

### **Definition/Description:**

Coronary artery disease develops because of hardening of the arteries (atherosclerosis) that supply blood to the heart muscle. CABG surgery is performed on patients with significant narrowing and blockage of the heart arteries (coronary artery disease) to create new routes around narrowed and blocked arteries, permitting increased blood flow to deliver oxygen and nutrients to the heart muscles. The bypass graft for a CABG can be a vein from the leg or an inner chest wall artery. In this report, CABG was defined as any hospitalization occurring in a teaching hospital with ICD-9-CM codes within the range of 36.1 to 36.16 or 36.19 present in any procedure field.

### **Method**

Five years of hospital data (1991/92-1995/96 and 1996/97-2000/01) were used, with the denominator being the WHR population from the same years. Only teaching hospitals were included in the analysis. Age was calculated as of December 31 for each year, and region of residence was assigned as of the first-occurring record. Data were adjusted for age and sex. Age groups for standardization were 0-39, 40-59, 60-74, 75+. This indicator reflects those services provided only to residents living in the WHR. It does not account for those services provided in the region regardless of where people live.

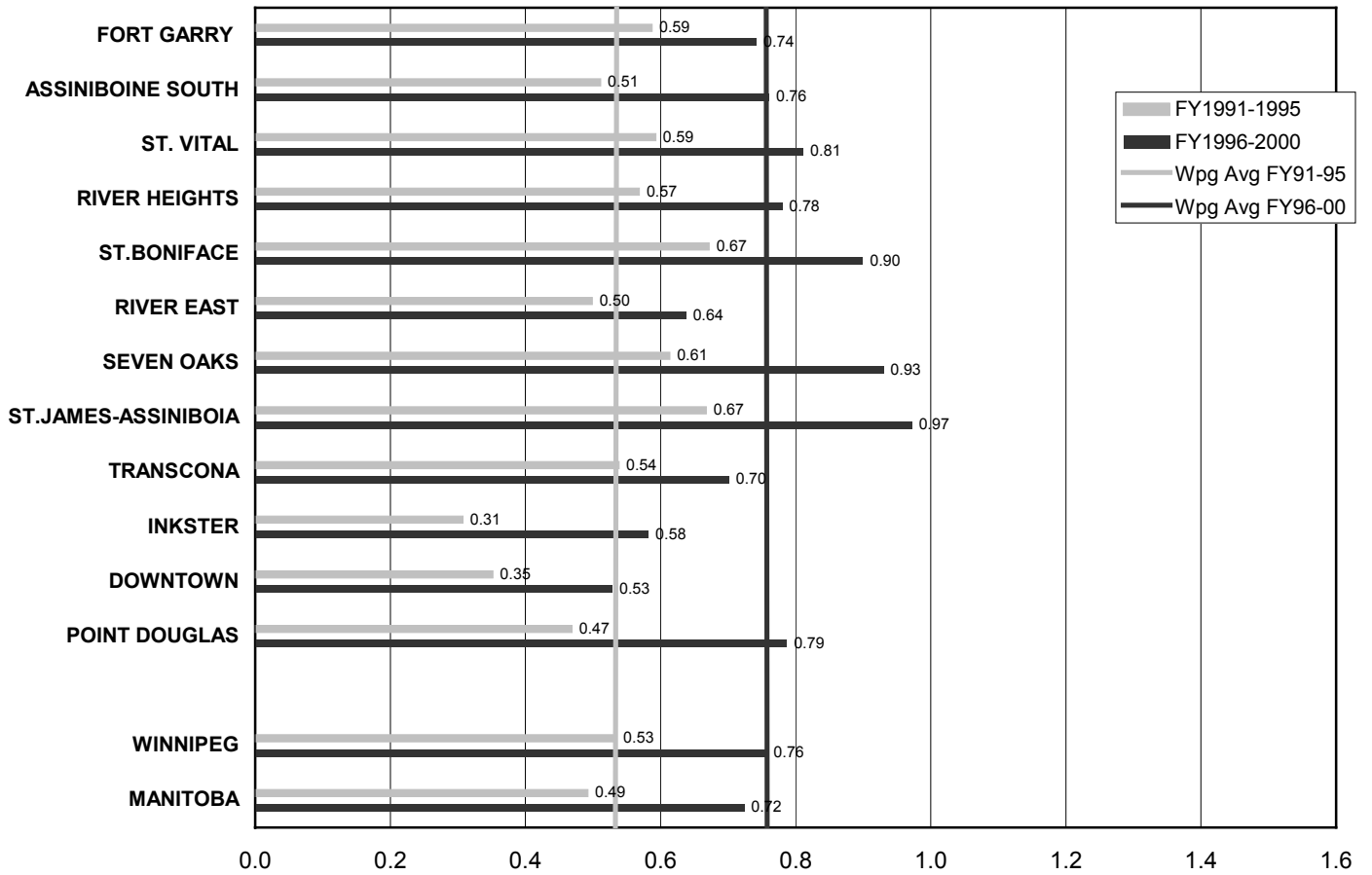
### **Source:**

Need to Know Project, Manitoba Centre for Health Policy, 2003

**Findings:**

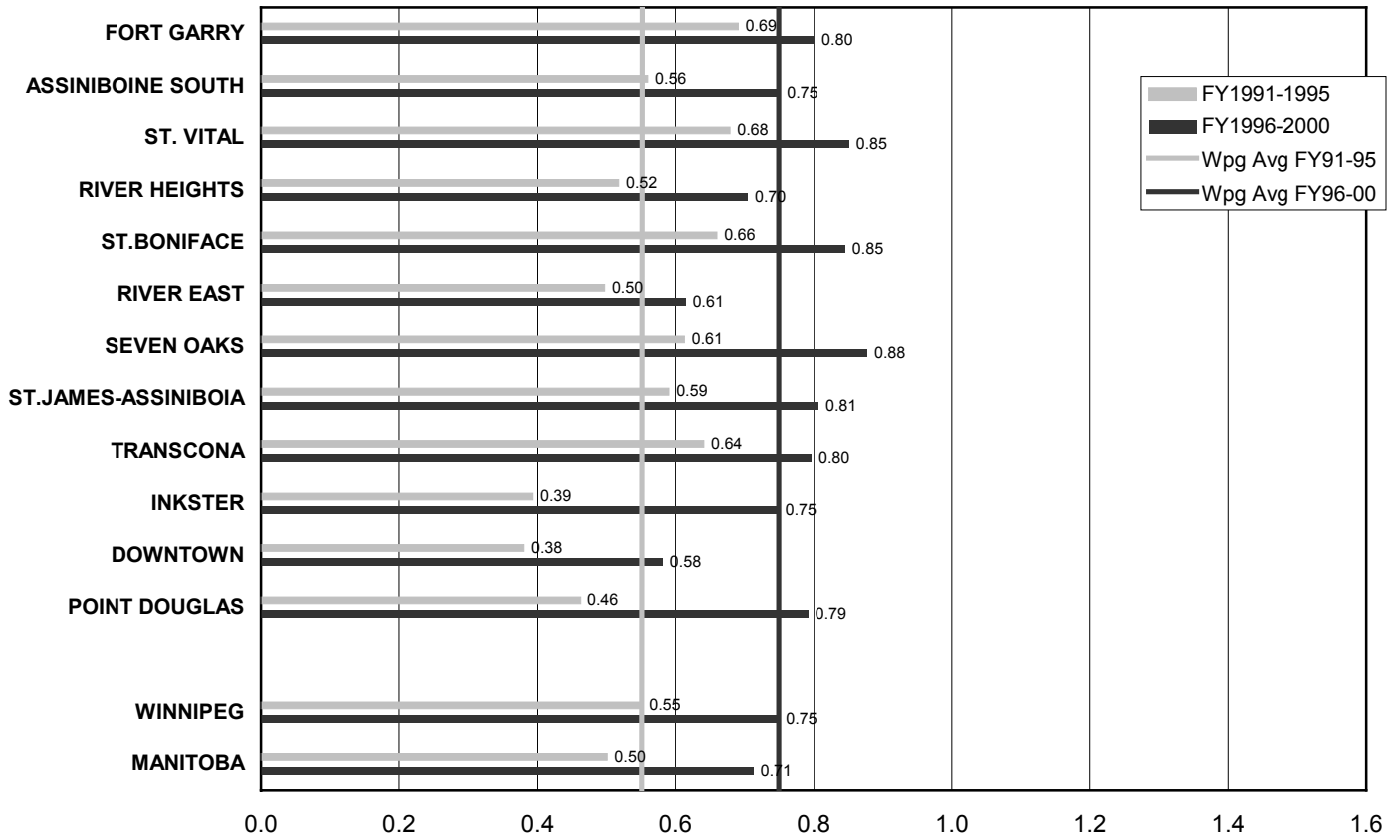
**Coronary Artery Bypass: Crude Rates by CA**

Crude rate of coronary bypass graft surgery per 1000 residents



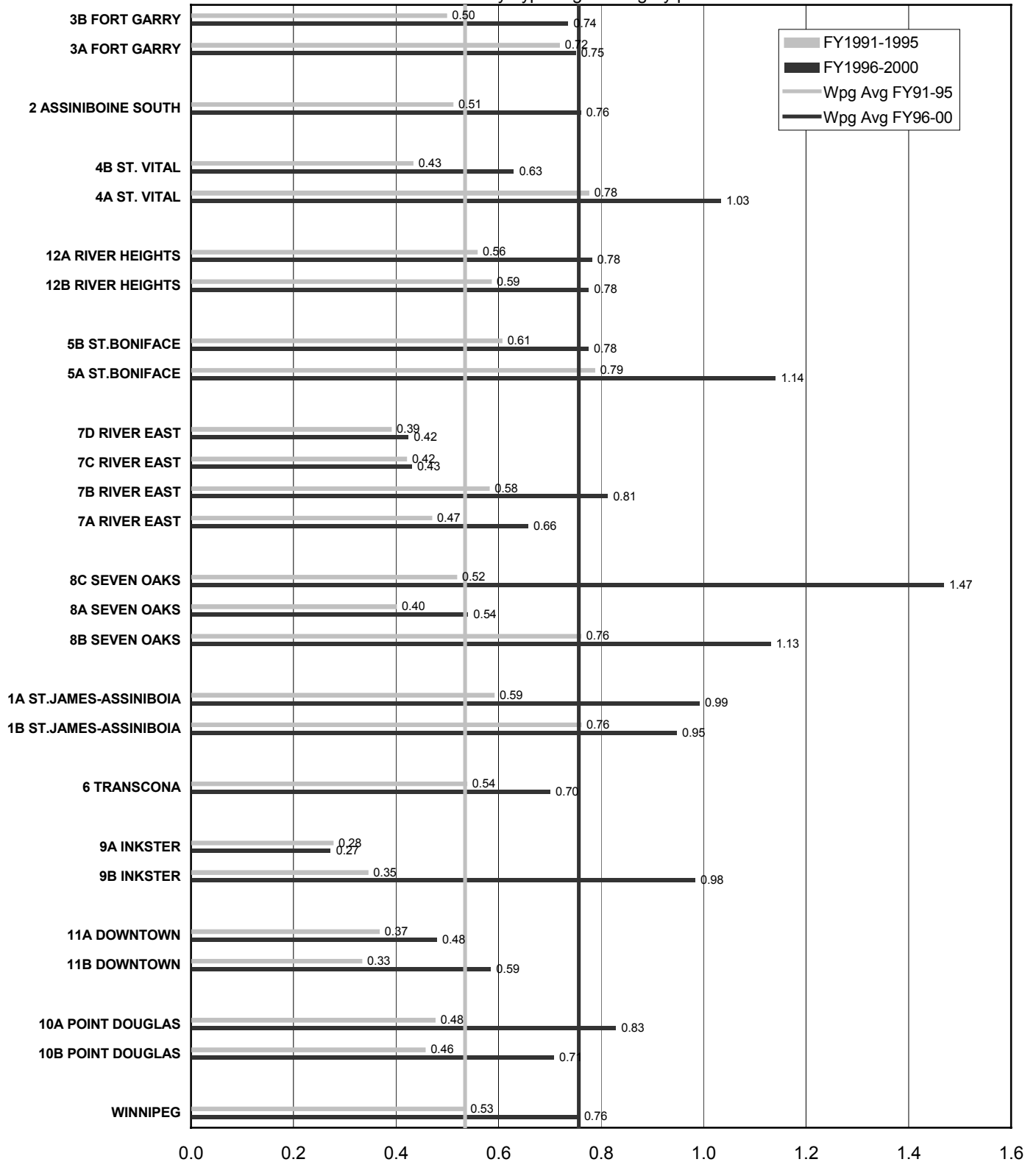
### Coronary Artery Bypass: Age-Adjusted Rates by CA

Age- & sex-adjusted coronary artery bypass graft surgery rates per 1000 residents



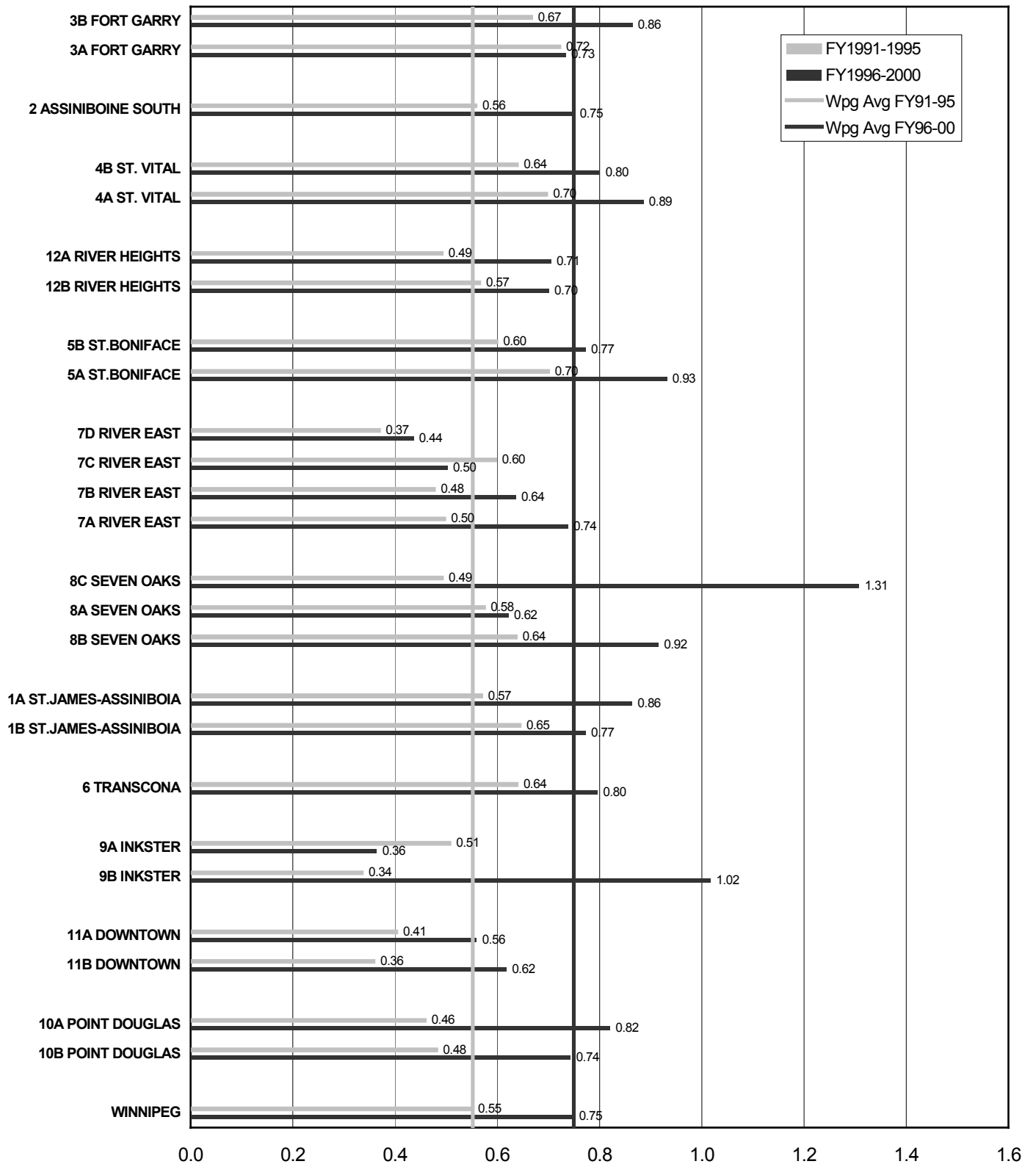
### Coronary Artery Bypass: Crude Rates by NC

Crude rate of coronary bypass graft surgery per 1000 residents



### Coronary Artery Bypass: Age-Adjusted Rates by NC

Age- & sex-adjusted coronary artery bypass graft surgery rates per 1000 residents



## Highlights:

### Regional Rates:

- Overall, Winnipeg experienced a slight increase in crude rates for this procedure, increasing from 0.53 to 0.76 per 1000 across the periods.
- After adjusting for age and sex, there remains a slight increase between the two time periods.

### Community Area Rates:

- In the last period, all community areas had increases in crude rates with St. James-Assiniboia having the highest rate at 0.97 per 1000. The Downtown area has the lowest crude rate at 0.53 while Seven Oaks and Point Douglas shared the largest increase of 0.32 over the two periods. Winnipeg's crude rate is 0.04 per 1000 over that of the Manitoba crude rate.
- After adjusting for age and sex, all community areas had increases. Seven Oaks had the highest adjusted rate of 0.88. The Downtown community area has the lowest adjusted rate at 0.58 and Inkster had the greatest increase of 0.36 per 1000 between the two periods. Winnipeg's adjusted rate is 0.04 per 1000 over that of the Manitoba rate.

### Neighbourhood Cluster Rates:

- The data shows more variation at the neighbourhood detail. Inkster 9A has the lowest rate at 0.27 and was the only neighbourhood that showed a decrease. Seven Oaks 8C has the largest rate of 1.47 per 1000 as well as the greatest increase among neighbourhood clusters of 0.95 across the two periods.
- After adjusting for age and sex, Inkster 9A has the lowest rate at 0.36 and was one of two neighbourhood clusters that showed a decrease, the other being River East 7C at 0.50 down from 0.60 in the previous period. Seven Oaks 8C has the largest rate of 1.31 per 1000 and the largest rate increase of 0.82 over the previous period.