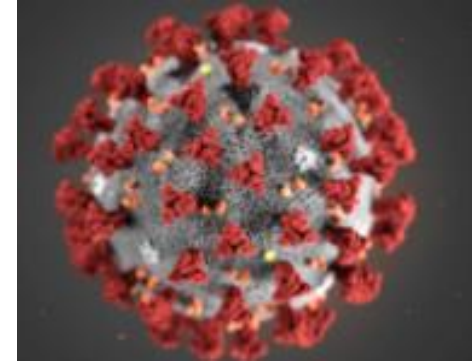


# THE GREAT AMPLIFIER: Opioid Overdoses in Times of Disruption



**Dr. Samim Hasham** BSc. Pharm (Hons), CDE, MMngt, PharmD

Consultant | CMHA Peel | Rapid Access Addiction Clinics | 102- 60 West Drive, Brampton, ON

Session Instructor | Faculty of Health Sciences | Midwifery Education Program | McMaster University | Hamilton, ON

Faculty | Adler College | 870 Yonge Street | Toronto, ON

**Robb Johannes** MA, BA (Hons.) [he/him]

Health Promotions and Program Development, Fred Victor

Adjunct Lecturer, Factor Inwentash Faculty of Social Work, University of Toronto

Co-Chair, St. James Town Service Providers' Network

# Questions


- How many deaths linked to opioids occurred in Canada between January and June 2020 (the latest national figures available)?
  - 1% = 925
  - 10% = 1,050
  - 36% = 1,910
  - 53% = 2,670
- Opioid-related deaths have increased by approximately how much since the pandemic began?
  - 20%
  - 30%
  - 40%
  - 50%
- Which opioid is responsible for the most deaths?
  - Hydromorphone
  - Heroin
  - Oxycodone
  - Fentanyl
- I can name at least one opioid and one Benzodiazepine.
  - Yes
  - No
  - I'm not sure

# OBJECTIVES:

- Recognizing Pandemics as System Disruptors and describe what disparities the Covid-19 Pandemic has exposed
- Discuss Community & System solutions for approaching Disruptions
- Describe what Harm Reduction looks like during Covid-19 and briefly discuss changes in use of Naloxone for Opioid overdoses during COVID-19

Recognizing Pandemics as  
System Disruptors  
and  
Describe what disparities the  
Covid-19 Pandemic  
has exposed

Please hold questions till the end



The Pandemic is  
liberating everyone to  
experiment with radical  
new ideas:

Some of these will persist  
after the crisis passes

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# Pandemics as System Disruptors

Pandemic has a Passport

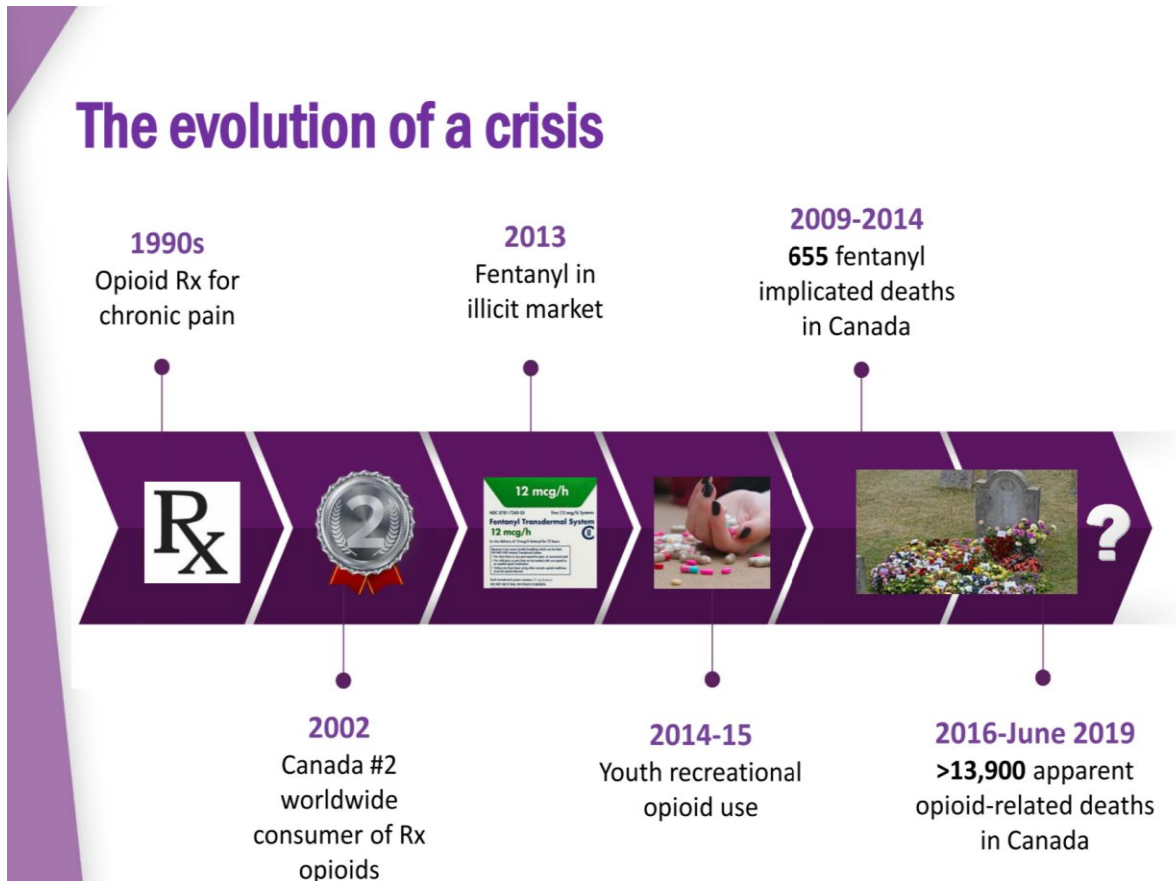
**PANDEMIC VS.  
EPIDEMIC**

Epidemic is often  
localized to a region.

- Pandemic
- Epidemic

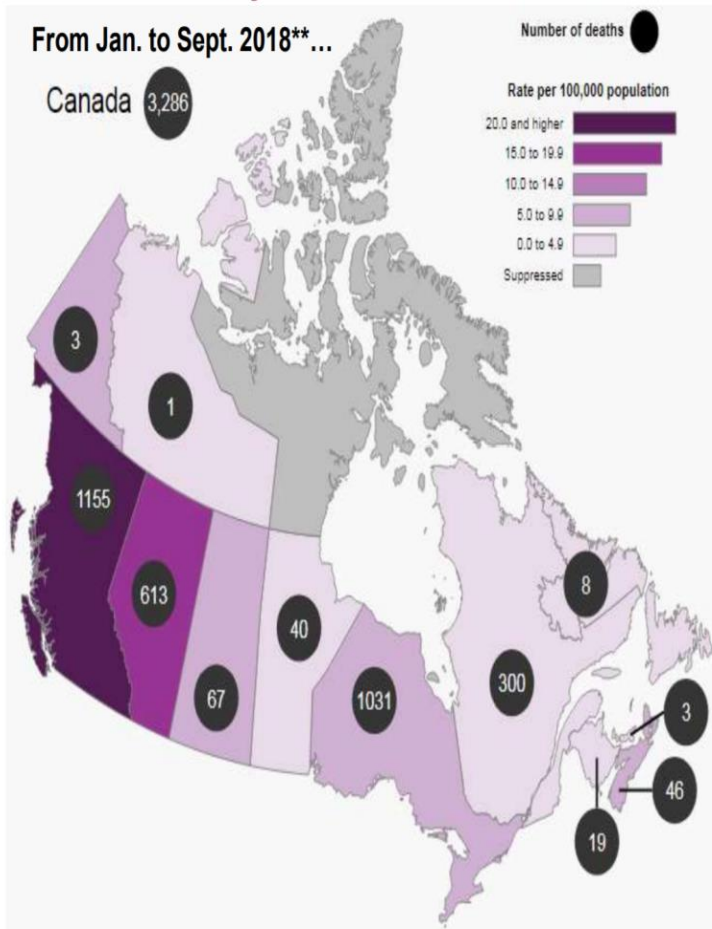


- **Disruption**
  - **System Disruptors**
    - **Opioid epidemic disruptor**
      - **Changes in rates of Opioid Overdoses**



## The opioid crisis is one of the most serious public health crises in recent memory

From Jan. to Sept. 2018\*\*...



# 10,300<sup>\*,\*\*</sup>+

Opioid-related deaths from Jan. 2016 to Sept. 2018

Compared to...

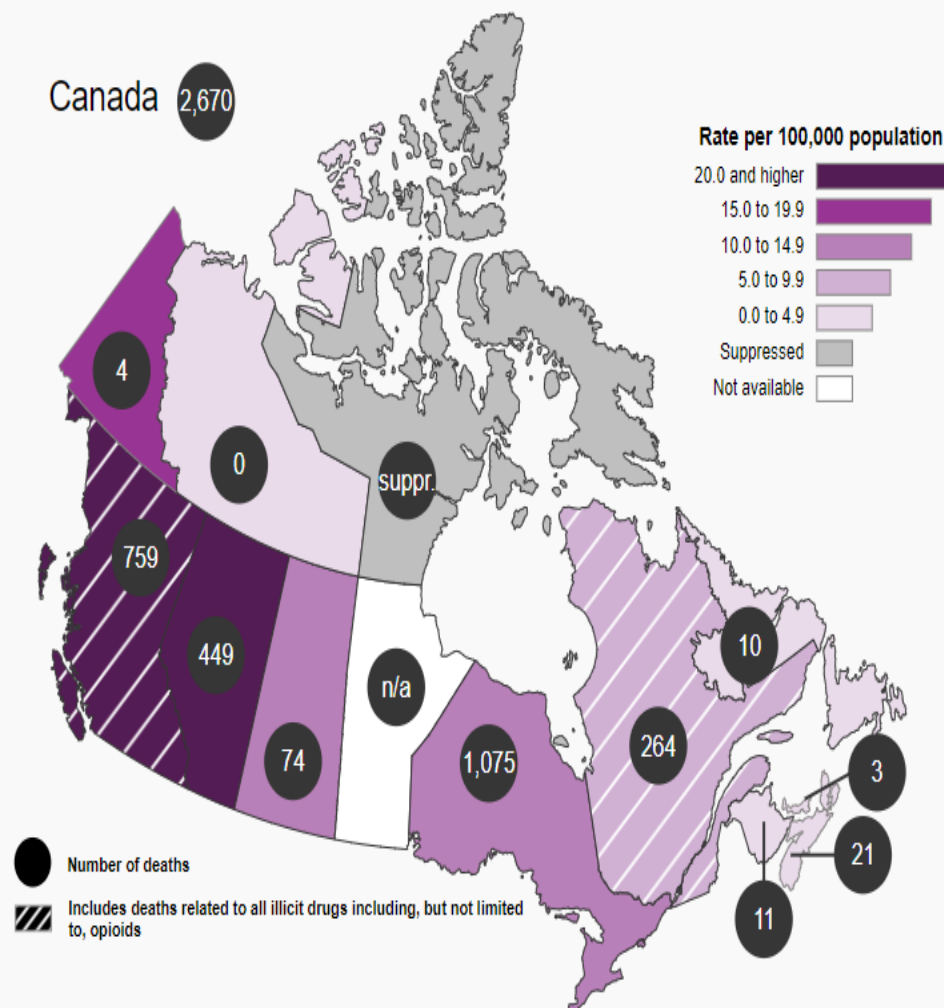
SARS  
2002-2003 44

H1N1  
2009-2010 428

HIV/AIDS  
1987-1999 13,255

\*\* Data from British Columbia and available data from Quebec for 2017 (July to December) and 2018 include deaths related to all illegal drugs including, but not limited to, opioids.

Number and rates (per 100,000 population) of total apparent opioid toxicity deaths by province or territory in 2020 (Jan to Jun)






# Record 34 people died in December 2020 of suspected opioid overdose in Toronto



**Katherine DeClerq** Multi-Platform Writer, CTV News Toronto

 [@KateDeClerq](#) | [Contact](#)

Toronto

## Paramedics attend a record 40 suspected opioid overdose calls, 3 deaths in 24 hours



Toronto saw record number of overdose deaths in December 2020 alone, public health unit says



**Sabrina Jonas** · CBC News · Posted: Jan 30, 2021 9:38 AM ET | Last Updated: January 30

Special Advisory Committee on the Epidemic of Opioid Overdoses. Opioid-related Harms in Canada. Ottawa: Public Health Agency of Canada; September 2020. <https://health-infobase.canada.ca/substance-related-harms/opioids>

TORONTO | NEWS

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### Pre-Pandemic Cohort

December 1, 2019 - March 15, 2020

**(n=519)**

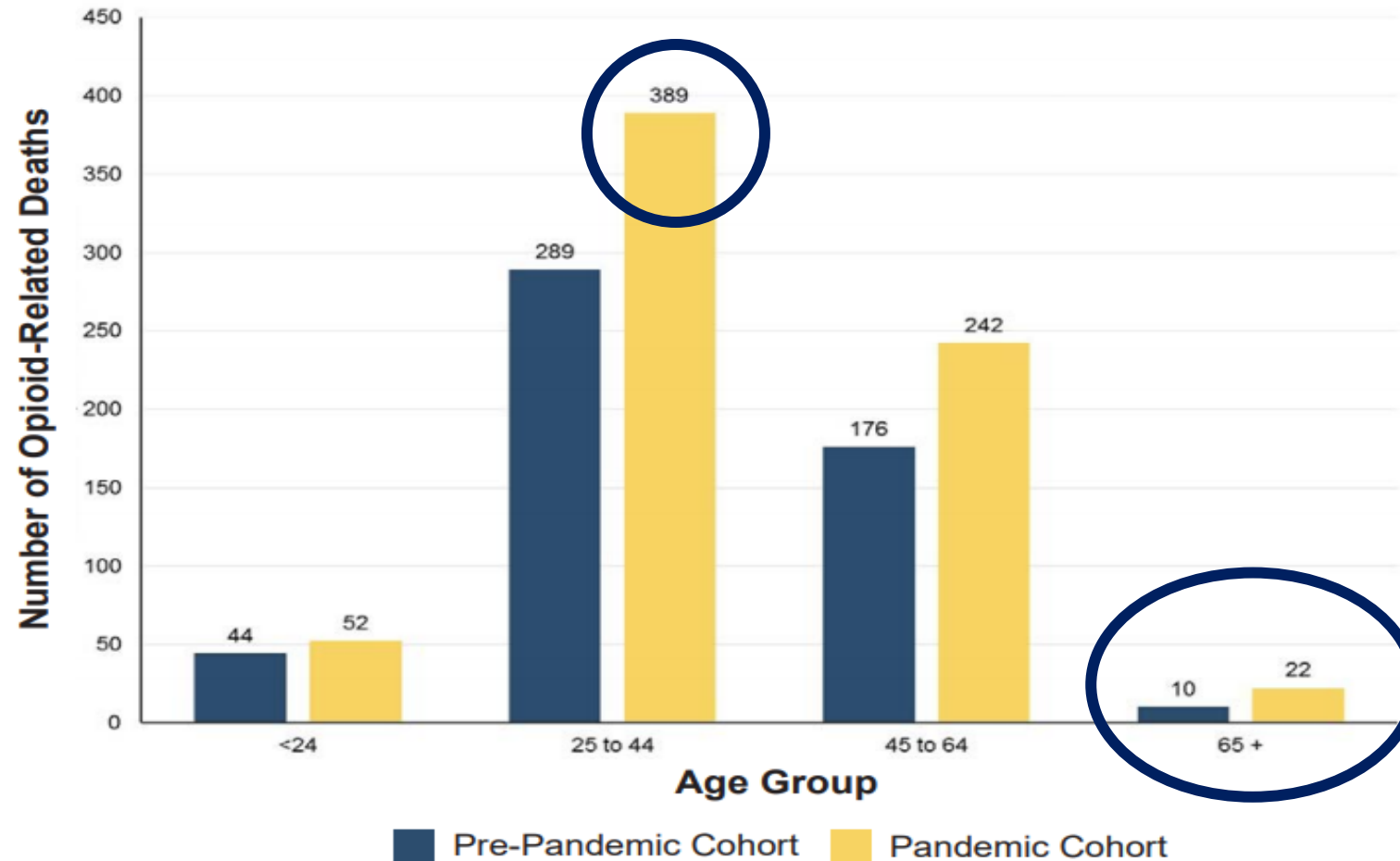


### Pandemic Cohort

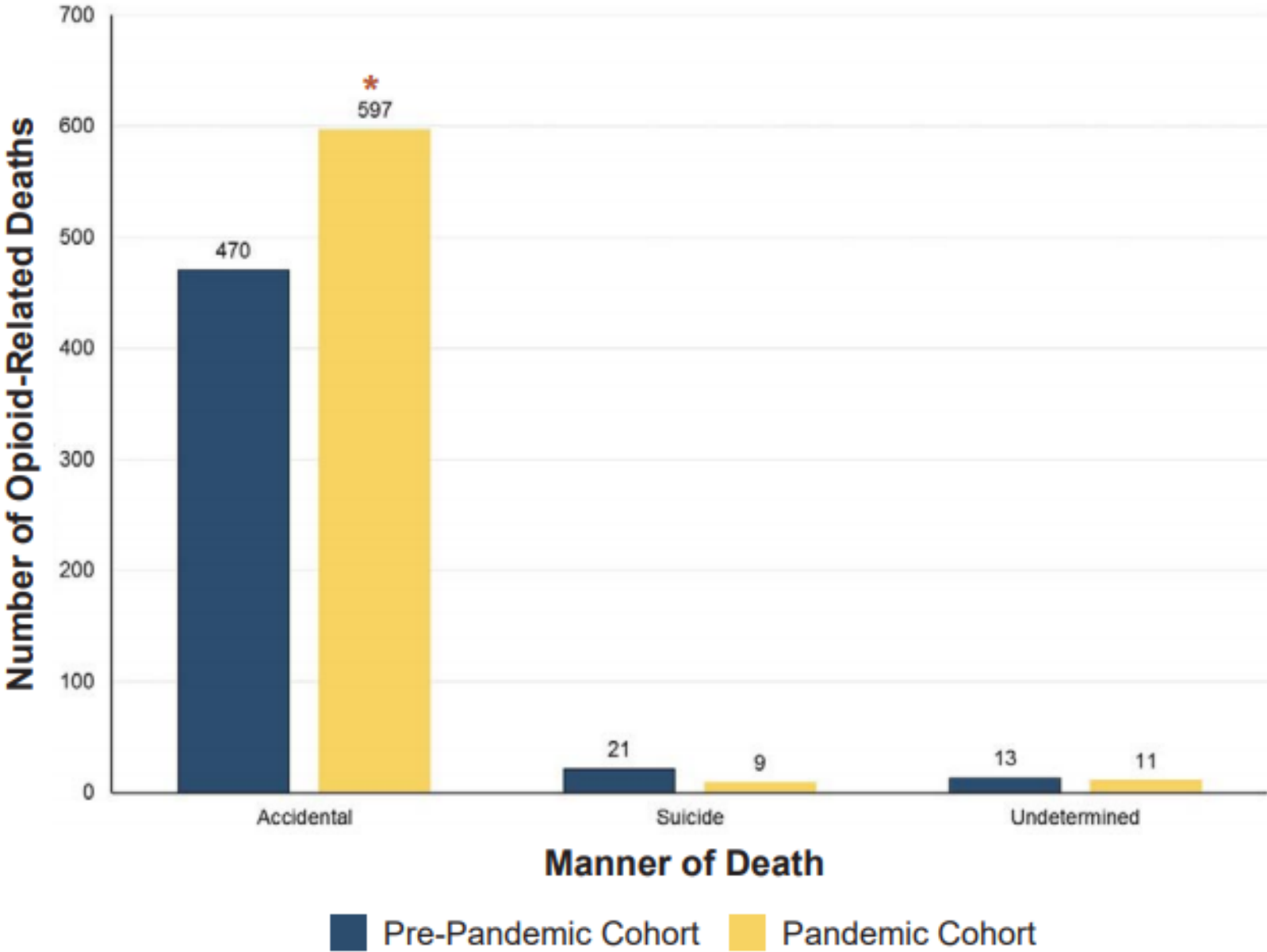
March 16, 2020 - June 30, 2020

**(n=705)**

## Distribution of opioid-related deaths by age



**Manner of death among confirmed cases**

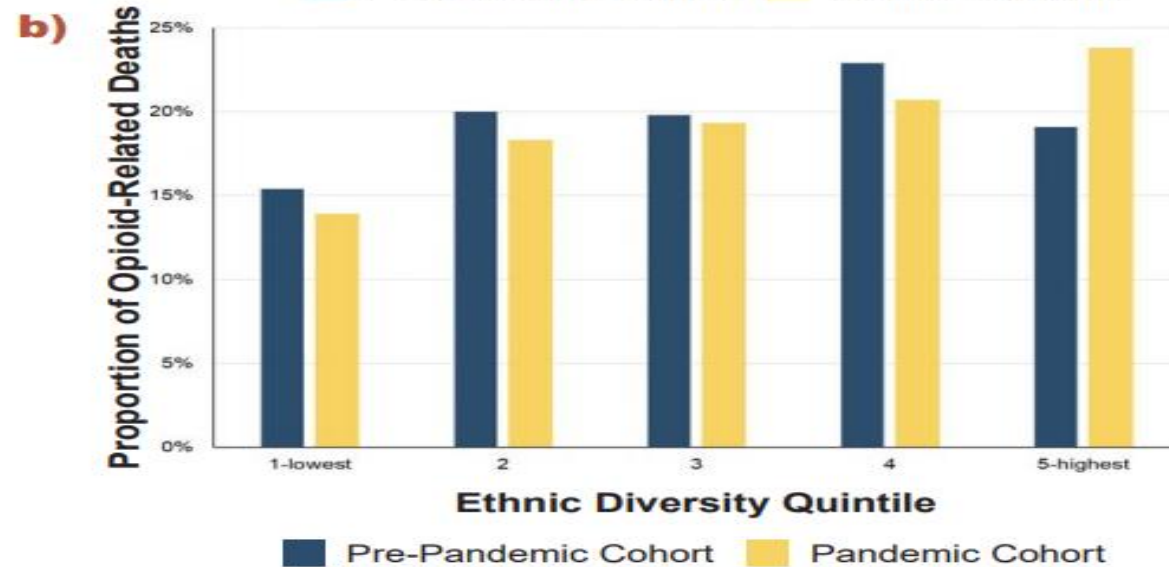
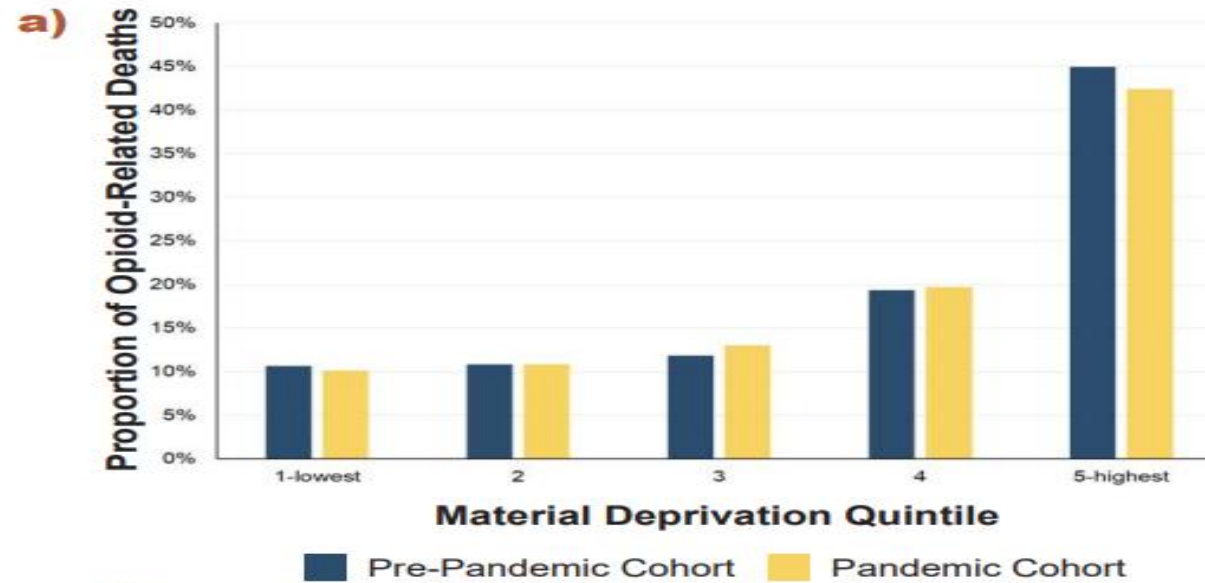


The proportion of men among opioid-related deaths increased from:



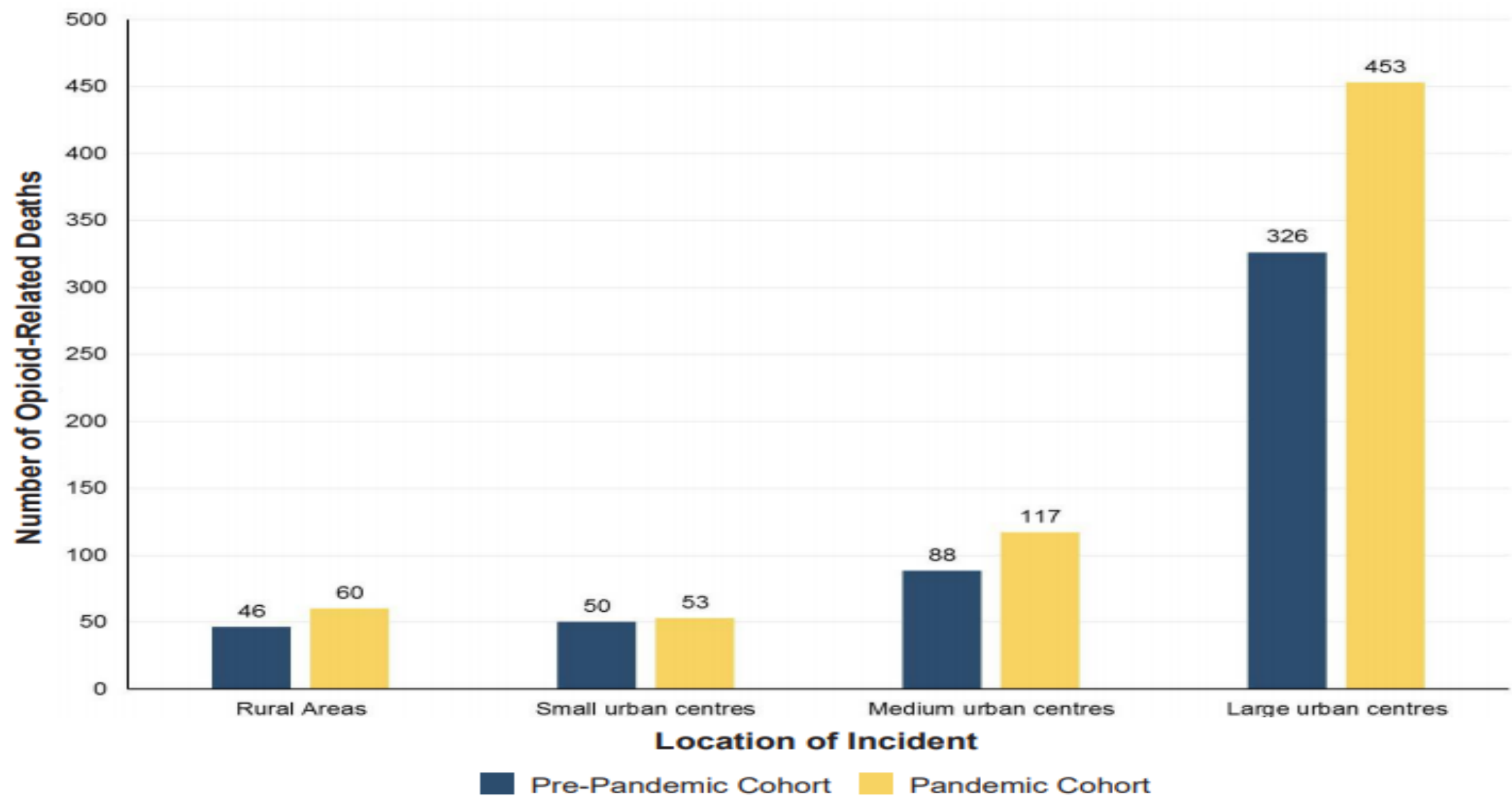


**Distribution of opioid-related deaths by neighbourhood quintile of a) material deprivation and b) ethnic diversity\***

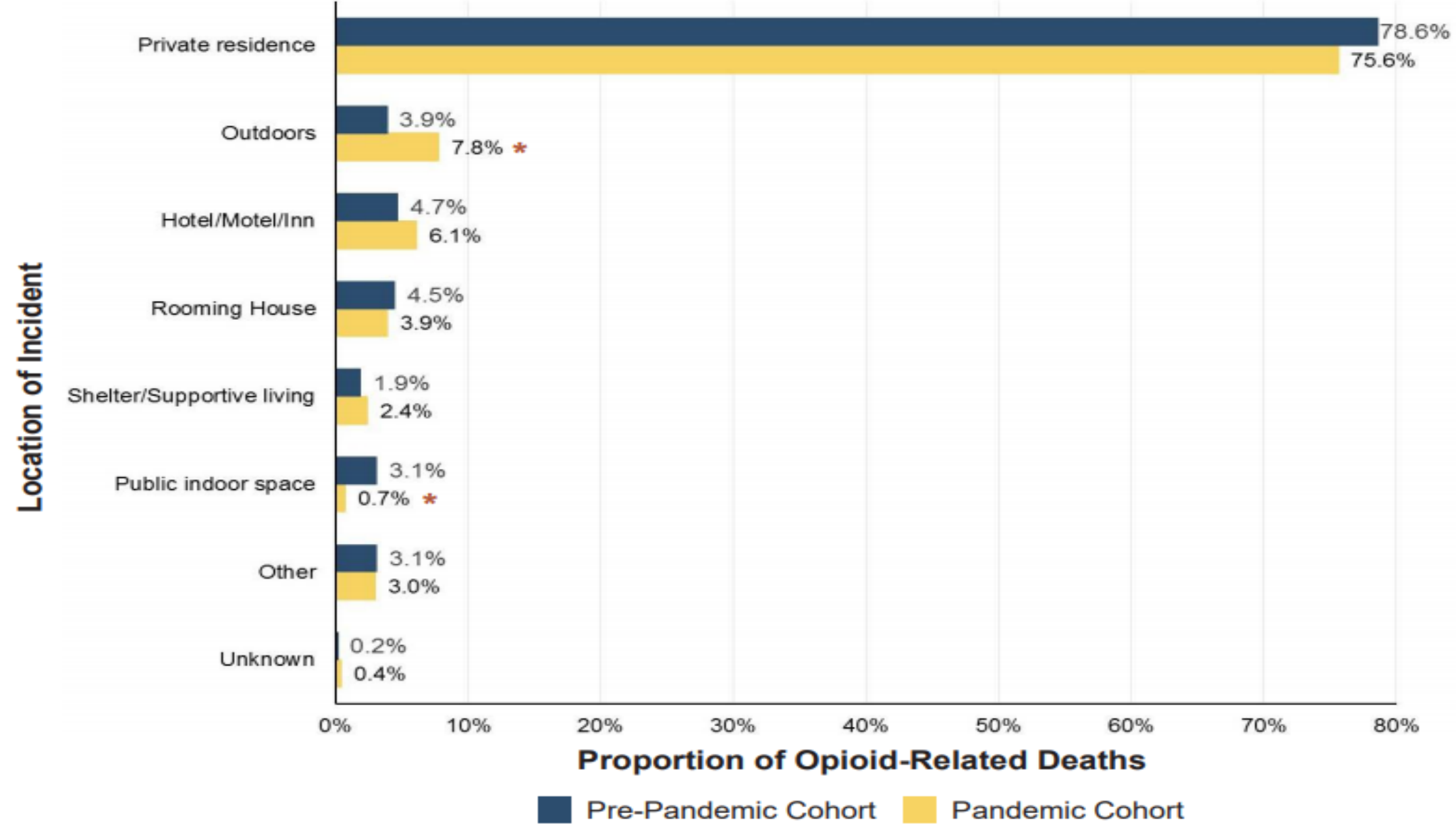


NOTE

**Geographic location of incident among opioid-related deaths**



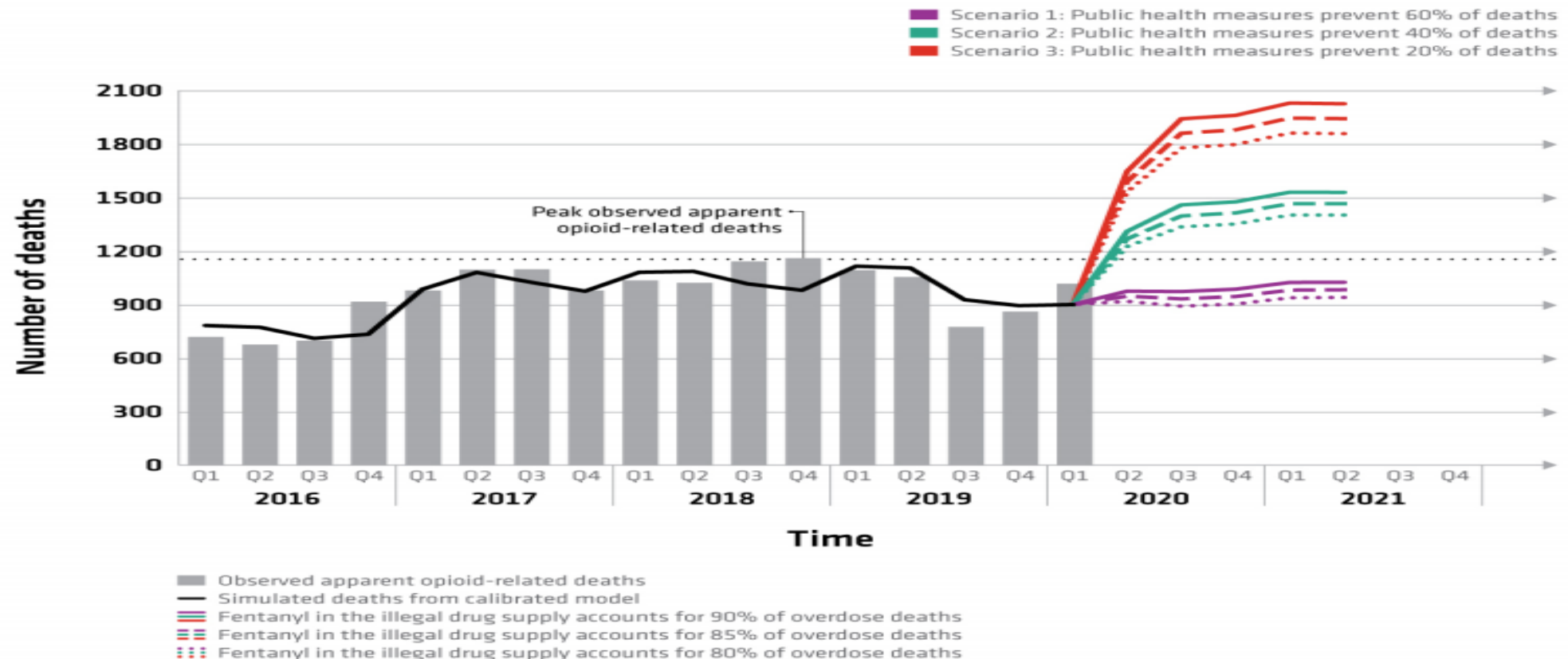
**Location of incident among opioid-related deaths prior to, and during, the pandemic**



# Modelling and the opioid overdose crisis

## Projections to June 2021

**Figure 1: Observed and projected opioid overdose deaths, Canada, January 2016 to June 2021**



# Canadian life expectancy has stopped rising because of the opioid crisis: Statistics Canada



By Leslie Young

Senior National Online Journalist, Health Global News

## Overdose deaths in Ontario climb by up to 40% since pandemic started: Chief Coroner

BY NEWS STAFF, THE CANADIAN PRESS

POSTED SEP 24, 2020 12:48 PM EDT

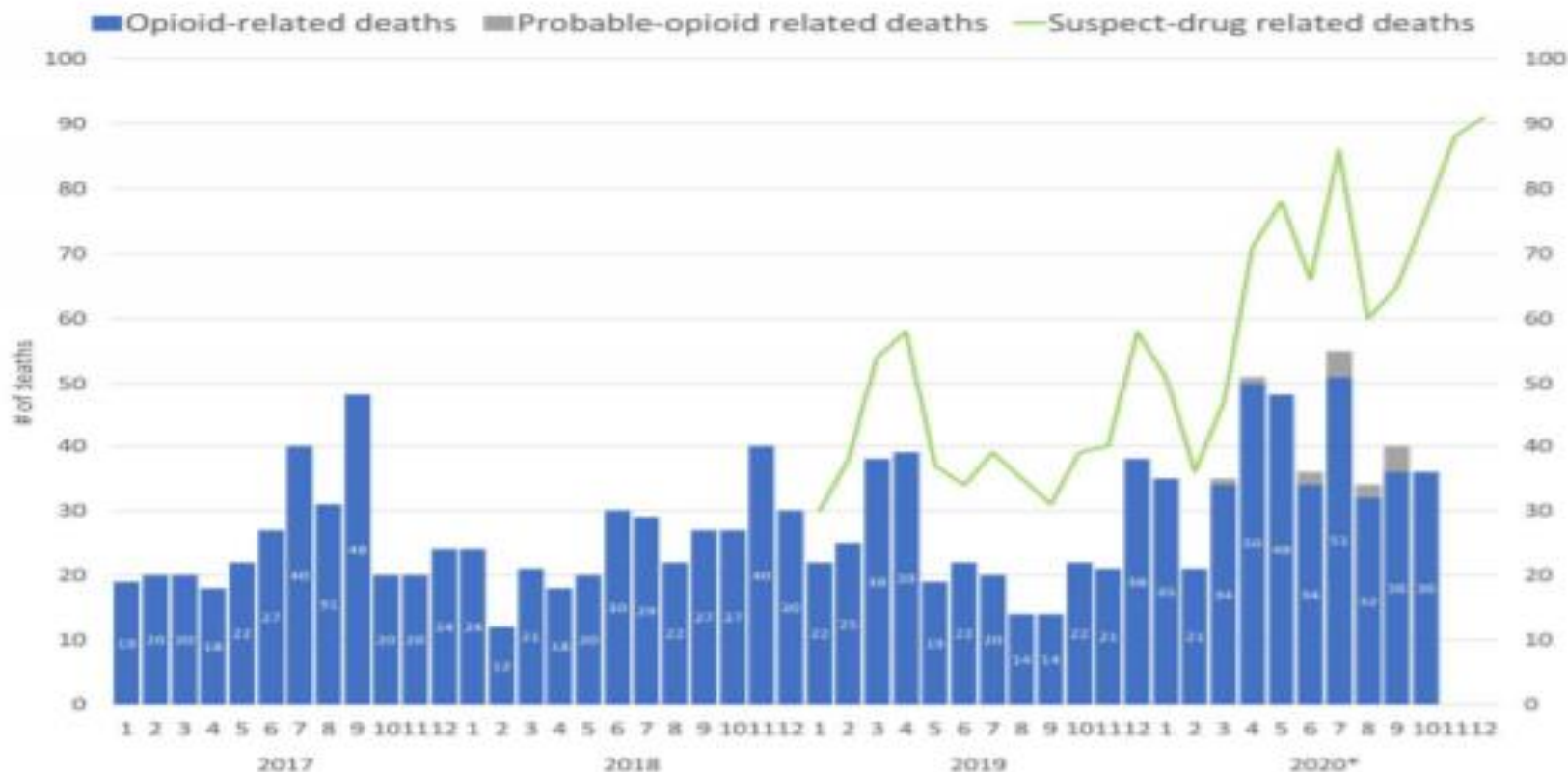




# Opioid-related Deaths in Toronto in 2020

2020: Jan-Sept: 341 (+12 probable) *~65% increase*  
 2019: Jan-Sept 212

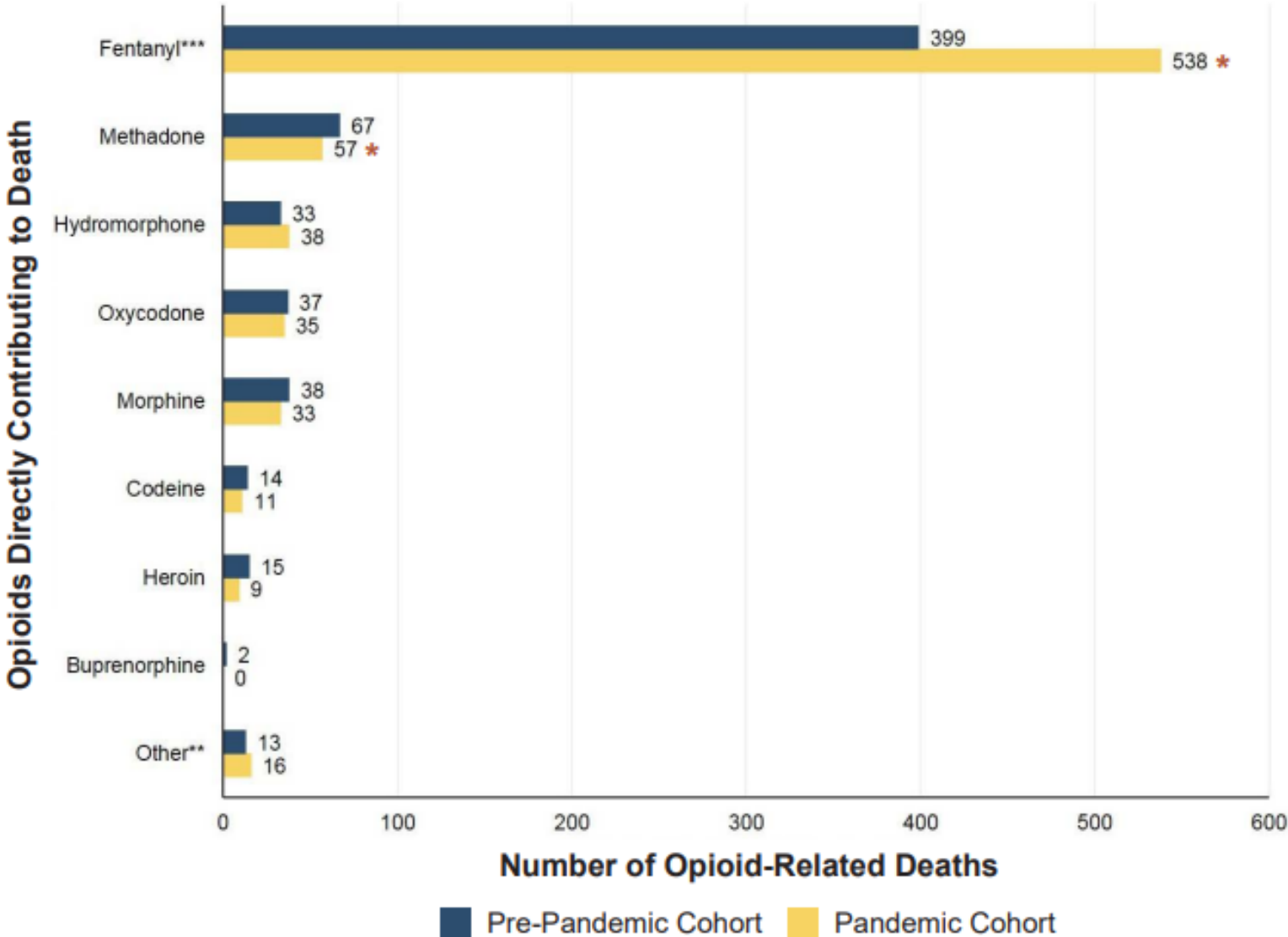
+ fentanyl & stimulant combinations  
 + etizolam involvement



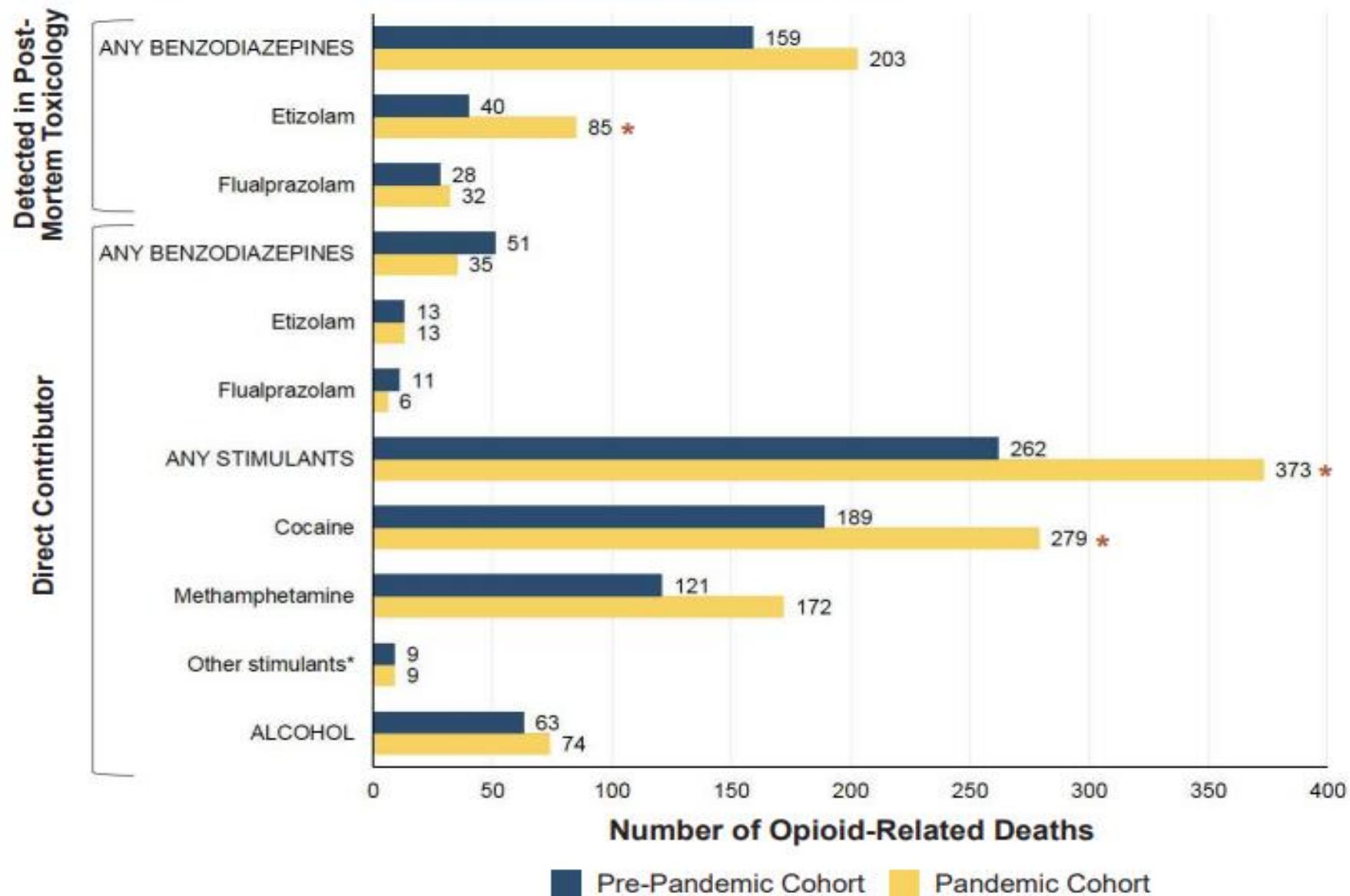
**Suspect-drug related death:** based on the preliminary investigation signs or history of drug use (drugs or drug paraphernalia at the scene, history of drug use, prescription for opioids, OAT treatment, naloxone use, physical signs of drug use or snoring prior to death)

**Probable opioid related death:** suspect-drug related death with toxicity positive for opioids pending conclusion on the cause of death

# Opioids directly contributing to opioid-related deaths in Ontario



## Other drug involvement in opioid-related deaths





**Naturally produced in  
the body**

**Endorphins**



***Opiates*, derived from  
opium poppy**

**Codeine**

**Morphine**



**Opioid are Depressants**

Fully synthetic

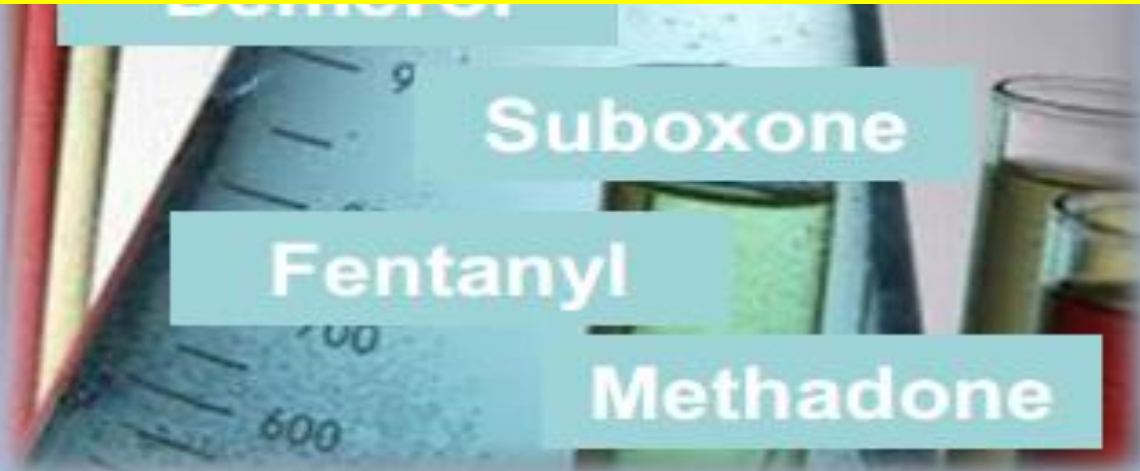
Semi-synthetic

**Alcohol and Benzodiazepines are also Depressants**

**Suboxone**

**Fentanyl**

**Methadone**



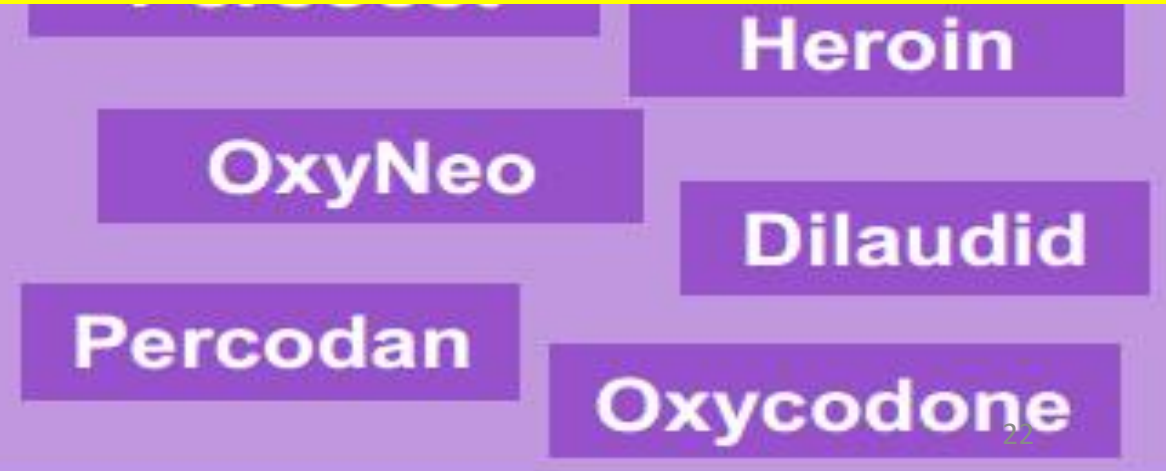
**Heroin**

**OxyNeo**

**Dilaudid**

**Percodan**

**Oxycodone**



# Fentanyl

- 100x stronger than morphine
- 50x stronger than heroin
- There are members of the “fentanyl family” in current medical and/or veterinary use that are much stronger than fentanyl.
  - Sufentanil
  - Carfentanil
- Because of its strong opioid effects, fentanyl has a potential to be abused
- **Why will things get worse?**
  - Fentanyl is cheap.
  - Fentanyl is easy to traffic.
  - Fentanyl has many legal chemical derivatives



A deadly dose of fentanyl is  
**2 mg**, which is equal to just  
**2 grains of salt.**

How much is in your pill?

#FentanylKills



CALGARY  
POLICE  
SERVICE



The Chief Coroner of Ontario reported Carfentanil as the opioid  
that contributed to deaths in  
21% of accidental opioid-related deaths in  
Toronto and Ontario between  
April 1, 2019, and April 30, 2020.



## Fentanyl Vs. Carfentanil

One million doses of  
**fentanyl** would fit in  
a shoebox.



One million doses  
of **carfentanil**  
would fit in a golf  
ball.



Although never tested, deadly dose of Carfentanil may be  
in the order of  
**20 micrograms** (0.02 mg)

# Why does the Brain prefer Opioids to Broccoli?

## Brain Disease



Prognosis

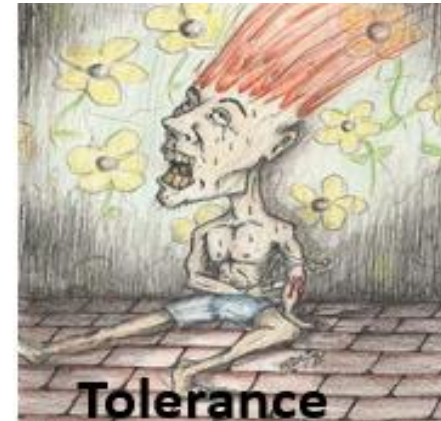
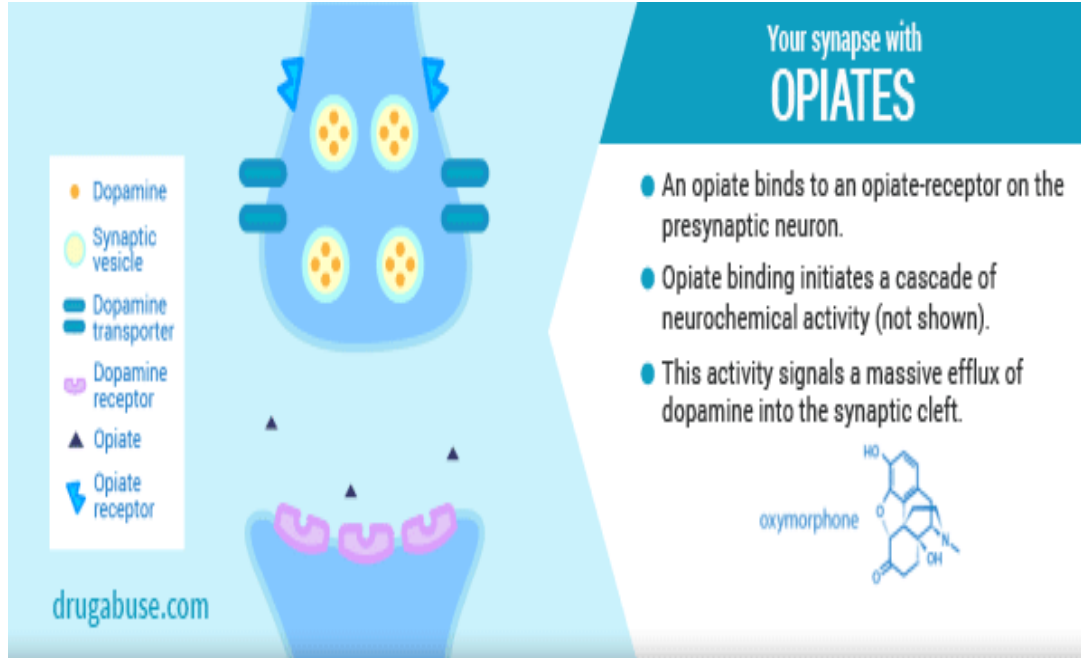


Progression



Symptoms

"Addiction is **chronic, relapsing brain disease** that is characterized by compulsive drug seeking and use, **despite harmful consequences**. It is considered a brain disease because drugs change the brain; they change its structure and how it works." National Institute of Drug Abuse (NIDA)



### Withdrawal

opiate withdrawal timeline

<b>VOMIT</b>	10/24 Hours
<b>SWEATING, NAUSEA, RUNNY NOSE, DILATED PUPILS, WATERY EYES</b>	36/48 Hours
<b>ANXIETY, INSOMNIA, LOCALIZED PAIN</b>	48/72 Hours
<b>ALL SYMPTOMS GRADUALLY START FADING AWAY</b>	72 Hours To 1 Week

<http://www.methadonecliniclocator.org>

# Common Risks for Opioid Overdose

Opioid dose and  
purity

## Mixing substances

Alcohol, stimulants,  
marijuana, and  
prescription medications

## Polypharmacy

Prescribed or non-prescribed

## Social Isolation

Using alone

## Addiction history

## Overdose history

## Chronic Medical Illness

Lung, liver, and  
kidney compromise

## Abstinence

- Release from incarceration
- Completion of detoxification
- Relapse after abstinence

**People leaving prison are at higher risk of overdose. Reduce your dose and don't use alone.**

Naloxone temporarily reverses the effects of an opioid overdose. Get your free kit at any pharmacy near you.

# Impact of Disparities on PWUDs



**Increased drug  
contamination  
and toxicity**

**Increased  
drug prices**

**Barriers to harm  
reduction and  
Healthcare  
services**

**Decreased drug  
quality and  
purity**

**Increased  
violence in  
drug  
market**

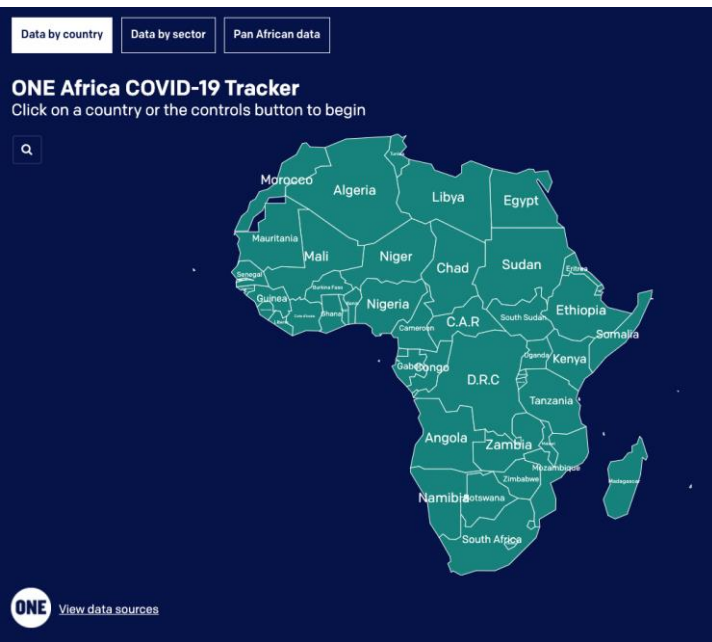
**Housing  
  
Food insecurity**

Discuss Community & System  
solutions for approaching  
Disruptions



# Disparities Exposed by COVID-19

- COVID-19 has been less of a “great equalizer” and more of a **great “amplifier”**
- **Vulnerable populations** have been hit the hardest globally
- Collaboration on best practice **internationally**
- **Social determinants of health** integration into public policy
- Need for comprehensive **data collection** (i.e. race, gender, decision-making)

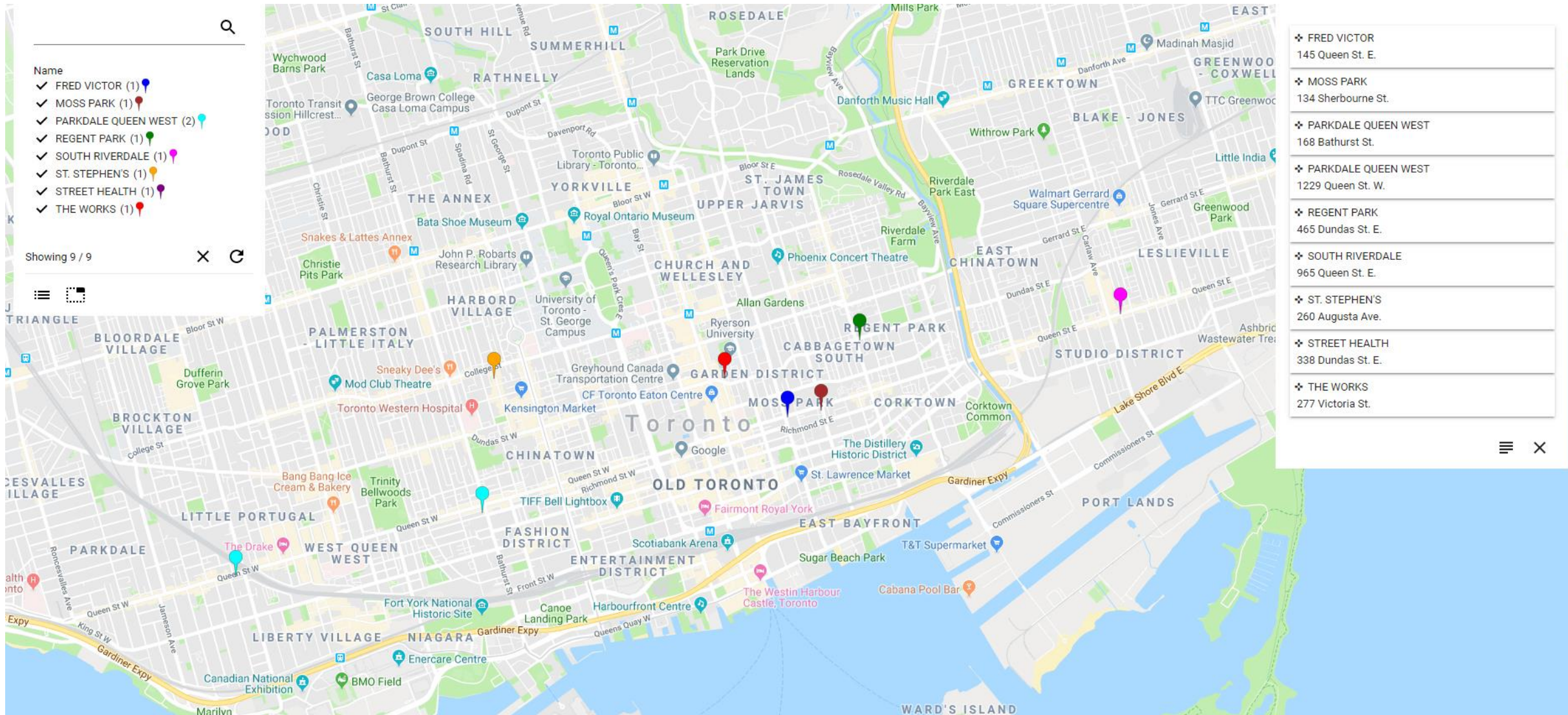


# VANCOUVER





# Supervised Consumption Sites in Toronto





## Community-Level Response: St. James Town

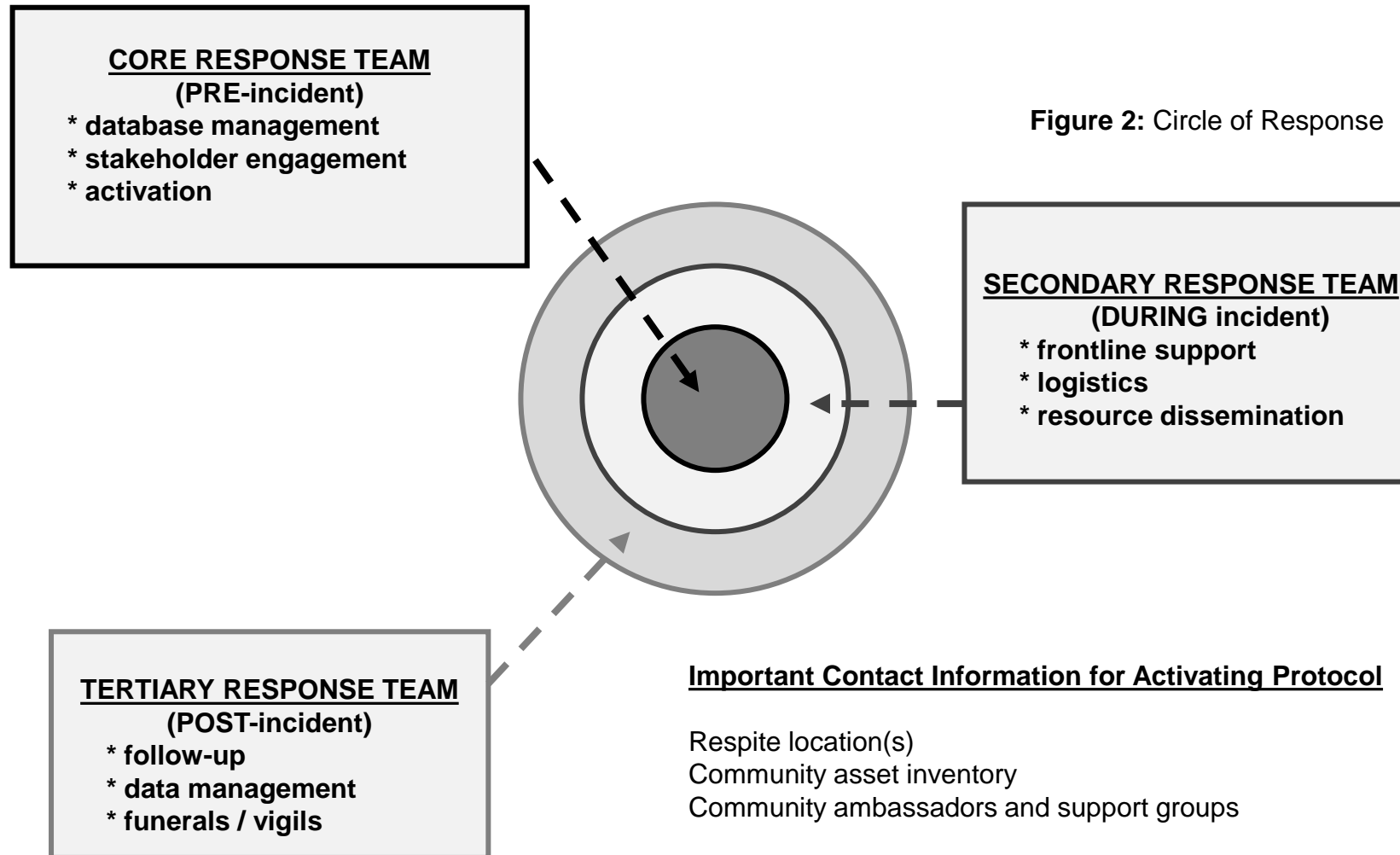
Table 1: CATEGORIES OF CRITICAL INCIDENT

Category	Type of incident	Examples	Response Range <sup>1</sup>
1.	<b>Relational</b> <sup>2</sup>	Shootings, stabbings, physical assaults, sexual assaults, violent incidents, deaths by suicide or overdose	12-72 hours
2.	<b>Neighbourhood-wide</b>	Large-scale building displacement, multiple concurrent property or electrical standards and/or fire code violations, environmental and weather extremes, or other incidences that may present unsafe circumstances upon many residents.	12-72 hours
3.	<b>Long-term</b>	Pandemics, epidemics	1-6 months

<sup>[1]</sup> Time frames are approximations depending upon community need; response, activation and coordination requirements; and other support factors. Systemic elements in seemingly interpersonal encounters (i.e. the relationship of marginalized communities with the police, race relations, hate crimes, domestic violence); such incidents are broader in scope and require time and space for identification.

<sup>[2]</sup> For a parallel crisis response protocol relating to individual violent and traumatic incidents (Level 1), please refer to the City of Toronto Community Crisis Response Program (CCRP): <https://www.toronto.ca/community-people/public-safety-alerts/community-safety-programs/community-crisis-response-program/>

## Community-Level Response: St. James Town (cont'd)



Describe what Harm Reduction looks  
like during Covid-19



# Substance Use & Harm Reduction



# Harm Reduction Tips for Safer Substance Use in a Pandemic



## Don't share your supplies

Sharing drug supplies increases the risk of spreading the virus. This includes sharing of cigarettes, joints, vapes, stems, pipes, straws, and injecting supplies (including ties, swabs, filters).



## Wash your hands

- Use soap & water for at least 20 seconds or use alcohol-based hand sanitizer
- Wash after **every time** you are around other people, use public transportation, handle cash, and after getting your drugs.



## Keep your space clean

- Wipe down all surfaces you use to prepare drugs, before and after use
- Use disinfectant whenever possible
- Wipe down drug packages when you get them



## Prepare your drugs yourself

- **Wash your hands first**
- If you can't prepare your own drugs, stay with the person who is preparing them and **make sure they wash their hands**



## Stock up on supplies and medications

- Get enough harm reduction supplies to last you 2 to 4 weeks.
- Ask your medical provider about emergency plans for avoiding disruptions to your prescription medications (including **Suboxone** and **Methadone**)



## Prepare for a drug shortage

- You may not be able to access your drug(s) of choice due to interruptions in the supply chain.
- Think about other medications that could help take the edge off
  - Seek medical help to get through withdrawal



## Plan & prepare for overdose

COVID-19 can affect breathing, which can put you at greater risk of overdose. Remember to practice overdose prevention by not using alone, having lots of Naloxone on hand, starting with small amounts, and not mixing substances.



## Minimize Contact

If you are having sex or doing sex work, COVID-19 can be transmitted by close contact like coughing, kissing, or direct contact with bodily fluids. Try to minimize close contact and use condoms.



For more information on tips for protecting yourself, visit [Canada.ca/Opioids](https://Canada.ca/Opioids) or for information on treatment resources or how to access services, call Connex Ontario at 1-866-531-2600

Adapted from: <https://www.gov.nl.ca/covid-19/files/COVID-19-Safer-Drug-Use-Harm-Reduction-Tips.pdf>



# 6

## Tips for Safer Substance Use



Every 10 hours in Ontario, someone dies of an overdose.

Changes in the drug supply lately have caused an increase of extremely toxic drugs, leading to even more overdoses than before. Make sure you're keeping yourself and your friends safe by following the tips below.

### 1

#### Never use alone



Never use alone or all at the same time. One person needs to be able to use Naloxone if needed and to call 911. Use a supervised site if one is available in your community.

### 2

#### Make sure you have Naloxone on hand



Regardless of what substance you're using, always make sure you have more than one dose of Naloxone on hand before you use. Make sure everyone knows where the kits are and how to use them.

### 3

#### Use where help is easily available



Make it easy for help/emergency teams to get to you if needed. Make a plan and know how to respond in case of an overdose. If you're helping someone who has overdosed, stay on the scene until help arrives.

### 4

#### Know the signs of an overdose



- Little to no breathing
- Not moving or cannot be woken up
- Cold or clammy skin
- Choking or coughing, gurgling or snoring sounds
- Bluish lips and nails
- Dizziness and confusion
- Pupils extremely small

### 5

#### Start low, go slow



Because of increased toxic drug supply, start with a small amount to test your reaction. If you haven't used in awhile, your tolerance will be lower.

### 6

#### One substance at a time



Mixing substances, including alcohol, "downers" and "uppers", increases risk of overdose. Stick to one substance at a time.

For more information on tips for protecting yourself, visit [Canada.ca/Opioids](https://Canada.ca/Opioids) or for information on treatment resources or how to access services, call Connex Ontario at 1-866-531-2600



# Safer Drinking Tips During COVID-19



During the global Coronavirus (COVID-19) pandemic you may have difficulty accessing alcohol. Liquor stores may limit hours and/or numbers of people in the store, move to delivery only, and/or stop accepting cash.

## Making a plan for safer drinking in case of reduced alcohol availability

Safer drinking during COVID-19 can include planning to:

- planning to drink your regular amount, but spreading it out over time to reduce bingeing and withdrawal
- slowly reduce the amount you drink each day,
- drinking lower alcohol content drinks such as beer instead of wine or wine instead of spirits, or
- taking a break from drinking after slowly reducing.

## Before making a plan, know your risk of serious alcohol withdrawal

Everyone is different but for some people who drink very heavily, stopping all at once or cutting down too fast can be dangerous. To make a plan, ask yourself:

1. Do I drink more than one bottle of spirits per day, or equivalent? (about 3 bottles of wine or 15 bottles of beer?)
2. Have I ever had a seizure from alcohol withdrawal before?
3. Have I ever had hallucinations (seeing or hearing things that aren't real) from alcohol withdrawal before?
4. Do I usually shake, sweat, and feel nauseous or vomit as soon as I wake up in the morning?

If you said "yes" to any of these questions, you are considered to be at **high risk** of withdrawal seizures.

If so, do not stop drinking suddenly unless you have been prescribed medication to relieve withdrawal. Cut down = gradually by no more than one or two drinks per day.

For these guidelines, "a drink" means...



BEER/CIDER/COOLER  
341ml (12oz)  
5% alcohol content



WINE  
142ml (5oz) glass  
12% alcohol content



DISTILLED ALCOHOL  
(rum, vodka, gin, etc)  
43ml (1.5oz) glass  
40% alcohol content

Alcohol strengths may vary from product to product so check the % of alcohol by volume listed on the container.

# Safer Drinking Tips (provided by EIDGE Vancouver)



## 1 Be prepared before you drink

- Take your medication, eat something (or drink a meal replacement) and have a big glass of water before or after your first drink of the day.
- Let your friends/family know where you'll be drinking if you are going on a bender.



## 2 Mixing and diluting your drinks

- Pre-mix your drinks with your preferred mix (orange juice, cola, etc.) to help dilute the overall alcohol percentage and make your drinks last longer.



## 3 Hydrate before & during any drinking session

- Keep a bottle or glass of water nearby and after each drink, have a drink of water.



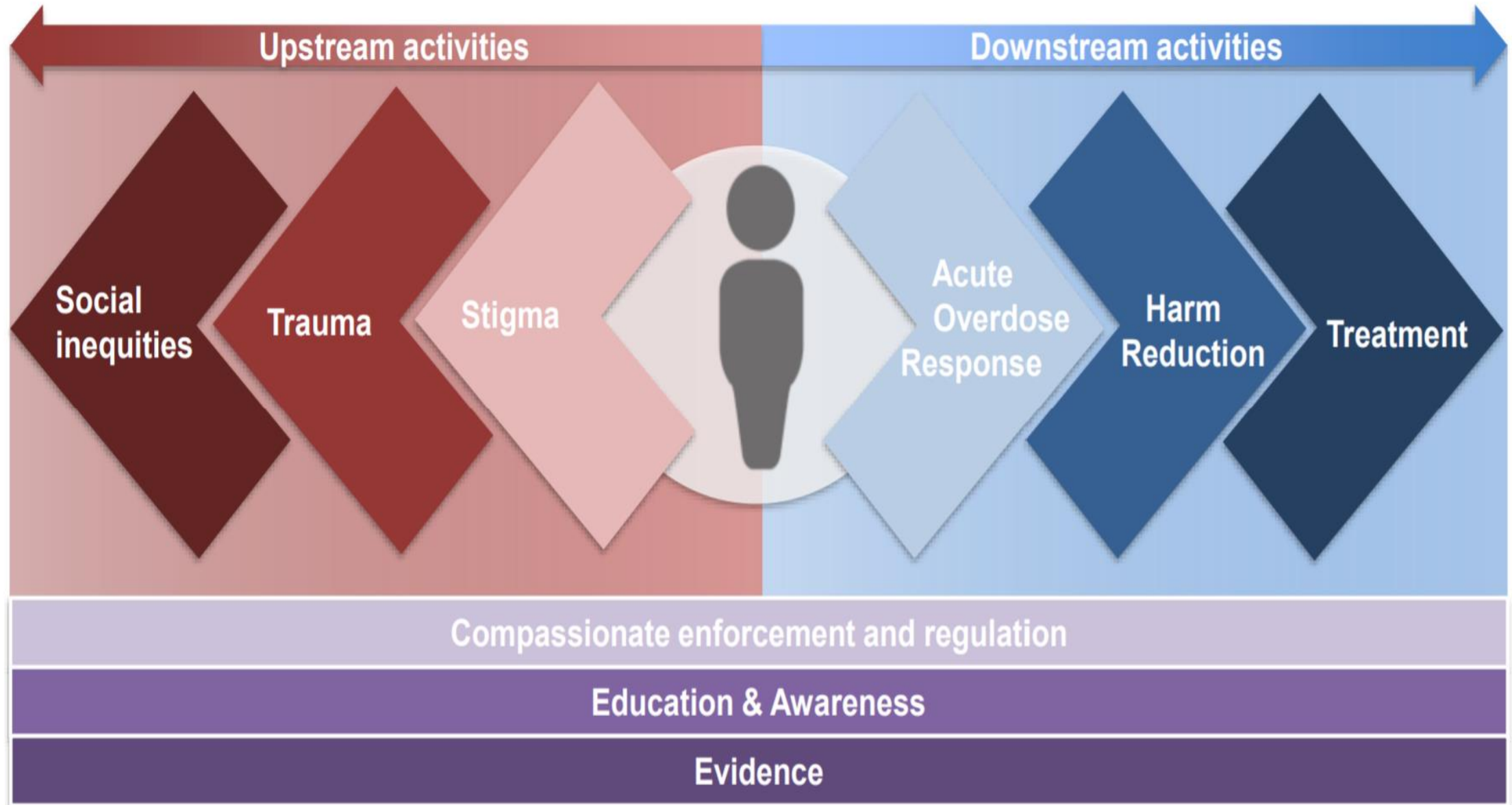
## 4 Know your limits

- Count your cans and bottles and know when you started drinking so you have a better idea if you should slow down.
- Some alcohols affect people differently. Avoid the alcohols that aren't a good fit for you. A certain type of alcohol might cause you to black out or fall down more so try not to drink that.



# ACTION NOW DETERMINES OUR FUTURE





## Social inequities



HUMAN RIGHTS-BASED  
APPROACH



LEAVING NO  
ONE BEHIND



INTEGRATED AND  
INDIVISIBLE



INCLUSIVITY AND  
PARTICIPATION



PROGRESS WITHIN  
PLANETARY BOUNDARIES



INTERGENERATIONAL  
RESPONSIBILITY



ASPIRATIONAL



TRANSPARENCY AND  
ACCOUNTABILITY

## Health in All Policies (HiAP)

A short overview of the approach and of initiatives related to HiAP in the Canadian context

*“Health in All Policies is an approach to public policies across sectors that **systematically** takes into account the health implications of decisions, **seeks synergies**, and avoids harmful health impacts in order to improve population health and health equity. It improves **accountability** of policymakers for health impacts at all levels of policy-making”.*

Helsinki Statement (WHO, 2013).

[https://www.who.int/healthpromotion/conferences/8gchp/statement\\_2013/en/](https://www.who.int/healthpromotion/conferences/8gchp/statement_2013/en/)

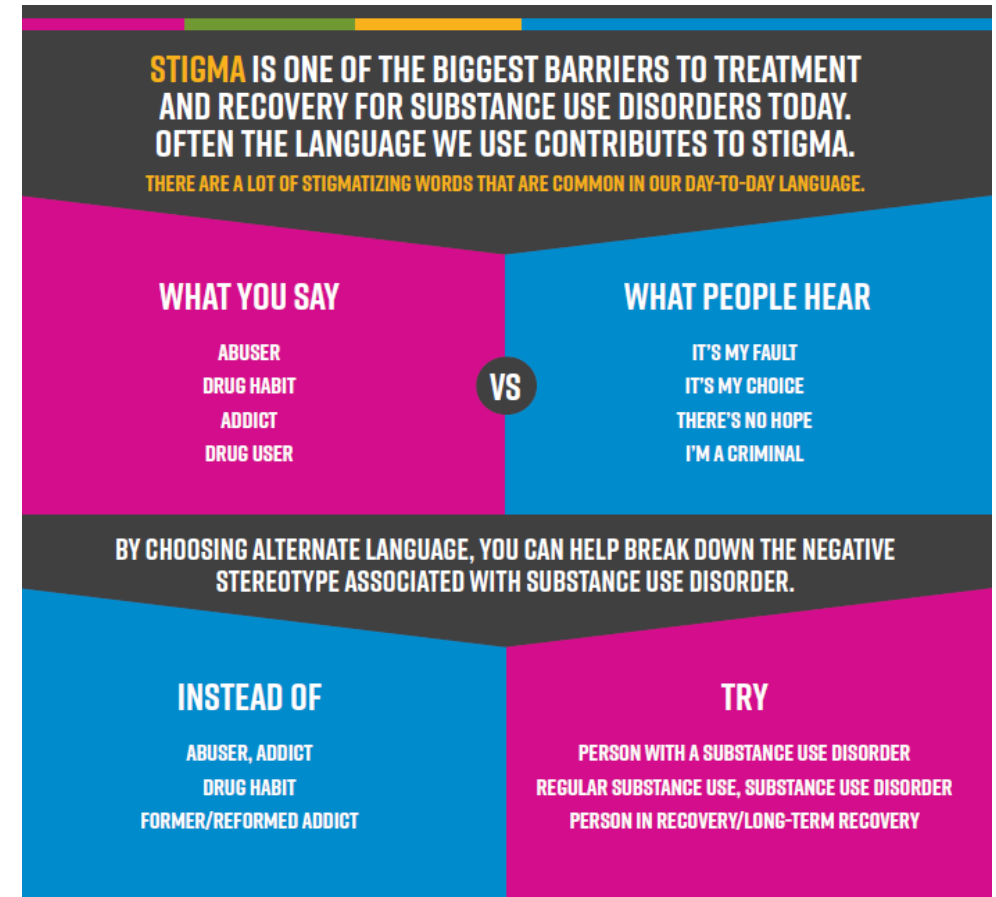


# Stigma is a barrier to accessing services, health care, and treatment for people who use drugs.



“Stigma is the chief reason that people who use opioids do so alone. It prevents them from coming forward, and if they do seek help, it keeps them from admitting they were unwell in the first place.”

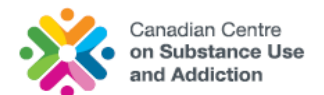
Gord Garner, Executive Director, Community Addictions Peer Support Association (CAPSA) [Ottawa Citizen](#)



THINK BEFORE YOU SPEAK. HELP REMOVE **THE STIGMA.**

JOIN THE **CONVERSATION**

#WORDSMATTER



Evidence. Engagement. Impact.

© Canadian Centre on Substance Use and Addiction 2017



- Safer drug supply
- Decriminalization
- 24/7 Treatment
  - Opioid Navigator
- “Never waste a crisis”
- Telehealth
- Innovations
  - Apps
  - NORS (national overdose response service)

**Drug-dispensing machines being installed to help address overdose crisis, including in Victoria**

The Times Colonist  
AUGUST 25, 2020 06:00 AM



Discuss changes in Naloxone  
response to Opioid overdoses during  
COVID-19

# Opioid Overdose Response & COVID-19

## Administering Naloxone during COVID-19



**CALL** 9-1-1\*. **WEAR** disposable gloves. **ADMINISTER** naloxone. **TILT** the person's face to the side or cover their mouth with a mask in case they cough



Chest compressions and/or the recovery position are **RECOMMENDED**



Rescue breaths are **NOT RECOMMENDED** at this time



**WASH** your hands with soap and water when done assisting

\*The Good Samaritan Drug Overdose Act provides some legal protection for people who experience or witness an overdose and call 911 or their local emergency number for help.

# **Let's Talk**

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**Dr. Samim Hasham, BSc.Pharm (Hons), MMngt,**  
**CDE, PharmD**  
**[Hashams@cmhapeel.ca](mailto:Hashams@cmhapeel.ca)**