



## The shifting unregulated drug supply in Ontario:

*Implications and messaging regarding benzodiazepine-type substances in drugs sold as opioids or “down”*

The unregulated (“illicit”) drug supply is increasingly unpredictable and toxic. During the week of February 24, 2020, there were a number of suspected fentanyl/benzodiazepine overdoses across the province. Lab-based analysis of samples from overdose incidents in Toronto during that week revealed these drugs were a combination of fentanyl, caffeine and flualprazolam (a benzodiazepine derivative).

The spike in numbers drew media attention and a number of confusing or potentially misleading statements, specifically about the use of naloxone, were made.

*“Police are warning Torontonians of a potentially lethal mix of street drugs after an antidote failed to reverse the overdoses of a dozen people at a downtown supervised-injection clinic.” (Toronto Star, Feb 27, 2020)”*

To be clear: **naloxone did work to restore people’s breathing**, but people did not wake up right away, due to the presence of benzodiazepines or derivatives.

From samples taken in Toronto during the week of February 24, a drug checking program using gas-or liquid-chromatography mass spectrometry techniques found:

- Flualprazolam presenting in a much larger number of samples.
- Flualprazolam and etizolam presenting in significantly higher proportions of the samples.

The increased presence and concentration of benzodiazepines or derivatives likely contributed to the increased number of overdoses during the week of February 24.

### KEY MESSAGES

- **There is no harm in administering naloxone in response to any suspected drug overdose, even if you don’t not know what drugs the person took.**
  - Concurrent opioid / benzodiazepine overdose may be present; it is reasonable to administer naloxone as this may improve breathing but the person may not regain consciousness due to sedation from benzodiazepines.
- Benzodiazepines and derivatives (“benzos”) have been contaminating the unregulated opioid drug supply throughout Ontario for at least three years.
- This trend seems to be increasing in frequency and with newer benzos being detected through lab-based drug testing.



- A benzo-related overdose may last several hours. It can include the following symptoms:
  - Drowsiness and sedation: the person affected may feel very sleepy and slip in and out of consciousness.
  - Impaired balance, grogginess and/or movement control.
  - Slurred speech.
  - Blackouts and memory loss.
- If an overdose with benzodiazepines is suspected, perform typical resuscitation as required.
- The effects of benzodiazepines, such as sedation, sleep and shortness of breath may look similar to the effects of opioid drugs such as fentanyl, oxycodone and heroin.
- Naloxone is extremely effective in reversing **opioid** overdose. Benzos are not opioid drugs and therefore will not respond to naloxone administration.
- **Despite this, people are encouraged to administer naloxone in the event of any suspected drug overdose, as you will not know what drugs are causing the overdose.**

### Benzodiazepines

- Are a commonly prescribed group of medications with a range of clinical uses that include treating anxiety, insomnia and managing alcohol withdrawal.
- Are normally seen as pharmaceutically-manufactured tablets and capsules or injectable forms.
- **The intentional, or unintentional, simultaneous use of opioids with benzodiazepines, increases the risk of non-fatal and fatal overdose through respiratory depression. This is even more significant when mixed with other central nervous system depressants, such as alcohol.**
- In the unregulated drug market, illicit or “bootleg” benzos have also been seen in other drugs such as counterfeit Xanax pills / “bars”).

### TIPS FOR PEOPLE WHO USE DRUGS

- Talk with dealers, suppliers and other people who use drugs to get anecdotal information about what drugs are currently circulating and which batches to potentially avoid based on bad reactions.
- Check your drugs, if you can:
  - In Ottawa go to Sandy Hill Community Health Centre:  
[www.shchc.ca/programs/oasis/drug-checking](http://www.shchc.ca/programs/oasis/drug-checking)
  - In Toronto, you can drop off a sample at Parkdale Queen West Community Health Centre (Queen West site), South Riverdale Community Health Centre, or The Works at Toronto Public Health:  
[www.cdpe.org/project/drug-checking-services](http://www.cdpe.org/project/drug-checking-services)



- Try to not use alone
  - If possible, access a Consumption Treatment Service / Overdose Prevention Site / Safe Injection Site.
  - Use with someone else and take turns spotting for each other.
  - If you must use alone, have someone check on you via phone:
    - You can call **1-888-853-8542** and someone can be on the phone with you while you use. (Mon-Fri 10am-10pm; Sat & Sun 10am-12am)
    - [www.grenfellministries.org/overdose-prevention-line](http://www.grenfellministries.org/overdose-prevention-line)
  - **If you do use alone, leave your door unlocked in case a friend or paramedics need to enter.**
- Do a small test dose first – start low, go slow.
- Know the signs of different types of drug overdose and how to respond:
  - Opioid and stimulant overdose:
    - [www.librarypdf.catie.ca/PDF/ATI-70000s/70214.pdf](http://www.librarypdf.catie.ca/PDF/ATI-70000s/70214.pdf)
  - Naloxone training video for opioid overdose (Ontario):
    - [www.ohrn.org/naloxone](http://www.ohrn.org/naloxone)
- If benzos are involved, be mindful that people may not “wake-up” following naloxone administration but their breathing may be restored. **Keep monitoring their breathing and call 911 to get medical help.**
- Get free naloxone kits at harm reduction programs, community health centres, health units and many pharmacies:
  - Find out where: [www.ontario.ca/page/get-naloxone-kits-free](http://www.ontario.ca/page/get-naloxone-kits-free) or call: 1-800-565-8603.

#### A note on drug checking:

- Urine test strips, manufactured by BTNX, are designed to check for the presence of fentanyl in people’s urine. These test strips have been tested in labs and have some use for drug checking purposes for the detection of fentanyl, and several fentanyl analogues, in drug samples.
- BTNX also manufactures benzodiazepine urine test strips but, at this time, these are not recommended for drug checking purposes. From the manufacturer:

*“We don’t have any information about BZO [benzodiazepine] strips for harm reduction. The BZO test strips are specific to diazepam, and other structurally similar benzodiazepine drugs. The test strip would not be able to detect clonazepam or any other drugs that are significantly different to oxazepam. I wouldn’t recommend using the BZO test strips as a harm reduction tool, as we don’t detect all of the benzodiazepine drugs, which would lead to false negatives.”*



## IMPLICATIONS FOR COMMUNITY BASED PROGRAMS

People who overdose as the result of benzos may need monitoring for longer than normal. This could place extra demands on staff.

*“We have been seeing lots of ODs with prolonged sedation, suggesting the presence of benzos for a while now. It is for sure difficult to manage and keep people safe that are unarousable. Generally, in a supervised consumption setting, people barely even need oxygen for prolonged sedation ODs, but they are vulnerable as they are not sleeping but heavily sedated and cannot rouse, hear or defend themselves from theft or assault. We are regularly seeing this last at least three hours, and have heard people report being unarousable for up to thirteen hours. Even more distressing is that many people are reporting amnesia following rousing. Many folks are also waking up extremely irritable - this may have to do with the small amount of “down” in their drugs and the length of time they are sedated - they are waking up “dopesick” and confused. Stable vitals, but prolonged sedation suggests the presence of a benzo. Strategies to keep a very sedated person safe include securing their person and belongings and helping them into a comfortable position. We also need to discuss why benzo withdrawal is serious.”*

- J.K., Overdose Prevention Nurse, Moss Park OPS

## IMPLICATIONS FOR COMMUNITY WITHDRAWAL AND DRUG TREATMENT SERVICES

- There are concerns about tolerance and withdrawal due to prolonged or unintended exposure to benzodiazepines in people who regularly use opioid drugs.
  - For example, if people have been using “fentanyl” (which may actually be a combination of drugs including benzodiazepines) stop using, they may experience symptoms of benzodiazepine withdrawal (e.g. tremors, anxiety, seizures), which can be life-threatening
- Healthcare providers may need to monitor people for symptoms of benzo withdrawal, even if they only report using opioids.

## ONTARIO CONTEXT

### Ontario Coroner Data

Number of opioid-related deaths with etizolam involved in Ontario, 2017-September 2019		
	Detected in post-mortem toxicology	Directly contributing to death (opioid and etizolam)
2017	3*	3
2018	11	6
2019 Jan-September**	25	9

\* May be under-reported due to data collection approach during this time

\*\*Preliminary based on approximately 90% case completion for Q1 - Q3 2019

Top 3 opioids directly contributing to death where etizolam was also detected in toxicology, May 2017 - Sept 2019*	
Opioid directly contributing to death	Detected in post-mortem toxicology
Fentanyl	28
Oxycodone	7
Codeine	1

\*Not mutually exclusive, more than one of the opioids listed may have contributed to the death

Number of opioid-related deaths with etizolam involved in Ontario, January to Sept 2019*	
Public Health Unit	Detected in post-mortem toxicology
Peel Public Health	5
Toronto Public Health	4
Durham Region Health Department	3
Hastings Prince Edward Public Health	2
North Bay Parry Sound District Health Unit	2
Southwestern Public Health	2
Algoma Public Health	1
Chatham-Kent Public Health	1
City of Hamilton Public Health Services	1
Halton Region Public Health	1
Kingston, Frontenac and Lennox & Addington Public Health	1
Peterborough Public Health	1
Windsor-Essex County Health Unit	1

\*2019 data is preliminary and may not be completely representative geographically as case closure times vary across regions

**Recent Ontario Media:**

**February 2020 - Toronto Police warning**

[www.thestar.com/news/city\\_hall/2020/02/27/toronto-police-warn-of-potentially-deadly-drug-mixture-after-spike-in-overdoses.html](http://www.thestar.com/news/city_hall/2020/02/27/toronto-police-warn-of-potentially-deadly-drug-mixture-after-spike-in-overdoses.html)

Police are warning Torontonians of a potentially lethal mix of street drugs after an antidote failed to reverse the overdoses of a dozen people at a downtown supervised-injection clinic.

“Despite being administered (the opioid antidote) naloxone, none of these individuals recovered in a way that was typical for a normal fentanyl overdose,” Watts said. “This leads us to believe that the substance was fentanyl and another unidentified substance.”

**Feb 2020 - Halton Police warning**

[www.haltonpolice.ca/about/media/view\\_release.php?releaseID=6360](http://www.haltonpolice.ca/about/media/view_release.php?releaseID=6360)

The Halton Regional Police Service (HRPS) has received notification from Health Canada that analysis of a drug seized in Halton by the HRPS earlier this year has been identified as a mixture of flualprazolam, fentanyl, caffeine and dimethylsulphone.

[www.insidehalton.com/news-story/9867355--far-more-potent-new-drug-seized-in-halton-has-caffeine-in-it-and-poses-an-overdose-risk/](http://www.insidehalton.com/news-story/9867355--far-more-potent-new-drug-seized-in-halton-has-caffeine-in-it-and-poses-an-overdose-risk/)

**Jan 2020 - Xanax pills in Coburg**

[www.northumberlandnews.com/news-story/9810631-cobourg-police-issue-warning-after-flualprazolam-found-in-seized-xanax-pills/](http://www.northumberlandnews.com/news-story/9810631-cobourg-police-issue-warning-after-flualprazolam-found-in-seized-xanax-pills/)

**OTHER BACKGROUND INFORMATION**

User generated harm reduction content

- [drugs.tripsit.me/flualprazolam](https://drugs.tripsit.me/flualprazolam)
- [www.psychonautwiki.org/wiki/Talk:Flualprazolam](http://www.psychonautwiki.org/wiki/Talk:Flualprazolam)

Kingston, Frontenac and Lennox & Addington Public Health – Backgrounder on Etizolam

- [www.kflaph.ca/en/healthy-living/etizolam.aspx](http://www.kflaph.ca/en/healthy-living/etizolam.aspx)

World Health Organization: Critical Review Report: FLUALPRAZOLAM

- [www.who.int/medicines/access/controlled-substances/Final\\_Flualprazolam.pdf?ua=1](http://www.who.int/medicines/access/controlled-substances/Final_Flualprazolam.pdf?ua=1)

EMCDDA - Benzodiazepines drug profile

- [www.emcdda.europa.eu/publications/drug-profiles/benzodiazepine](http://www.emcdda.europa.eu/publications/drug-profiles/benzodiazepine)