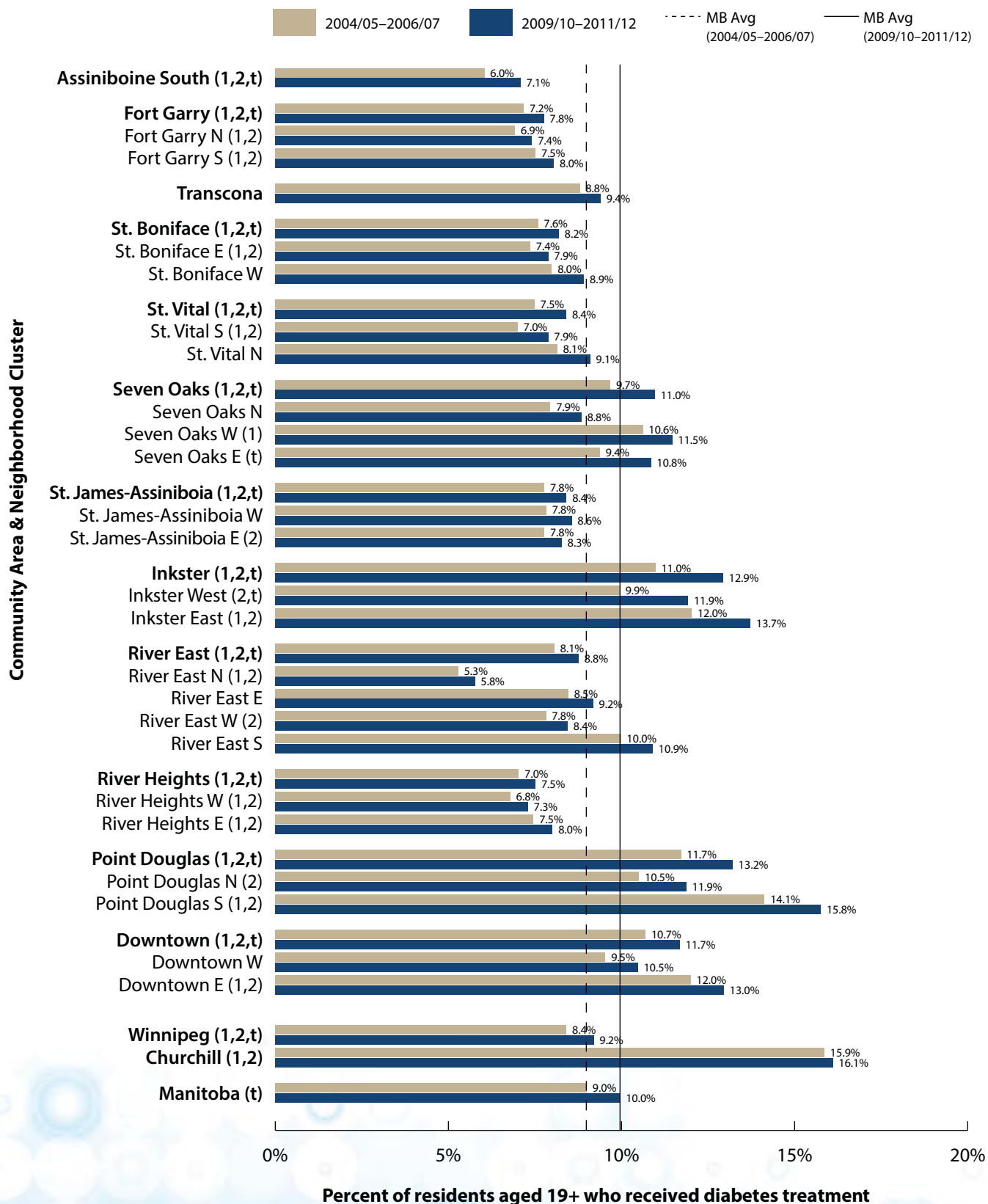
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

Figure A3.3.3.b3

Diabetes Prevalence by Winnipeg Community Area & Neighborhood Cluster

Age- & sex-adjusted percent of residents aged 19+ who received treatment for diabetes, 2004/05–2006/07 & 2009/10–2011/12



Source: Manitoba Centre for Health Policy, 2013

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

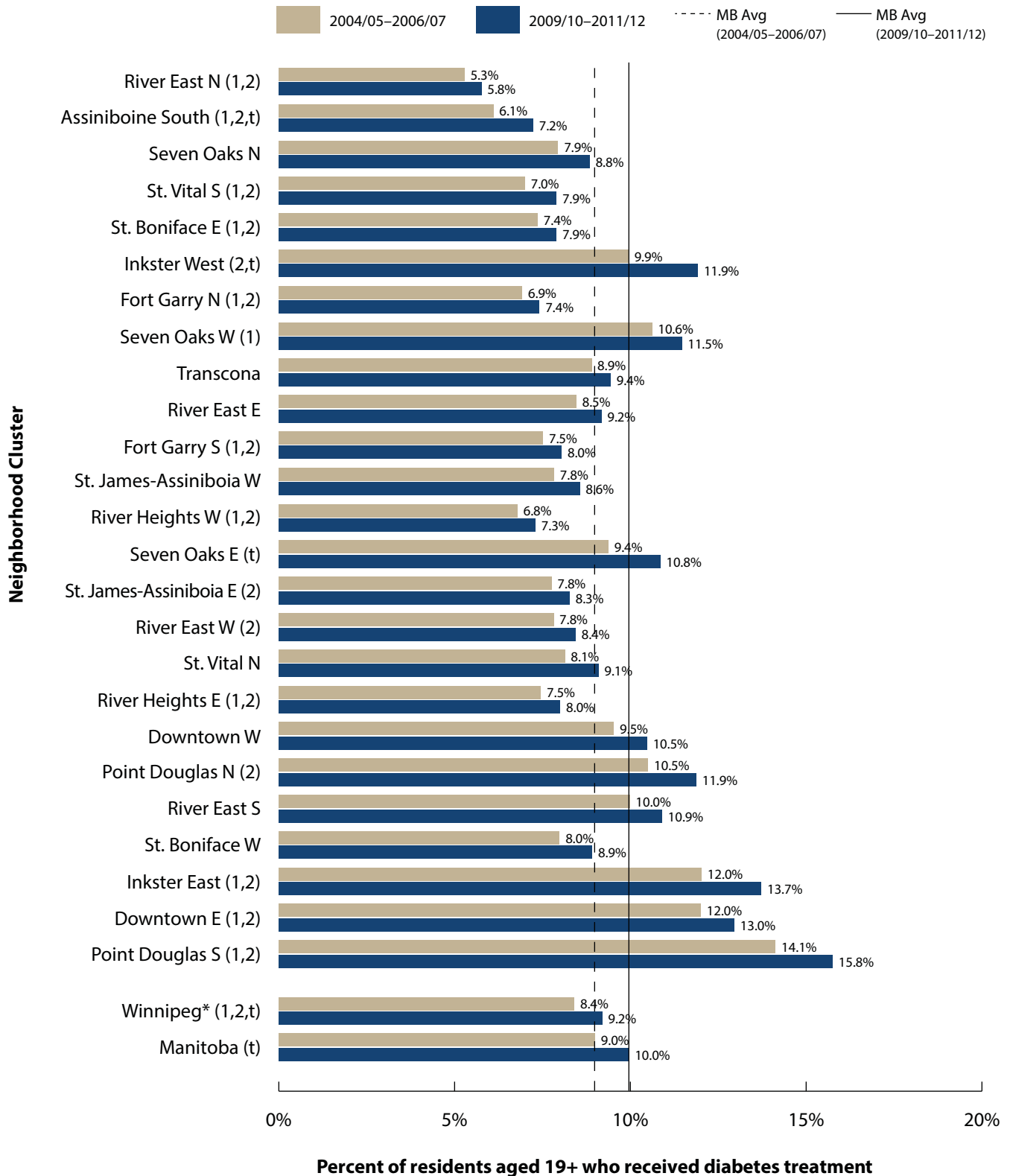
'2' indicates that in the second time period, the area's rate was statistically different from the MB average at that time

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

Figure A3.3.3.b4

Diabetes Prevalence by Winnipeg Neighborhood Cluster

Age- & sex-adjusted percent of residents aged 19+ who received treatment for diabetes, 2004/05–2006/07 & 2009/10–2011/12



Source: Manitoba Centre for Health Policy, 2013

*Excluding Churchill

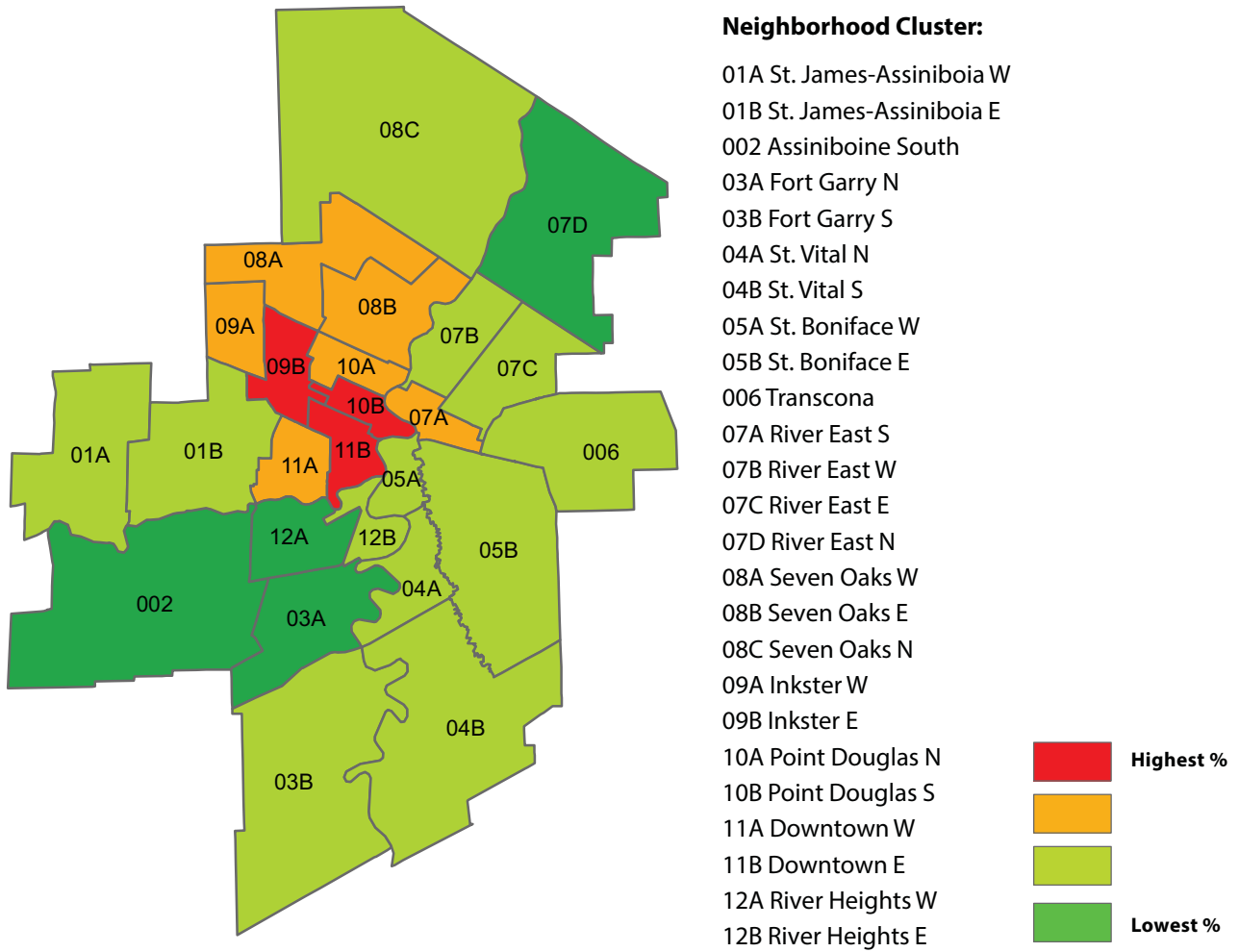
'1' indicates that in the first time period, the area's rate was statistically different from the MB average at that time

'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 Prevalence by Winnipeg Neighborhood Cluster

Age- & sex-adjusted percent of residents aged 19+ who received treatment for diabetes, 2009/10–2011/12



Source: Manitoba Centre for Health Policy, 2013

Table A3.3.3.b1

Health Inequality in Diabetes Prevalence (%), by Median Household Income & Urban Income Quintile

| Health Inequality Measures | Time Period | |
|--|--|--|
| | 2004/05-2006/07 % of persons treated for diabetes | 2009/10-2011/12 % of persons treated for diabetes |
| Persons treated for diabetes by <i>Neighborhood Cluster (NC)</i> <i>median household income</i> | | |
| Highest income NC (River East N) | 5.3% | 5.8% |
| Lowest income NC (Point Douglas S) | 14.1% | 15.8% |
| Absolute difference (Lowest income NC – Highest income NC) | 8.8% | 10.0% |
| Ratio (Lowest income NC / Highest income NC) | 2.66 | 2.72 |
| | | |
| Persons treated for diabetes by <i>Urban Income Quintile</i> | | |
| Highest Urban Income Quintile (U5) | 6.1% | 6.8% |
| U4 | 7.3% | 8.2% |
| U3 | 8.0% | 8.9% |
| U2 | 9.1% | 9.9% |
| Lowest Urban Income Quintile (U1) | 11.0% | 12.1% |
| Absolute difference (U1-U5) | 4.9% | 5.3% |
| Ratio (U1/U5) | 1.8 | 1.78 |

Source: Manitoba Centre for Health Policy, 2013