

# **Supervised Consumption Site Neighbourhood Report: Parkdale Supervised Consumption Service**

## **Introduction**

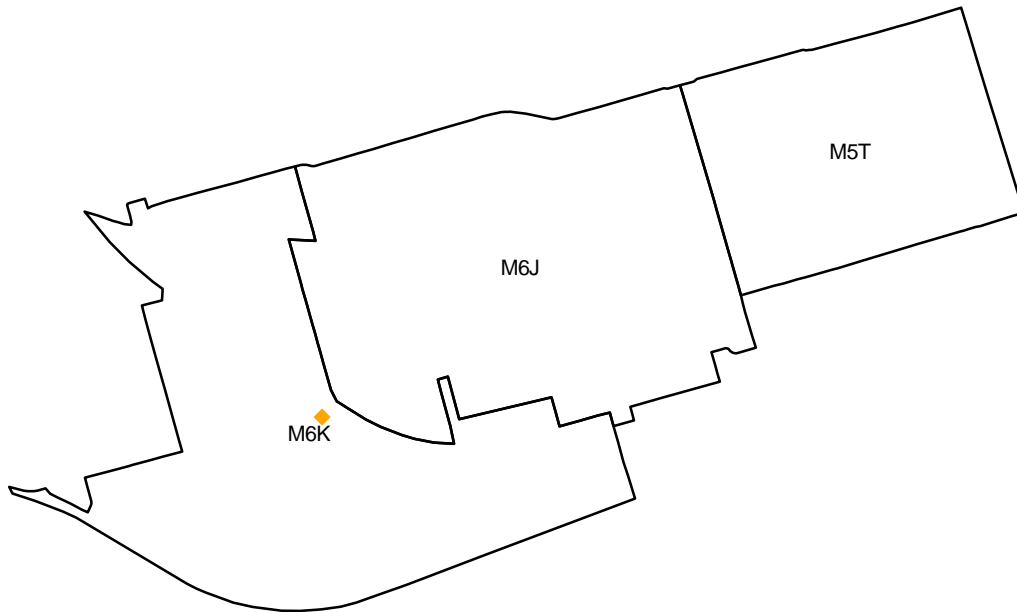
Supervised consumption sites are facilities in which people use pre-obtained drugs under observation by trained personnel, where sterile supplies are available, and where overdoses can be immediately treated. In Ontario, sites are expected to demonstrate that they are located in neighbourhoods where there is a need for such services. The purpose of this analysis is to characterize unregulated drugs in Toronto neighbourhoods within the vicinity of a supervised consumption site. This report focuses on the Parkdale Supervised Consumption Service site.

## **Methods**

Our analysis used 2 steps. First, we determined the neighbourhoods that constitute the catchment area for each supervised injection site. Second, we calculated drug-related outcomes for each neighbourhood and each year and present these results as tables and maps.

### ***Identifying Catchment Areas***

We asked each supervised consumption site to indicate their approximate catchment area by identifying the relevant Forward Sortation Areas (FSA; the first 3 digits of the postal code). The 3 FSAs that constitute the Parkdale Supervised Consumption Service catchment area are shown on the map below. The location of the Parkdale Supervised Consumption Service (1229 Queen St W) is indicated in orange.



**Figure 1:** Map of the Parkdale Supervised Consumption Service catchment area

### ***Drug-Related Outcomes***

We estimated the following outcomes, over time, for all of Toronto and for each FSA:

- a. The number of people who have an opioid-dependence related emergency department visit or hospitalization.
- b. The number of people who have an opioid-toxicity related emergency department visit or hospitalization. Toxicity is also sometimes called overdose or poisoning.
- c. The number of people who have a stimulant-dependence related emergency department visit or hospitalization.
- d. The number of people who have a stimulant-toxicity related emergency department visit or hospitalization.
- e. The number of people who have at least one outpatient physician visit related to substance use.
- f. The number of people who were dispensed at least one dose of opioid agonist therapy (OAT).
- g. The number of naloxone doses distributed from pharmacies.
- h. The number of deaths due to opioid toxicity, stimulant toxicity, or both.

For outcomes a through g, we calculated these numbers for each FSA and each year from 2018 to 2022. For outcome h (opioid and stimulant toxicity deaths) data were only available up to December 31, 2021 at the time of analysis.

### ***Global Outcome Measure***

We included 2 global outcome measures:

1. We counted the number of people who had one or more of the outcomes (a to f or h) listed above. We excluded the naloxone kit outcome, as kits can be dispensed to anyone and therefore do not necessarily indicate that the recipient is using drugs. Given the nature of our data sources, some people who use drugs may be counted when using one outcome but not when using another. This global outcome gives us the best estimate of how many people who use drugs were in the catchment area.
2. We also included a global hospital encounter outcome, which counts the number of people who had one or more emergency department visits or hospitalizations related to opioid or stimulant use (outcomes a to d).

### **ICES Data Sources**

We used the following ICES data sources:

- Discharge Abstract Database, which is a database of acute inpatient hospital discharges
- National Ambulatory Care Reporting System, which is a database of emergency room visits
- Ontario Drug Benefit Database, which is a database of dispensed medications that are publicly funded, including all naloxone kits distributed by pharmacies
- Drug and Drug/Alcohol Related Death Database, which is a database of substance-use toxicity deaths
- Narcotics Monitoring System, which is a database including all opioids dispensed from community pharmacies
- Ontario Health Insurance Plan (OHIP), which is a database of physician billings
- Registered Persons Data Base (RPDB), which is a database of basic demographic information
- Postal Code Conversion File (PCCF), which is a database of Statistics Canada standard geographical area

*Note: these datasets were linked using unique encoded identifiers and analyzed at ICES.*

### **Presentation of Results**

We present our results in 5 ways:

1. We estimated the proportion of all Toronto events that happened in the Parkdale Supervised Consumption Service catchment area for each outcome. We also estimated the absolute number of people in each catchment area, based on a range of estimates of the total number of people who use drugs in Toronto of 9,000 to 20,000.

2. We calculated the rates for each outcome, which is the number of people with the outcome divided by the total population, for each outcome and each FSA in the catchment area. We present the results averaged over all 5 years of the study.
3. We calculated the rank of each FSA in the Parkdale Supervised Consumption Service catchment area among all FSAs in Toronto, using the average rates over the 5 years of the study, for each outcome. Toronto has a total of 96 FSAs; a rank of 1 means the FSA has the highest rate in Toronto and a rank of 96 means it has the lowest rate.
4. We estimated the effect on Parkdale Supervised Consumption Service of closing 5 supervised consumption sites (Regent Park Community Health Centre, South Riverdale Community Health Centre, Kensington Market Overdose Prevention Site (KMOPS), The Works, Parkdale Queen West Community Health Centre). In secondary analyses, we estimated the effect of also closing the Moss Park site.

We first estimated the proportion of clients who were within 500 m of Parkdale Supervised Consumption Service. We estimated the proportion of site clients within each FSA based on the distribution of people who used drugs (using our global outcome measure and assuming that clients were geographically distributed equally within each FSA). Some people were within 500 m of both Parkdale Supervised Consumption Service and another site. We counted these people and assigned an equal number to each site.

To assess the impact of closing sites on Parkdale Supervised Consumption Service, we estimated how many clients from closed sites would be within 500 m of Parkdale Supervised Consumption Service (and thus, would be new Parkdale Supervised Consumption Service clients). When clients were within 500 m of both Parkdale Supervised Consumption Service and another open site, we calculated the proportion going to Parkdale Supervised Consumption Service using the same method we described above. We repeated these calculations for distances of 1000 m (1 km) and 2000 m (2 km).

5. We mapped the global outcome measure for the entire city of Toronto. We categorized the FSAs into 20 quantiles, with darker numbers indicating higher rates and lighter number indicating lower rates, and outlining the FSAs in the Parkdale Supervised Consumption Service catchment area.
6. We mapped the global hospital encounter outcome (one or more hospital encounters) for the entire city of Toronto, using the same approach as outlined in point 4 above.

## Results

### *Proportion of Events*

In Table 1, we estimated the proportion of all Toronto events that happened in the Parkdale Supervised Consumption Service catchment area for each outcome as well as the average across all years.

**Table 1:** Proportion of Toronto's population with each study outcome in the Parkdale Supervised Consumption Service catchment area

Outcome	Proportion of total outcome in the catchment area <sup>†</sup>					
	2018	2019	2020	2021	2022	All <sup>‡</sup>
Hospital Visits: Opioid Dependencies	7.7%	7.1%	8.7%	9.5%	9.1%	<b>8.6%</b>
Hospital Visits: Opioid Toxicities	7.1%	9.0%	9.0%	9.9%	8.1%	<b>8.8%</b>
Hospital Visits: Stimulant Dependencies	7.0%	7.8%	8.4%	7.5%	10.7%	<b>8.4%</b>
Hospital Visits: Stimulant Toxicities	4.7%	6.2%	4.1%	9.0%	6.8%	<b>6.8%</b>
Outpatient Physician Visits	5.9%	5.9%	5.9%	6.1%	6.2%	<b>6.0%</b>
People Dispensed OAT	6.7%	6.2%	5.5%	5.1%	5.4%	<b>5.8%</b>
Naloxone Doses: Pharmacies	12.8%	8.1%	7.6%	5.8%	4.2%	<b>7.6%</b>
Deaths: Opioid or Stimulant Toxicities	3.8%	2.2%	6.7%	5.0%	NA	<b>6.0%</b>
Global Outcome	6.1%	6.0%	5.7%	5.6%	5.9%	<b>5.9%</b>
Any Hospital Encounters	6.9%	7.0%	7.7%	8.1%	8.9%	<b>7.8%</b>

<sup>†</sup>Proportion is the number of people in the catchment area divided by the number of people with the same outcome across Toronto

<sup>‡</sup>Outcome averages over all 5 years

NA - data not available

We estimated that, on average, 5.9% of all Torontonians who met at least one of our definitions for drug use lived in, or had an event in, the Parkdale Supervised Consumption Service catchment area. Across the different outcomes, our averaged estimates ranged from 5.8% to 8.8%. For comparison, 3.5% of all people in Toronto live within this catchment area.

The estimated population of people who use drugs in Toronto is 9,000 to 20,000, which corresponds to an estimated 531 to 1180 people who use drugs residing or using drugs in the Parkdale Supervised Consumption Service catchment area.

## Event Rates

In Table 2, we estimated the rates for each outcome within the catchment areas FSAs. For comparison, we have also included the rates across all Toronto FSAs in the final column.

**Table 2:** Rates (per 10,000 individuals) of study outcomes in each FSA

Outcome	Rate (per 10,000 individuals)			
	M5T	M6J	M6K	All FSAs
Hospital Visits: Opioid Dependencies	30.1	11.6	24.4	8.5
Hospital Visits: Opioid Toxicities	24.4	9.1	26.0	7.7
Hospital Visits: Stimulant Dependencies	39.9	19.4	29.0	11.5
Hospital Visits: Stimulant Toxicities	4.5	2.3	3.8	1.7
Outpatient Physician Visits	139.6	121.0	164.1	82.7
People Dispensed OAT	124.5	176.6	96.0	77.3
Naloxone Doses: Pharmacies	219.8	263.1	45.4	71.4
Deaths: Opioid or Stimulant Toxicities	3.7	1.5	4.5	1.9

## ***Rank of Neighbourhoods***

In Table 3, we estimated the rank of each outcome rate within the catchment area FSAs. A rank of 1 indicate the highest rate of all Toronto FSAs and a rank of 96 indicates the lowest rate.

**Table 3:** Ranks of Neighbourhoods (FSAs)

Outcome	Rank (of 96)		
	M5T	M6J	M6K
Hospital Visits: Opioid Dependencies	4	22	6
Hospital Visits: Opioid Toxicities	5	29	4
Hospital Visits: Stimulant Dependencies	4	14	8
Hospital Visits: Stimulant Toxicities	3	24	7
Outpatient Physician Visits	9	13	6
People Dispensed OAT	14	7	20
Naloxone Doses: Pharmacies	9	7	45
Deaths: Opioid or Stimulant Toxicities	9	48	7

## Effects of Site Closures

In Tables 4a and 4b, we estimated the impact of closing sites. We estimated the number of unique clients who use Parkdale Supervised Consumption Service per month, the number of clients who are within the service distance of the site (estimated at 500m, 1000m, and 2000m), and the anticipated increase in client volumes after other sites close. For example, in Table 4a, we estimated that 17 clients from sites slated to close would be within 2000m of Parkdale Supervised Consumption Service but not close to other sites that remain open. Parkdale Supervised Consumption Service would require an 15.4% increase in client caseload capacity if all these clients shift their care to this site.

**Table 4a:** Client service projections at Parkdale Supervised Consumption Service if 5 sites close

Distance	Number of unique clients per month before April 1, 2025	Projected number of clients relocating from closed sites	Projected relative increase in clients (%)
500m	109	0	0%
1000m		0	0%
2000m		17	15.4%

Note: Numbers rounded to nearest integer value

**Table 4b:** Client service projections at Parkdale Supervised Consumption Service if 6 sites close

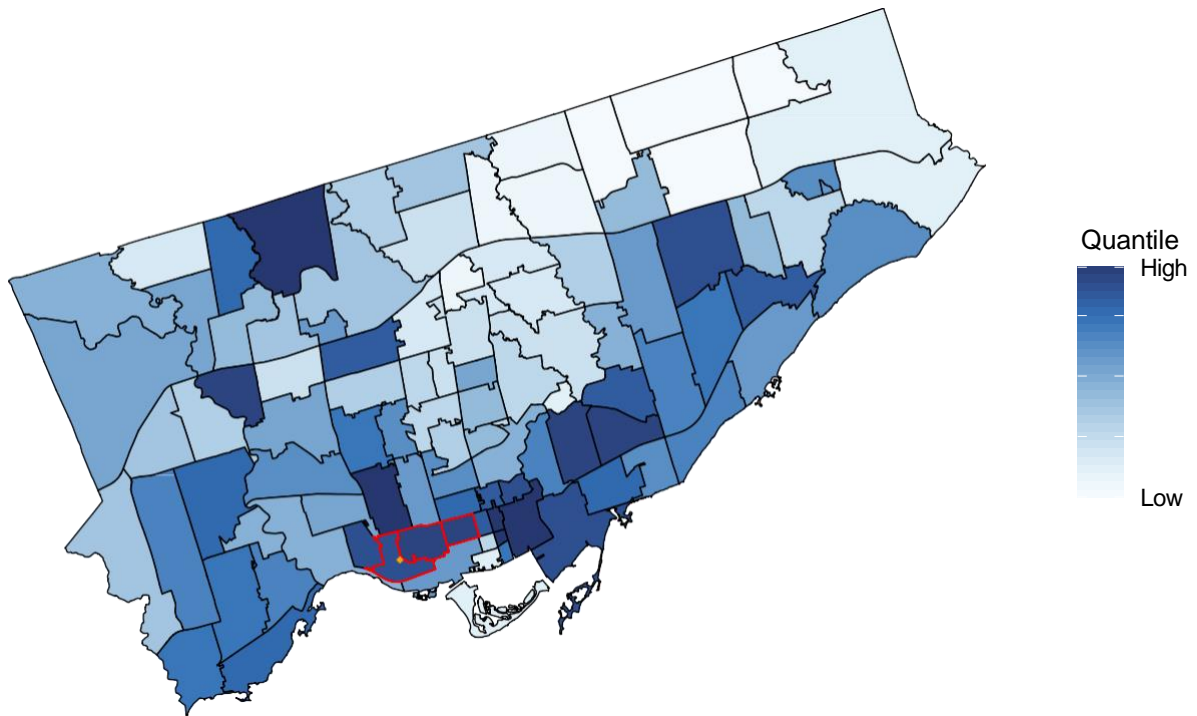
Distance	Number of unique clients per month before April 1, 2025	Projected number of clients relocating from closed sites	Projected relative increase in clients (%)
500m	109	0	0%
1000m		0	0%
2000m		17	15.4%

Note: Numbers rounded to nearest integer value



## ***Mapping Global Outcomes***

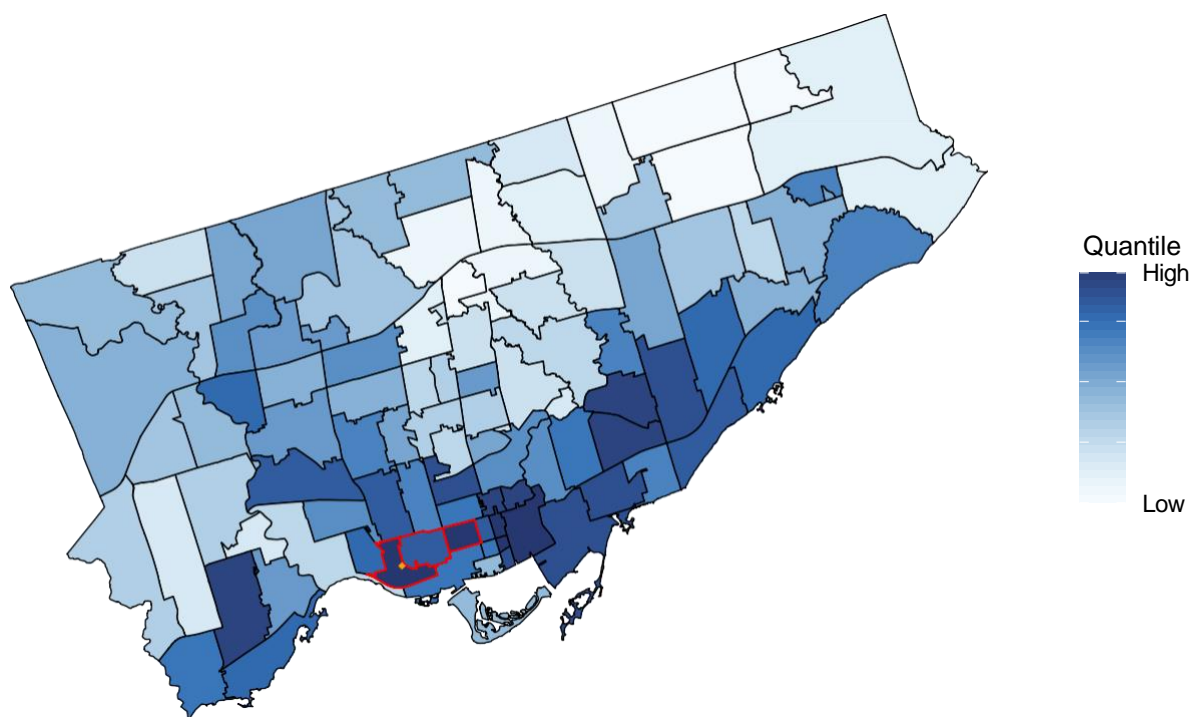
In Figure 2, we displayed the estimated rate of drug use using our global outcome measure for all FSAs in Toronto. Darker colours indicate higher rates and lighter colours indicate lower rates. The Parkdale Supervised Consumption Service catchment area is outlined in red and the location of the site is indicated in orange.



**Figure 2:** Global outcome (Quantiles)

## ***Mapping Hospital Outcomes***

In Figure 3, we displayed the estimated rate of our global hospital outcome measure (one or more hospital encounters) for all FSAs in Toronto. Darker colours indicate higher rates and lighter colours indicate lower rates. The Parkdale Supervised Consumption Service catchment area is outlined in red and the location of the site is indicated in orange.



**Figure 3:** One or more hospital encounters (Quantiles)

## **Acknowledgements**

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