

BRIEFING NOTE

Tracking the SDGs in Canadian Cities: SDG 3

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While all Canadians are fortunate to have access to universal health care, cities still play an important role in ensuring equal access to health services and promoting health education and access to the essential services that improve the physical and mental well-being of all residents. The focus of the second brief in our series is SDG 3, the health and well-being of all.

Tracking progress on SDG 3



Ensure Healthy Lives and Promote Well-Being for All at All Ages

There are 25 health and well-being indicators suggested for SDG 3 by the United Nations Statistical Commission (UNSC), based on the recommendations from the Inter-Agency and Expert Group on SDG indicators (IAEG-SDGs). The IISD SDG Cities Data Portal shares data on nine of these suggested indicators. Data is made available at the Census Metropolitan Area (CMA) level primarily through Statistics Canada's census data, the Canadian Community Health Survey, the Uniform Crime Reporting Survey and the Vital Statistics Survey Death Database, as well as through national organizations such as the Canadian Medical Association. Table 1 provides a comparison of the UNSC SDG 3 indicators and their corresponding equivalents for Canadian cities.



Table 1. Comparison of SDG 3 indicators suggested by UNSC and corresponding indicators for Canadian cities based on data availability

UN Indicator		Corresponding Indicator for Canadian Cities
3.2.2	Neonatal mortality rate	Early neonatal mortality rate (deaths of infants aged less than one week) and perinatal mortality rate (stillbirths with a gestational age of 28 weeks or more), per 1,000 births, 3-year average
3.3.1	Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	Mortality rate attributed to HIV infection per 100,000 population, 3-year average
3.4.1	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	Mortality rate attributed to cardiovascular disease, cancer or chronic respiratory disease per 100,000 population, 3-year average
3.4.2	Suicide mortality rate	Suicide and self-inflicted injury mortality rate per 100,000 population, 3-year average
3.5.2	Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	5+ drinks (until 2012); heavy drinking (from 2013), percentage of the population
3.6.1	Death rate due to road traffic injuries	Rate of traffic violations causing death per 100,000 population
3.a.1	Age-standardized prevalence of current tobacco use among persons aged 15 years and older	Prevalence of smoking among persons aged 12 years and older, percentage of the population
3.c.1	Health worker density and distribution	Total physicians per 100,000 population

HIGHLIGHTS FOR SDG 3 INDICATORS

- 3.3.1 Counter to the Canadian trend, HIV/AIDS mortality rates rose in Regina and Saskatoon.
- 3.4.1 Chronic disease mortality rates have experienced a decreasing trend across most cities. Moncton saw the largest decline; Victoria had the highest rates in 2010 (603.1 deaths per 100,000 population); and Calgary had the lowest rates (351.6 deaths per 100,000 population).
- 3.4.2 While suicide and self-inflicted injury mortality rates have increased across Canada, Canadian cities have seen an overall decline between 2001 and 2011.
- 3.5.2 Heavy drinking rates in Halifax and Toronto decreased between 2003 and 2014.
- 3.a.1 Smoking rates in Saskatoon dropped 44.6 per cent between 2003 and 2014. Regina had the highest rate in 2014 (22.5 percent) and Victoria had the lowest rate (13.2 per cent).



Trends in Achieving SDG 3 in Canadian Cities

Target 3.2 focuses efforts on newborn and child health. Using data from the Statistics Canada Vital Statistics database, we report on indicator 3.2.2, neonatal mortality rates (Statistics Canada, 2010). The SDG target of reducing all neonatal mortality rates to at least as low as 12 per 1,000 live births has been achieved. In 2006, the Canadian average for neonatal and perinatal deaths was 5.5 per 1,000 live births. Winnipeg had the highest proportion of neonatal deaths with 7.4 deaths per 1,000 live births, and Ottawa had the lowest proportion with 3.6 deaths per 1,000 live births.

For indicator 3.3.1, the SDG Indicator Portal (IISD, n.d.) reports on the mortality rate attributed to HIV infection per 100,000 people using a 3-year average. This indicator is similar to the UN-suggested indicator measuring the number of new HIV infections per 1,000 uninfected population. SDG target 3.3 calls for ending the AIDS epidemic. In Canada, in 2011, the proportion of deaths from HIV infections per 100,000 people was 0.9, a decrease from 1.4 deaths per 100,000 people in 2001. In Regina and Saskatoon, deaths from HIV infection have risen, and in 2011 they were recorded at 3.1 deaths and 3.7 deaths per 100,000 people, respectively. In most cities, however, HIV mortality rates dropped between 2001 and 2011 and remain below 1.5 deaths per 100,000 people.



By 2030, SDG target 3.4 calls on countries to “reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being” (United Nations Department of Economic and Social Affairs, 2017). This target is measured by two indicators, 3.4.1 chronic disease mortality rate and 3.4.2 suicide and self-inflicted injury mortality rates. Data is available for both.¹

In Canada, the average mortality rate for chronic diseases² decreased by 6.8 per cent between 2000/12 and 2010/12 from 500.8 deaths to 466.8 deaths per 100,000 people. During this same time period, chronic disease mortality rates saw decreases. Rates in Moncton decreased most significantly, by 17.1 per cent from 522.1 deaths to 447.3 deaths per 100,000 people. Calgary saw a decrease of 16.5 per cent from 351.6 deaths to 293.6 deaths per 100,000 people. Quebec City was the only city to experience an increase in chronic disease mortality, rising 0.5 per cent from 473.2 deaths per 100,000 people in 2000/02 to 475.5 deaths per 100,000 people in 2010/12. For the 2010/12 cycle, Victoria experienced the highest chronic disease mortality rates (603.1 deaths per 100,000 people) followed by Winnipeg (515.2 deaths per 100,000 people) (Figure 1).

¹ The data source for indicators 3.4.1 and 3.4.2 is Statistics Canada (2015).

² Indicator 3.4.1, chronic disease mortality rate, includes data for all cancers, circulatory diseases and respiratory diseases excluding infectious and parasitic diseases. Diabetes rates were not available at the Census Metropolitan Area level to include in this indicator. Rates are calculated as 3-year averages.

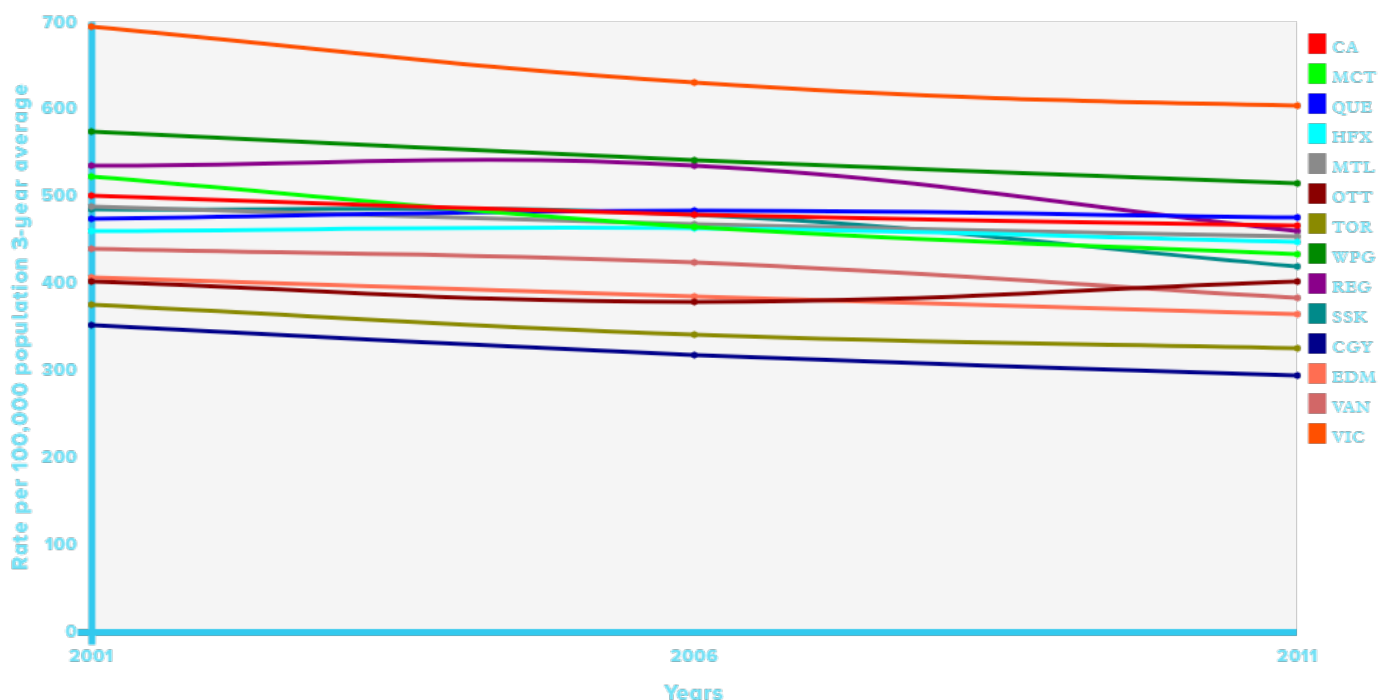


Figure 1. 3.4.1 Chronic diseases mortality rate in Canadian cities (rate per 100,000 population)

Source: SDG Indicator Portal (IISD, n.d.)

After accidents, suicide is the second largest cause of death in Canadians aged 15 to 34 (Centre for Addiction and Mental Health [CAMH], 2017). Indicator 3.4.2 provides a snapshot of suicide and self-inflicted injury mortality rates between 2000/02 and 2010/12. Suicide and self-inflicted injury mortality rates for Canada have increased 66.7 per cent between 2000/02 and 2010/12, from 7.2 deaths per 100,000 people to 12 deaths per 100,000 people. During this time period, the largest decreases in suicide and self-inflicted mortality rates per 100,000 people were seen in the provinces of Quebec and Alberta. Quebec City suicide and self-inflicted mortality rates decreased by 31.4 per cent from 19.4 deaths per 100,000 people to 13.3 deaths per 100,000 people and Montreal rates decreased by 14.6 per cent, from 13 deaths per 100,000 people to 11.1 deaths per 100,000 people. In Alberta, between 2000/02 and 2010/12, Calgary rates decreased 17.5 per cent from 12.6 deaths per 100,000 people to 10.4 deaths per 100,000 people; Edmonton rates decreased by 13.4 per cent. In contrast, during this time period, suicide and self-inflicted mortality rates increased in Moncton (12.6 per cent) as well as in Toronto and Regina (4.5 per cent), Saskatoon (4.0 per cent) and Victoria (3.9 per cent). In 2010/12, Ottawa experienced the highest suicide and self-inflicted mortality rates with 14.1 deaths per 100,000 people, and Toronto experienced the lowest with seven deaths per 100,000 people (Figure 2).



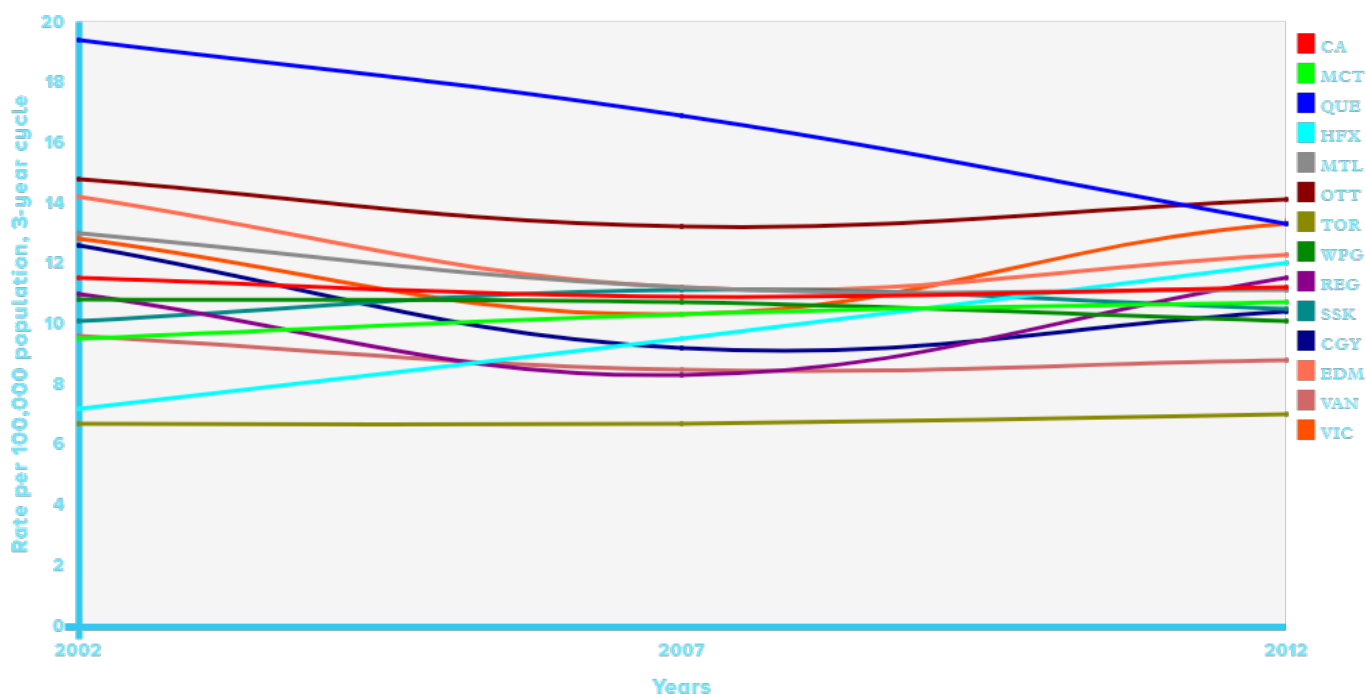


Figure 2. 3.4.2 Suicide and self-inflicted injuries mortality rate in Canadian cities (rate per 100,000 population)

Source: SDG Indicator Portal (IISD, n.d.)

Target 3.5 aims to “strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.” IISD’s SDG Indicator Portal reports on indicator 3.5.2, the instance of heavy drinking in Canadian cities annually, between 2003 and 2014. In Canada, the percentage of heavy drinking has increased by 7.8 per cent from 16.6 per cent of Canadians to 17.9 per cent between 2003 and 2014. Overall, Canadian cities have seen an increasing trend in the percentage of people who reported they drank heavily during this time period. Rate increases were highest in British Columbia between 2003 and 2014. In Victoria, heavy drinking increased by 49.6 per cent, from 13.7 per cent to 20.5 per cent, and in Vancouver it increased 26.1 per cent, from 11.5 per cent to 14.5 per cent. Similar increases were also seen in Quebec City (24.1 per cent change) and Toronto (22.8 per cent change). Two cities have made progress in reducing heavy drinking rates between 2003 and 2014. In Halifax, the percentage of heavy drinking decreased from 21.8 per cent to 20.3 per cent, and in Winnipeg rates decreased from 17.3 per cent to 16.9 per cent. In 2014, the highest heavy drinking rate for Canadian cities in the SDG Indicator Portal was Quebec City (24.2 per cent), and the lowest rate was in Toronto (14 per cent) (Figure 3).



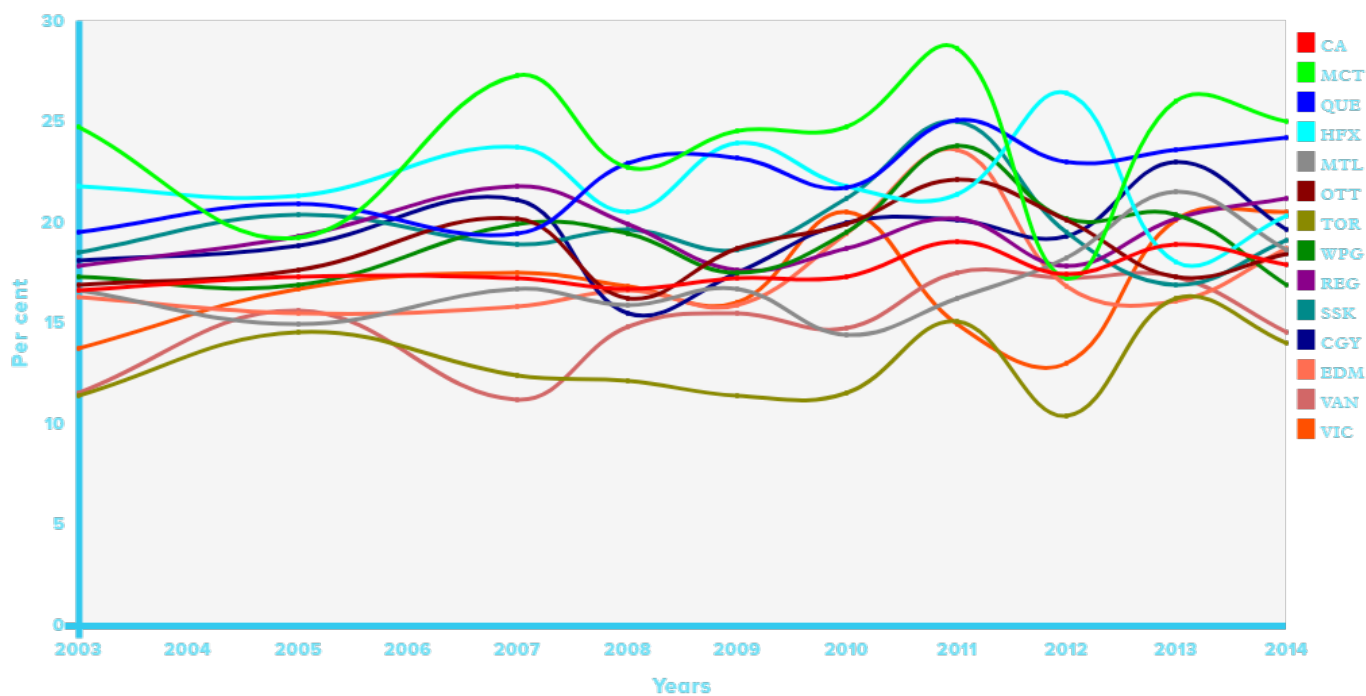


Figure 3. 3.5.2 Heavy drinking in Canadian cities (%)

Source: SDG Indicator Portal (IISD, n.d.)

Indicator 3.6.1 tracks the number traffic violations causing death per 100,000 people annually between 2000 and 2016. Compiled from Statistics Canada (2015), this indicator is linked to SDG target 3.6, which aims to halve the number deaths and injuries from road traffic accidents by 2020. It is important to note that this indicator does not measure the complete number of traffic accidents causing injury or death, only the number of recorded violations causing death. In Canada, the rate of traffic violations causing death decreased from 1.05 violations per 100,000 people in 2000 to 0.49 violations in 2016. Canadian cities have generally followed this trend, decreasing from 0.15 and 0.82 traffic violations causing deaths per 100,000 people in Toronto and Halifax, respectively. Exceptions include Moncton, Winnipeg and Saskatoon, whose rates have all increased over this same time period. In Saskatoon, the number of traffic violations causing death increased from 0.87 violations per 100,000 people in 2000 to 1.87 violations per 100,000 people in 2016, the highest increase recorded in the SDG Indicator Portal. In 2016, Quebec City had the lowest rates of traffic violations causing death (0.12 violations per 100,000 people) followed by Vancouver (0.27 violations per 100,000 people) (Figure 4).



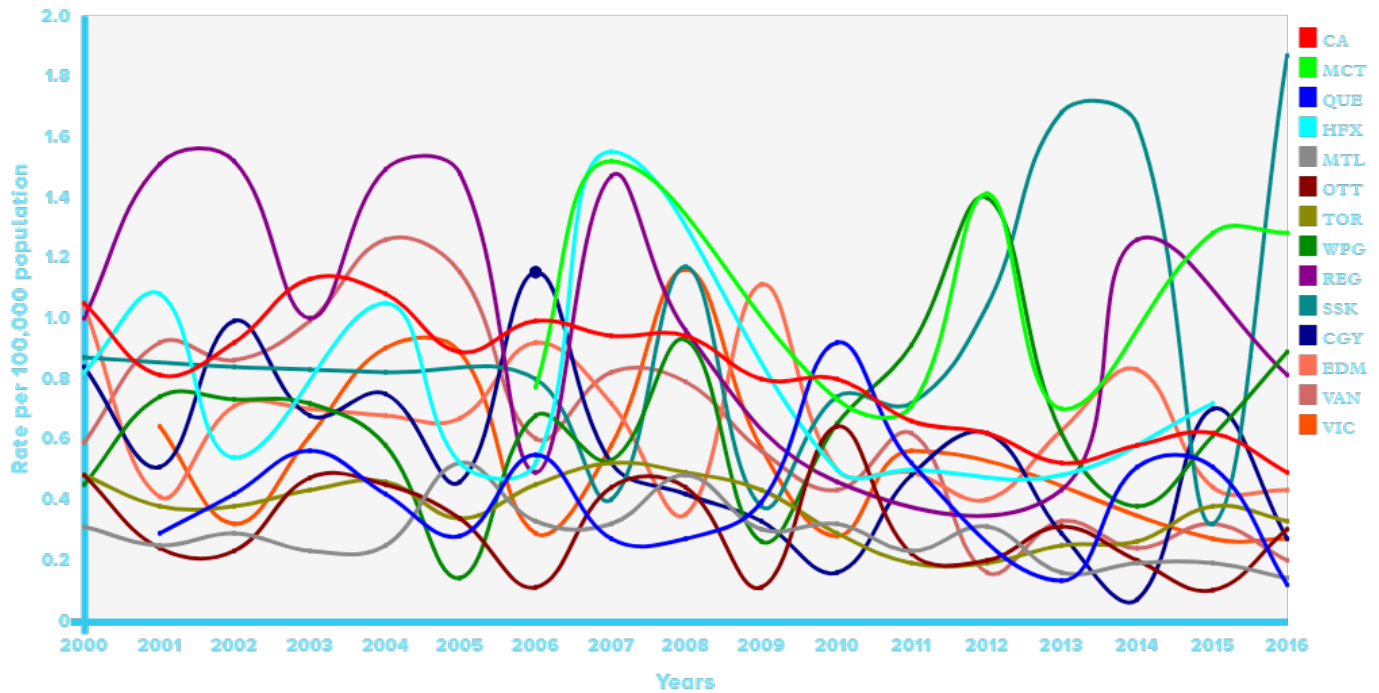


Figure 4. 3.6.1 Traffic violations causing death in Canadian cities (rate per 100,000 population)

Source: SDG Indicator Portal (IISD, n.d.)

SDG target 3.a calls for strengthening the implementation of the World Health Organization Framework Convention on Tobacco Control. According to the Centre for Addiction and Mental Health, tobacco is the most widely consumed addictive substance and is responsible for nearly 17 per cent of all deaths in Canada (CAMH, 2017). In Canada, in 2014, 18.1 per cent of people reported they smoked daily or occasionally on the Statistics Canada Canadian Community Health Survey (Statistics Canada, 2017). This was a 4.9 per cent decrease from 23 per cent in 2003. All cities, with the exception of Halifax, showed decreases in smoking rates during this period. The largest decreases occurred in Saskatoon, where smoking dropped by 44.6 per cent from 24 per cent to 13.3 per cent of people. In Halifax, the percentage change in smoking increased 11.9 per cent during 2003 to 2014, from 19.4 per cent to 21.7 per cent. In 2014, rates were highest in Regina (22.5 per cent) and lowest in Victoria at 13.2 per cent, followed closely by Saskatoon at 13.3 per cent (Figure 5).



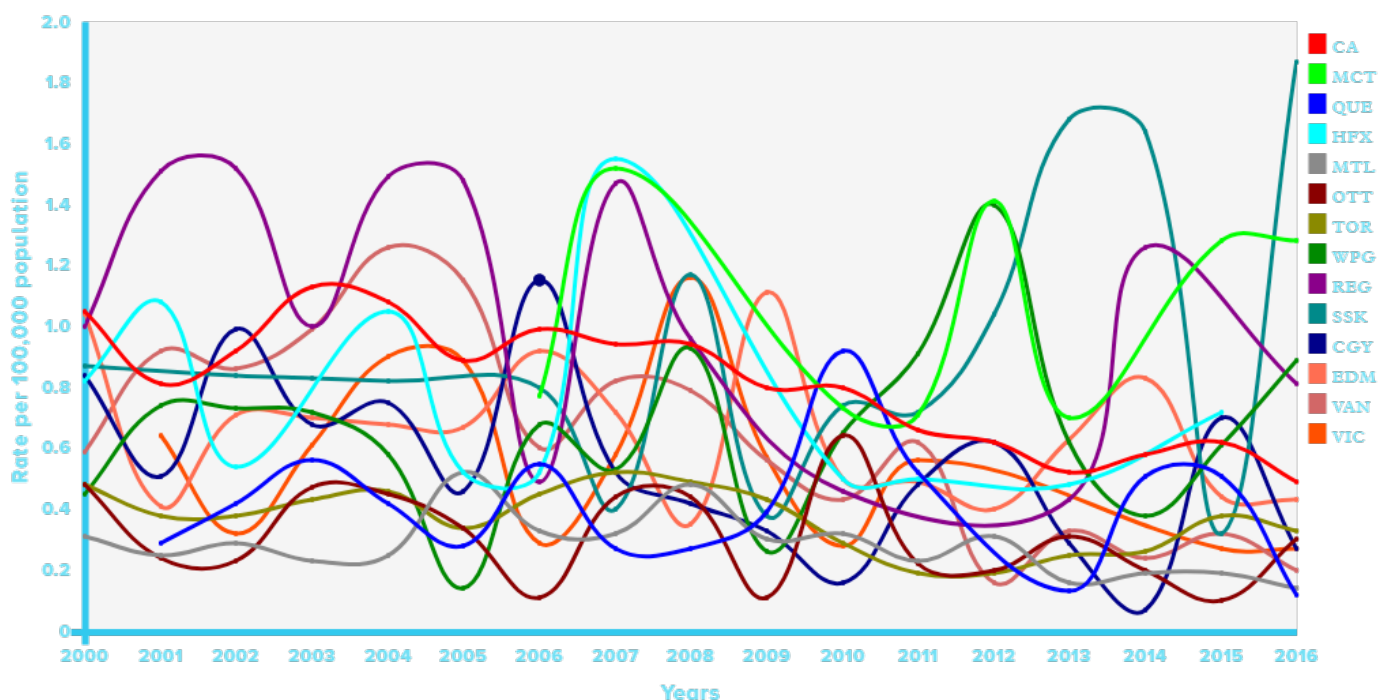


Figure 5. 3.A.1 Tobacco use in Canadian cities (%)

Source: SDG Indicator Portal (IISD, n.d.)

SDG Target 3.c calls for increasing health financing and recruitment, development, training and retention of the health workforce. It calls for these actions specifically in developing countries, but it is also worthwhile to explore the health workforce in developed countries as well. IISD's SDG Indicator Portal tracks indicator 3.c.1 using the total number of physicians per 100,000 people. In Canada, health worker density increased from 188 physicians per 100,000 people in 2000 to 228 physicians in 2015. This trend holds for all Canadian cities in the SDG Indicator Portal. Health worker density has risen in all cities during this time period, increasing by 76 physicians per 100,000 people in Moncton and increasing by 38 physicians per 100,000 people in Saskatoon. In 2015, Vancouver had the highest health worker density with 455 physicians per 100,000 people, and Regina had the lowest density with 210 physicians per 100,000 people (Figure 6).

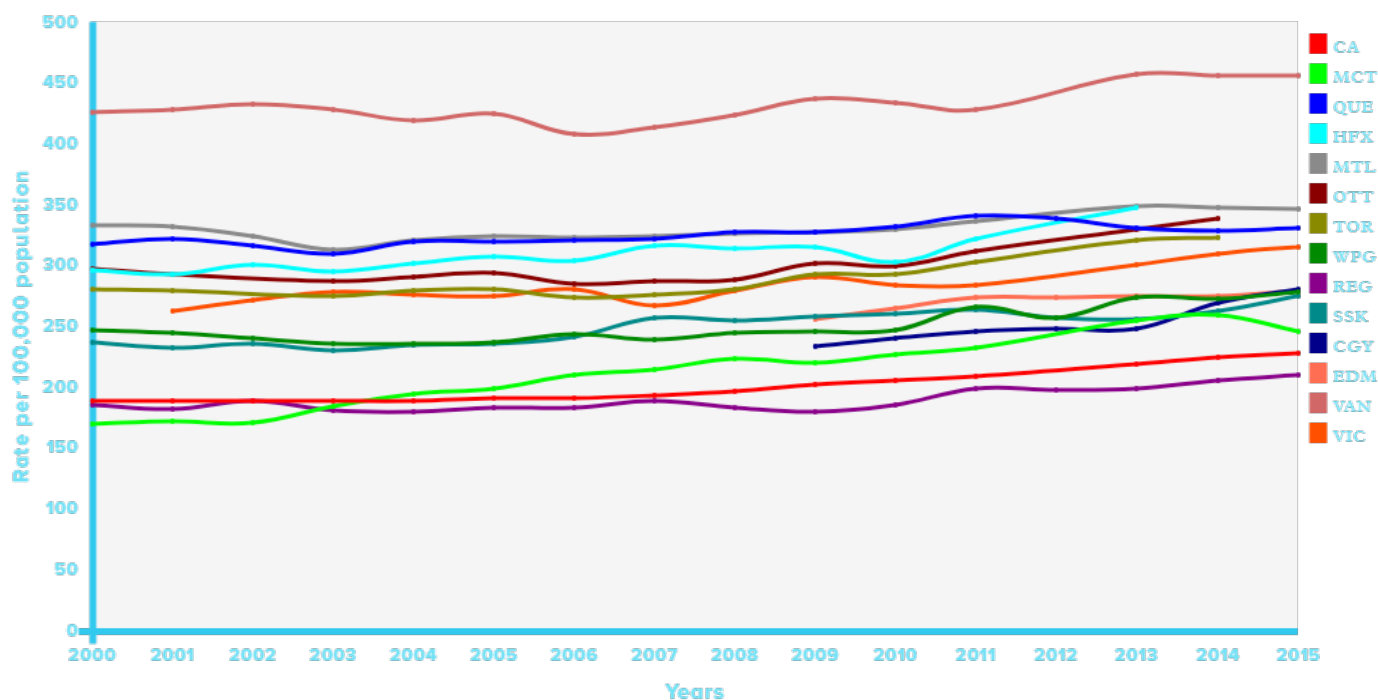


Figure 6. 3.c.1 Health worker density in Canadian cities (rate per 100,000 population)

Source: SDG Indicator Portal (IISD, n.d.)

Conclusions

Progress on SDG 3 has been significant in Canadian cities over the past 20 years. Rates of neonatal mortality are well below the target 3.2 threshold of 12 deaths per 1,000 live births. Both chronic disease and smoking rates have decreased as well as traffic violations causing death. The number of health workers per 100,000 people has also increased over time. This suggests that increased supports and education and improved access to health services have contributed to behaviour shifts and overall improvements in health outcomes. On the other hand, the rate of heavy drinking has increased over this period, and while insufficient data exists at the city level, between 2013 and 2015, nationally there was an increase in the number of Canadians who reported they used at least one of six illicit drugs in the past year (from 11 per cent in 2013 to 13 per cent in 2015). This overall trend resulted primarily from increased use of cannabis, hallucinogens and ecstasy (Statistics Canada, 2017).

Currently, we are not able to assess progress on seven indicators. These include data pertaining to maternal mortality and adolescent birth rates in cities. While it is important to understand the health and well-being of women and infants, there is no comparable data available at the city level at this time. Additionally, while data is available for 3.5.1 coverage of treatment interventions for substance use disorders through the Canadian Centre on Substance Abuse annual National Treatment Indicators Reports, the varying provincial administrative structures limit comparability.

While there are some variations in provincial health care coverage, in general the Canadian public health care system provides universal coverage for all groups. Thus, indicators connected to access to health services are considered having reached their target. These include indicators 3.1.1, 3.7.1, 3.8.1 and 3.b.1. Further, cases of communicable diseases such as tuberculosis (3.3.2) and tropical diseases (3.3.3 and 3.3.5) are



rare in Canadian cities and are therefore not reported. As was discussed in the first brief in this series, the extensive coverage of municipal water systems also reduces the need to report on indicator 3.9.2, mortality rate attributed to unsafe water, sanitation and hygiene services. Given the interconnections among the SDGs, further progress on SDG 3 might be best achieved through focused attention to ending poverty (SDG 1) and hunger (SDG2), ensuring inclusive and equitable quality education (SDG 4), and achieving gender equality (SDG 5).

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