



# Opioid Toxicities and Access to Treatment among Adolescents and Young Adults in Ontario

This study reports trends in opioid-related harms and access to treatment among adolescents (aged 15 to 17 years) and young adults (aged 18 to 24 years). Comparisons are also made with adults (aged 25 to 44 years).

## Opioid-Related Toxicities and Treatment Patterns among Adolescents and Young Adults between 2014 and 2021

**711**  **opioid-related inpatient hospitalizations**

**5,401**  **opioid-related emergency department visits**

**752**  **opioid-related deaths**

While opioid-related toxicities among adolescents and young adults **increased** over the study period, rates of treatment **decreased**.

### Opioid-Related Toxicities



### Treatment for Opioid Use Disorder



**▲ 4X** increase in **emergency department visits**  
3.9 to 17.7 per 100,000

**▼ 2X** decrease in rate of **opioid agonist therapy (OAT)** recipients  
245 to 112 per 100,000

**▲ 3X** increase in **rate of deaths**  
1.2 to 3.4 per 100,000

**▼ 4X** decrease in residential **treatment admission**  
29 to 7.9 per 100,000

**Note on OAT:** The declines in OAT appear to be unique to young adults (aged 18 to 24), as the rate of individuals receiving OAT remained low and generally stable in adolescents (aged 15 to 17 years) and adults (aged 25 to 44 years).

## Opioid Toxicity Deaths among Adolescents and Young Adults

### Pre-Pandemic

March 17, 2019 - March 16, 2020

**115 deaths**

### During Pandemic

March 17, 2020 - March 16, 2021

**169 deaths**

### Adolescent and Young Adult Opioid Toxicity Deaths During the Pandemic

#### Demographics

**2 in 3**  **deaths occurred among males**

**>90%** of deaths occurred among **young adults (aged 18-24)**


After adjusting for population size, the **rate of deaths** among young adults was **5X higher** than among adolescents (aged 15-17)


#### Living Arrangement

**7 in 10**  **deaths occurred in private residences, with 63% occurring at their home address**

**1 in 8**  **experienced homelessness**

### Circumstances Surrounding Death

There was an **individual present who could intervene** in **23%** of deaths 

Among deaths where an individual was present to intervene, **naloxone** was administered only **50%** of the time 

### Substances Directly Contributing to Death

#### Opioids

**90%** of deaths involved only **non-pharmaceutical** opioids

▲ Significant increase compared to **75%** prior to the pandemic

**6%** of deaths involved only **pharmaceutical** opioids

▼ Significant decrease compared to **14%** prior to the pandemic

**Fentanyl** and its analogues directly contributed to

**94%**

**of opioid toxicity deaths**

▲ Significant increase compared to **84%** prior to the pandemic

#### Non-Opioid Substances

**1 in 2**  **deaths involved non-pharmaceutical stimulants**

**1 in 10**  **deaths involved benzodiazepines**

**1 in 20**  **deaths involved alcohol**

### Mode of Drug Use

**2 in 3**  **deaths involved inhalation or smoking as the known mode of drug use**


▲ Significant increase compared to **48%** prior to the pandemic

### Healthcare Encounters Prior to Death

In the **week prior to death**

**1 in 4**  **had a healthcare encounter**

Within the **five years prior to death**

Almost **90%**  **had a healthcare encounter for a mental health diagnosis**

Approximately **1/2** had a diagnosis or treatment of **opioid use disorder (OUD)**

37% with an OUD were prescribed OAT in the year prior to death

▼ Significantly lower than adults aged 25 to 44 (**49%**)

### For More Information

Iacono A, Kolla G, Yang J, Leece P, Moumita T, Wu F, Cheng C, Campbell T, Antoniou T, Juurlink D, Sheikh H, Emblem J, Kurdyak P, Bertrand J, Shearer D, Singh S, Gomes T, on behalf of the Ontario Drug Policy Research Network, Office of the Chief Coroner for Ontario and Ontario Agency for Health Protection and Promotion (Public Health Ontario). Opioid toxicity and access to treatment among adolescents and young adults in Ontario. Toronto, ON: Ontario Drug Policy Research Network; 2023.