Accidental Substance-Related Toxicity Deaths: Prior Patterns of Prescribing, Substance Use Diagnoses, and Access to Treatment

Deaths involving Opioids, Benzodiazepines, Stimulants, and Alcohol in Ontario from 2018 to 2022



Overall Substance-Related Toxicity Deaths

10,024

accidental substance-related toxicity deaths

84% involved opioids 61% involved stimulants

13% involved alcohol 7.8% involved benzodiazepines

72%

increase in the number of deaths from the first and last 12 months of the study period

Nearly 2 in 3 people who died from a substance-related toxicity had a prior substance use disorder diagnosis

Prior Non-Fatal Substance-Related Toxicities

were treated in a hospital setting for a substancerelated toxicity incident in the year before death

17% for an opioid-related toxicity 1.0% for an alcohol-related toxicity

5.0% for a stimulant-related toxicity 2.0% for a benzodiazepine-related toxicity

Substance-Specific Findings

Non-**Pharmaceutical Substances**

Involved in

Death

86% of opioid-related toxicity deaths (e.g. fentanyl)

of stimulant-related toxicity deaths (e.g. cocaine, methamphetamine)

of benzodiazepine-related toxicity deaths (e.g. etizolam, bromazolam)

Polysubstance Use Contributing to Death

66% opioid-related toxicity deaths 80% stimulant-related toxicity deaths

84% **alcohol**-related toxicity deaths

benzodiazepine-related toxicity deaths

Prior Substance Use Disorder Diagnoses

Opioid-Related Toxicity Deaths

98%

Nearly 2 in 3 had a substa use disorder

had a substance

2 had an opioid use disorder

Opioid use disorder diagnoses varied significantly across age groups:

41%

25 to 44

46%

36%

<25

45 to 64

≥65

Prior Receipt of Opioid Agonist Treatment (i.e. methadone, buprenorphine,

slow release oral morphine)

83% in the past 5 years **59%** in the past year

30% in the past 30 days

11% on the day of death

had a **stimulant**

use disorder

Stimulant-Related Toxicity Deaths

had a substance

22% 30%

Stimulant use disorder diagnoses across age groups:

<25

33%

25 to 44

45 to 64

Prior Receipt

of Naltrexone

and/or

16%

≥65

16%

Alcohol-Related Toxicity Deaths

1 1 3 in 5 had a substance use disorder in 2 had an alcohol use disorder Alcohol use disorder diagnoses were similar

Acamprosate

in the past year

of Topiramate and/or Gabapentin 19%

Prior Receipt

52% 48% 55% ≤44

across age groups:

45 to 64 ≥65

use disorder

4.7% 13% in the past 30 days 3.6% 9.4% on the day of death Benzodiazepine-Related Toxicity Deaths

Prior Receipt of Gabapentin and/or **Pregabalin**

in 20 had a benzodiazepine

Nearly 2 in 3 had a substa

27% in the past 30 days 27%

42%

had a substance

on the **day of death**

in the past year

For more information: