# **Toronto Overdose Information System – Data Notes**

### **Paramedic Response**

Monthly and weekly number of suspected opioid overdose calls received by Toronto Paramedic Services, Toronto

Source: Toronto Paramedic Services. Paramedic Electronic Patient Care Record. Data Notes:

- This indicator is preliminary and subject to change pending further review of the data source.
- This indicator includes cases where the responding paramedic suspects an opioid overdose. This may differ from the final diagnosis in hospital or cause of death determined by the coroner.
- 'Fatal' cases include those where the patient died on scene and the coroner was notified. Patients who die after being transported to hospital may be miscategorized here as 'non-fatal' cases.
- This indicator includes only instances where 911 is called and likely underestimates the true number of overdoses in the community.

Map of suspected opioid overdose calls received by Toronto Paramedic Services, Toronto

Source: Toronto Paramedic Services. Paramedic Electronic Patient Care Record. Data Notes:

- This information is preliminary and subject to change pending further review of the data source.
- The map shows the locations where paramedics made contact with patients, which may or may not be the same location from which 911 was called.
- The colours of the heat map indicate the relative density, defined as the number of cases per unit area. As a stretch legend is used to visualize the density, this map should not be interpreted in absolute terms when compared to heat maps from other time periods.
- Suspected opioid overdoses occurring slightly outside the City of Toronto boundaries were excluded from the map.
- This indicator includes cases where the responding paramedic suspects an opioid overdose. This may differ from the final diagnosis in hospital or cause of death determined by the coroner.
- This indicator includes only instances where 911 is called and underestimates the true number of overdoses in the community.

## **Hospital Visits**

Number of substance-related emergency department visits by month, Toronto hospitals

Source: Acute Care Enhanced Surveillance System. ED Line Listings. Data Notes:

- This data source only captures substance-related visits that result in an individual seeking care in a hospital setting. This is likely an underestimation of the true burden of overdose in the population.
- ACES is a syndromic surveillance system that classifies visits and admissions into 'syndromes' using algorithms to assess and classify open text from the chief compliant recorded at triage or registration. This process allows ACES to provide daily counts of visits.
- This data source captures visits to acute care facilities in Toronto. However, it does not currently capture visits to some specialty hospitals, such as the Women's College Hospital.
- 'Substance-related visits' include instances of intoxication, addiction, overdose, or withdrawal. They include visits caused by opioids or non-opioid related drugs (OPI and TOX syndromes, combined) but exclude those related to alcohol.
- This indicator includes all visits to Toronto hospitals, regardless of whether or not the individual resides in Toronto.

Number of emergency department visits due to suspected overdoses by month, Toronto hospitals

Source: Acute Care Enhanced Surveillance System. ED Line Listings. Data Notes:

- This data source only captures suspected overdoses that result in an individual seeking care in a hospital setting. This is likely an underestimation of the true burden of overdose in the population.
- ACES is a syndromic surveillance system that classifies visits and admissions into 'syndromes' using algorithms to assess and classify open text from the chief compliant recorded at triage or registration. This process allows ACES to provide daily counts of visits.
- 'Suspected overdoses' refer to a subset of substance-related visits that specifically reference 'overdose' in the chief complaint. They exclude overdoses that specify a substance of non-interest (e.g. alcohol, over-thecounter medication, prescription drugs of non-interest such as blood pressure medication, and toxic products such as cleaning products).

- 'Suspected overdoses' include only visits with a Canadian Triage Acuity Score of 0, 1, 2 or missing.
- 'Suspected overdoses' exclude visits for children less than 10 years of age.
- For the majority of visits, the substance causing overdoses is not specified. It is important to note that this indicator measures overdoses from all types of substances, not just opioids.
- 'Suspected overdoses' also exclude intentional overdoses or those related to self-harm.
- This data source captures visits to acute care facilities in Toronto. However, it does not currently capture visits to some specialty hospitals, such as the Women's College Hospital.
- This indicator includes all visits to Toronto hospitals, regardless of whether or not the individual resides in Toronto.

Number of emergency department visits due to opioid poisoning by month, Toronto hospitals

Source: National Ambulatory Care Reporting System. Ontario Ministry of Health, IntelliHealth Ontario.

### Data Notes:

- This data source only captures overdoses where patients visited the emergency department. It is likely these data underrepresents the true burden of overdose in the population.
- This indicator includes all visits to Toronto hospitals, including those who are residents from outside Toronto accessing care in the city.
- Opioid poisonings were captured using ICD-10 codes: T40.0 –Opium, T40.1 –Heroin, T40.2 –Other opioids (e.g. Codeine, Morphine), T40.3 Methadone, T40.4 –Other synthetic narcotics (Pethidine) and T40.6 Poisoning by other and unspecified narcotics.
- This indicator include visits where opioid poisoning was listed as a main or a contributing cause.
- Emergency department visits with diagnoses that were not confirmed but noted as query or suspect were included.
- Emergency department visits includes only unscheduled visits.

Number of hospitalizations due to opioid poisoning by month, Toronto hospitals Source: Discharge Abstracts Database. Ontario Ministry of Health, IntelliHealth Ontario.

#### Data Notes:

- This data source only captures overdoses where patients were hospitalized.
   It is likely these data underrepresents the true burden of overdose in the population.
- This indicator includes all hospitalizations to Toronto hospitals, including those who are from outside Toronto accessing care in the city.
- Opioid poisonings were measured using ICD-10 codes: T40.0 –Opium, T40.1 –Heroin, T40.2 –Other opioids (e.g. Codeine, Morphine), T40.3 Methadone, T40.4 –Other synthetic narcotics (Pethidine) and T40.6 Poisoning by other and unspecified narcotics.
- This indicator includes hospitalizations where opioid poisoning was listed as a main or a contributing cause.
- Hospitalizations with diagnoses that were not confirmed but noted as query or suspect were included.

### **Deaths**

Annual number of deaths from opioid toxicity, Toronto
Source: Public Health Ontario. Interactive Opioid Tool & Communication
Data Notes:

- These data include all manners of death from opioid toxicity (i.e. accidental, intentional, and undetermined) combined.
- The deaths included here are caused by opioid toxicity, with or without other drugs also contributing to death.
- Deaths due to chronic substance use, medical assistance in dying, homicides and trauma where an intoxicant contributed to the circumstances of the injury are excluded.

Locations of opioid toxicity deaths in Toronto by TPH data regions Source: Coroner's Opioid Investigative Aid, Office of the Chief Coroner for Ontario.

- This map displays opioid toxicity deaths based on the date of death captured in the Opioid Investigative Aid.
- The postal code of the location of incident of acute toxicity (or if not available, the location of death or location of residence) was used to assign the cases.

## **TPH Supervised Injection Services**

Monthly and weekly indicators for the supervised injection services, The Works Source: NEO database & The Works – Toronto Public Health.

Data Notes:

- Number of visits refers to the number of clients visiting the supervised injection services (SIS). This includes all visits to the SIS, regardless of whether the client injected. Visits may be from repeat clients.
- Number of overdoses refers to the number of visits resulting in an overdose event that occurs within the site or that occurs to a client who has injected at the site, as reported by the manager at The Works. This does not refer to unique clients.
- Number of naloxone administrations refers to the number of visits resulting in a naloxone administration. Note that multiple doses of naloxone may be administered during one overdose event.