Opioid Preference for Safe(r) Supply

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CONFLICT OF INTEREST & FUNDING

- The authors declare no conflict of interest
- Many co-authors were employed by BC Centre for Disease Control when the study occurred
- Quantitative data was obtained from the 2021 Harm Reduction Client Survey, funded by Health Canada *Substance Use and Addiction Program*
- Qualitative data was obtained through the 'Understanding substance use patterns, preferences and needs: Informing safe(r) supply and safer use services' study (patterns & preferences study) funded by BC Ministry of Health *Community Crisis Innovation Fund*
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BC Centre for Disease Control

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- We respectfully acknowledge that this work was conducted across the unceded, ancestral and traditional territories of 198 First Nations across what we call British Columbia; and that BCCDC is situated on the stolen territories of the xʷməθkʷəy̓əm (Musqueam), skwxwú7mesh (Squamish), and sel̓íl̓witulh (Tsleil-waututh) nations
- We acknowledge the thousands of devastating and preventable deaths that have occurred in British Columbia due to the toxic unregulated drug supply. We would like to recognize the ongoing commitment of people with lived and living experience of substance use who have been and continue to be the lead advocates and actors working to reduce preventable deaths and harms for people who use drugs
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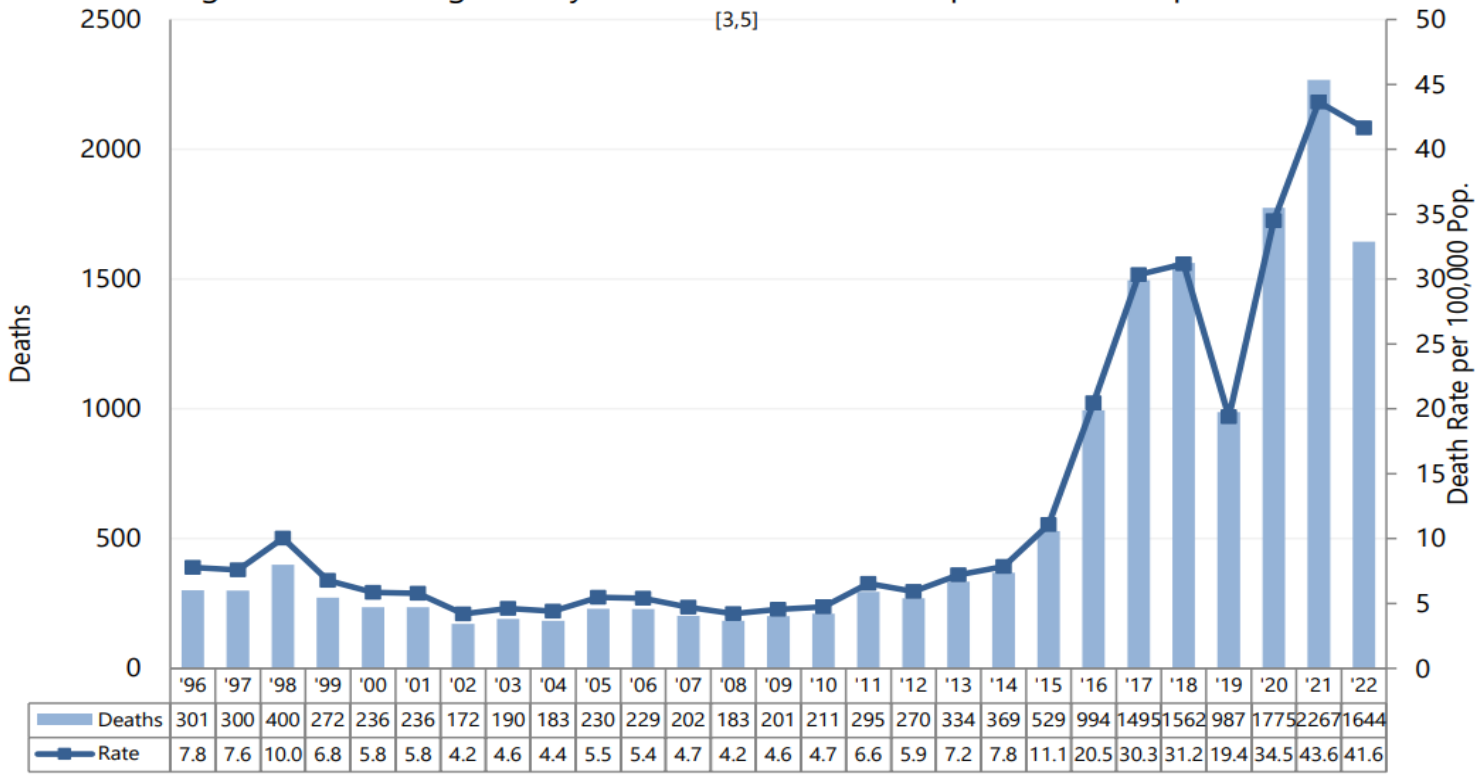
BACKGROUND: DRUG POISONING EMERGENCY (OVERDOSE CRISIS)

BC Coroners Service

Illicit Drug Toxicity Deaths in BC
January 1, 2012 to September 30, 2022

Figure 1: Illicit Drug Toxicity Deaths and Death Rate per 100,000 Population [3,5]

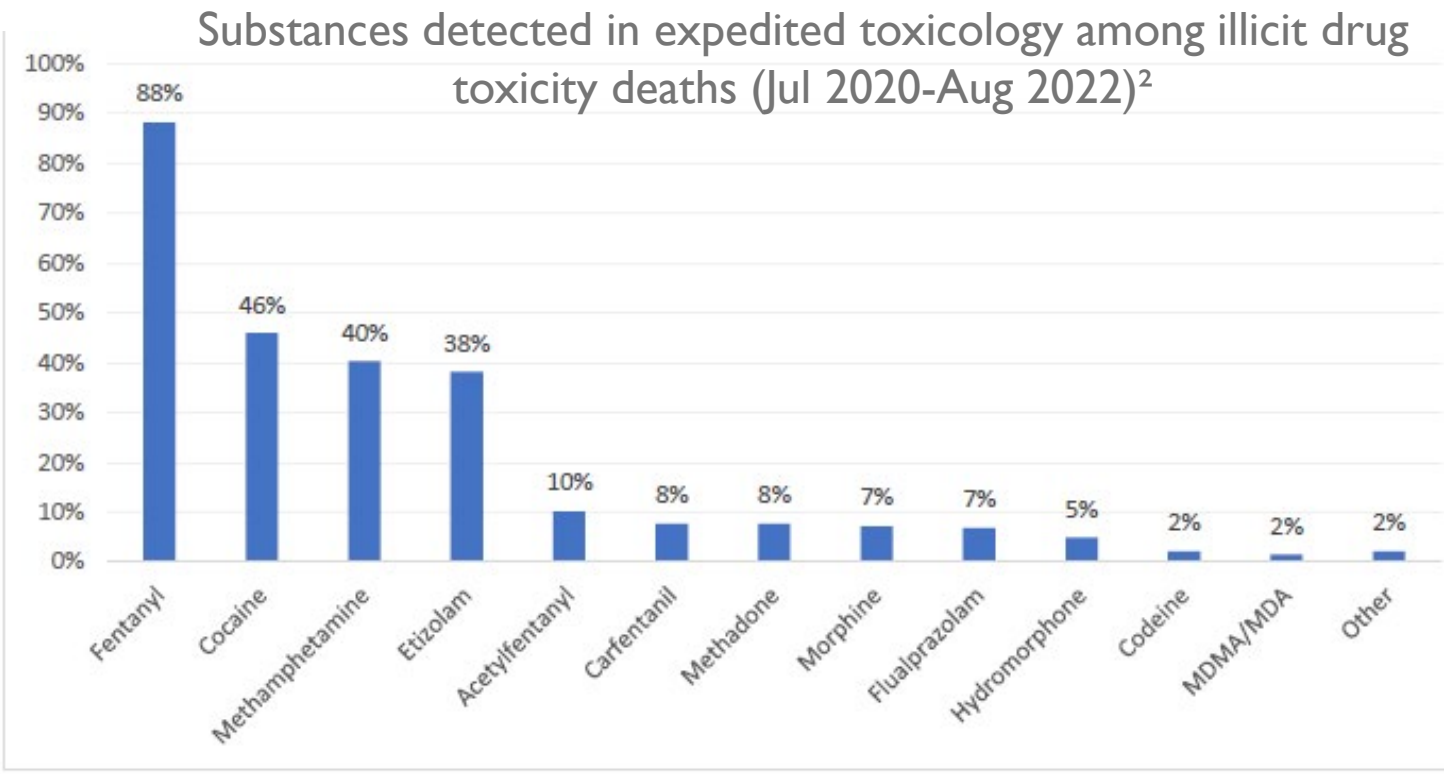


	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22
Deaths	301	300	400	272	236	236	172	190	183	230	229	202	183	201	211	295	270	334	369	529	994	1495	1562	987	1775	2267	1644
Rate	7.8	7.6	10.0	6.8	5.8	5.8	4.2	4.6	4.4	5.5	5.4	4.7	4.2	4.6	4.7	6.6	5.9	7.2	7.8	11.1	20.5	30.3	31.2	19.4	34.5	43.6	41.6

BC Coroners Service, 2022[1]

BACKGROUND: DRUG POISONING EMERGENCY (OVERDOSE CRISIS)

Not only is Fentanyl detected in most illicit drug toxicity deaths (88%) but we are seeing more and more extreme Fentanyl concentrations (>50 migrograms/litre) making it difficult for people to predict the concentrations in addition to the contents of their drugs



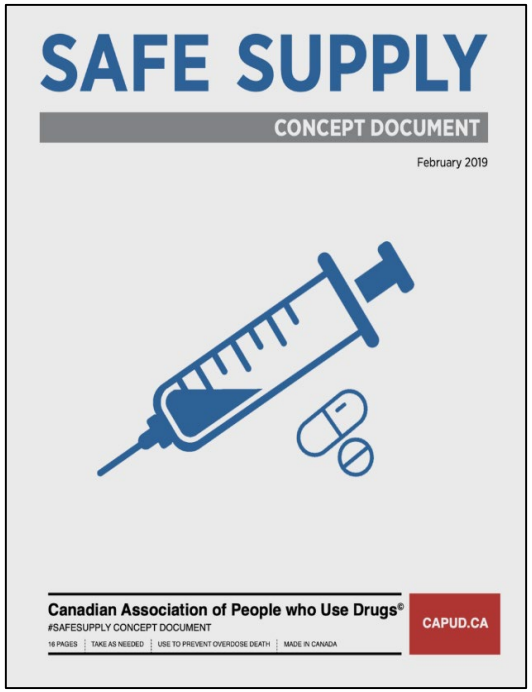
From Nov 2021-Aug 2022, approximately

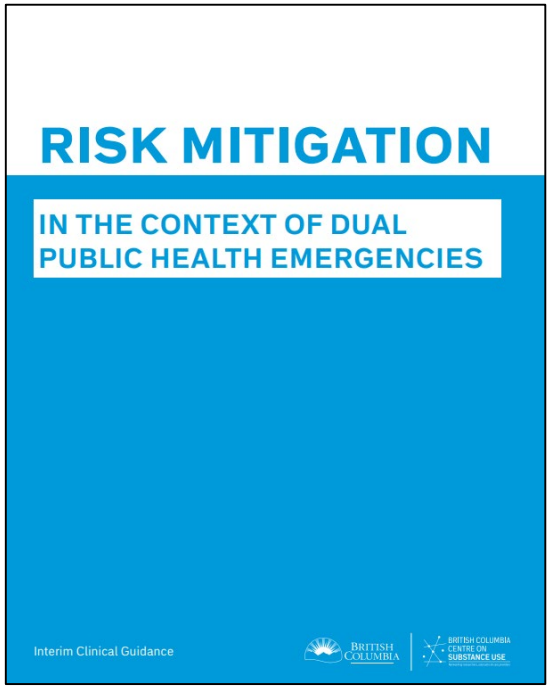
16% of cases had extreme fentanyl concentrations

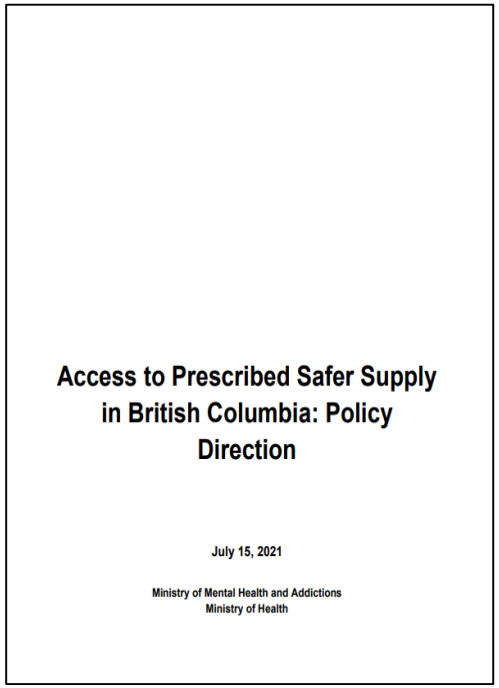
as compared to 8% from Jan 2019-Mar 2020[2]

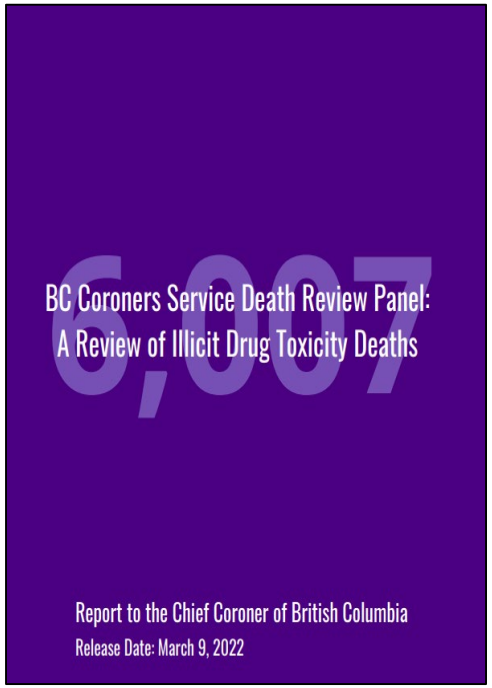
BACKGROUND AND RATIONALE : SAFE(R) SUPPLY

- Safe(r) supply provides people who use drugs with substances of known content as an alternative to the toxic drug supply
- In British Columbia, the concept was introduced and promoted through community action and various documents[3,4,5,6]









BACKGROUND AND RATIONALE : SAFE(R) SUPPLY

- Although there are some safe(r) supply programs in British Columbia, Canada, options in terms of substances, modes of use and program model are limited

Substance	Formulation(s) currently available in BC	Number of people accessing a regulated supply in BC in June, 2022	Number of prescribers offering a regulated supply in BC in June, 2022
Fentanyl	Patch, injectable, oral	Data not available	Data not available
Heroin	Injectable	115	13
Hydromorphone (e.g. Dilaudid)	Oral, injectable	Oral: 194 Injectable: 30	Oral: 46 Injectable: 13
Morphine (e.g. M-Eslon)	Oral	3,326	672

*These numbers are based on the BC Centre for Disease Control opioid agonist treatment indicators dashboard. These indicators represent the number of clients being dispensed opioid agonist treatment in BC in June 2022. Due to classification systems these data may under-represent the number of people receiving a regulated supply of hydromorphone. This dashboard can be accessed at: Unregulated Drug Poisoning Emergency Dashboard (bccdc.ca) [7]

STUDY AIMS & RESEARCH QUESTIONS

This study aims to:

.. identify, among people who use opioids, what is their preference for opioid safe(r) supply and mode of use

With the understanding that:

…people who use drugs must be involved in creating drug policy and that consultation ensures safe(r) supply will be designed practically to increase accessibility

Research questions for this study included:

1. If people who use opioids were provided with a continuous safe(r) supply of pharmaceutical grade opioids and/or opioid agonist therapy, which opioid(s) and/or opioid agonist therapy would they choose? Why?
2. If people who use opioids were provided with a continuous safe(r) supply of pharmaceutical grade opioids, what would be their preferred mode of use? Why?

METHODS: QUANTITATIVE AND QUALITATIVE

1. **Quantitative:** Cross-sectional survey administered to people who use substances using harm reduction supply distribution sites across BC in 2021. Descriptive and multivariate logistic regression analyses conducted to understand preferences and associations

17 survey sites

537 participants in total

374 included as analytical sample

2. **Qualitative:** One-on-one interviews and focus groups conducted with people who use substances across BC in 2021 and 2022. A thematic analysis was conducted to identify patterns and outliers in the data

47 interviews

6 focus groups (40 participants)

61 included as analytical sample

FINDINGS: PARTICIPANT DEMOGRAPHICS

Gender

- The majority of participants identified as cis men (HRCS: 63.6% [n=238], Qualitative: 59% [n=36]) followed by cis women (HRCS: 32.9% [n=123], Qualitative: 37.7% [n=23])

Age

- There was a relatively equal distribution of participants' age with the majority being between the ages of 30-39 (HRCS: 27.8% [n=104], Qualitative: 29.5% [n=18]) and 40-49 (HRCS: 26.2% [n=98], Qualitative: 21.3% [n=13]) and 50-59 (HRCS: 28.3% [n=106], Qualitative: 21.3% [n=13])

Regions of BC

- Participants were distributed across all health regions of BC including metropolitan and large urban centres (e.g. Vancouver, Kelowna, Victoria) (HRCS: 69.5% [n=260], Qualitative: 59% [n=36]) and smaller urban and rural areas (e.g. Quesnel, Nelson) (HRCS: 30.5% [n=114], Qualitative: 42% [n=25])

FINDINGS: PARTICIPANT DRUG USE CHARACTERISTICS

Type of opioids used*

- The majority of participants were using more than one opioid (HRCS: 75.9% [n=284], Qualitative: 86.9% [n=53]) and some combination of opioids from the street supply and prescribed opioids (HRCS: 57.5% [n=215], Qualitative: 85.7% of those using hydromorphone also used opioids from the street supply, 89.3% of those using morphine also used opioids from the street supply)

- The most commonly used opioids were:
  - Fentanyl and/or heroin** (HRCS: 88.5% [n=331], Qualitative: Fentanyl: 85.2% [n=52], Heroin: 63.9% [n=39])
  - Hydromorphone (HRCS: 37.7% [n=141], Qualitative: 45.9% [n=28])
  - Morphine (HRCS: 26.5% [n=99], Qualitative: 45.9% [n=28])

Mode of use*

- The majority of participants primarily smoked their opioids (HRCS: 72.7% [n=272], Qualitative: 70.5% [n=43]), followed by swallowing (HRCS: 47.9% [n=179], Qualitative: 65.6% [n=40]) followed by injecting (HRCS: 36.1% [n=135]), Qualitative: 57.4% [n=35])

*HRCS asked about substances and mode of use in the last 3 days, qualitative interviews and focus groups asked about last month

**Opioids used were self-reported and those that indicated heroin may have been primarily using Fentanyl due to the contaminated street supply

QUANTITATIVE FINDINGS: PREFERRED OPIOID AGONIST TREATMENT OR SAFE (R) SUPPLY

Preferred substance	n (%)
Methadone (Methadose/Metadol)	57 (15.6%)
Buprenorphine/Naloxone (Suboxone)	22 (6.0%)
Hydromorphone (injectable)	24 (6.6%)
Hydromorphone (tablet e.g. Dilaudid)	32 (8.8%)
Morphine (capsule/tablet, e.g. Kadian/M-Eslon)	33 (9.0%)
Morphine (injectable)	28 (7.7%)
Oxycodone (e.g., OxyCotin, OxyNeo)	31 (8.5%)
Fentanyl (liquid)	43 (11.8%)
Fentanyl (patch)	47 (12.9%)
Fentanyl (powder)	80 (21.9%)
Heroin/diacetylmorphine	165 (45.2%)

Out of 537 participants in the 2021 HRCS, 365 or 67.9% specified any opioid agonist therapy or opioid safe(r) supply option.

Participants could choose more than one substance.

QUALITATIVE FINDINGS: PREFERENCE FOR OPIOID SAFE(R) SUPPLY

- Many participants expressed a preference for a pharmaceutical grade supply of heroin and/or fentanyl based on these substances meeting various needs and objectives

"They [heroin, fentanyl] have the strongest analgesic effect and the strongest euphoric effect. I find that when I was prescribed Kadian morphine it was helpful in terms of mitigating withdrawal symptoms. But it's more of a safety or stabilizing sort of function..." (Oscar, Vancouver)

"You won't find one guy out there saying…I'm using fentanyl 'cause that's the wrong drug for me..." (Focus Group 5 Participant)

- Participants shared that existing safe(r) supply options were limited and, for most, were not effective for substantially or fully reducing their reliance on the toxic street supply

"Somebody using fentanyl, trying to replace that with dilaudid or hydromorph - they're using their whole supply in one shot in the morning and they're screwed by noon." (Thomas, Quesnel)

"I'm on four M-Eslon 100's and 14 dilaudids…. – I use probably - if I'm being honest, three, four points a day of heroin too– or fentanyl on top of that. and I don't get high from it. I just feel normal." (Focus Group 4 Participant)

QUALITATIVE FINDINGS: PREFERENCE FOR OPIOID SAFE(R) SUPPLY

- Many participants were interested in a safe(r) supply of heroin. Reasons, in contrast to other opioids, included: a longer lasting high, less undesirable side effects in comparison to other opioids, behavioral and physiological effects (e.g. higher functioning, less sleepy), unique euphoric properties.

"I don't like dope with fentanyl…I don't want to get high to go to sleep." (Focus Group 1 Participant)

"Heroin, you can do a little bit of heroin and get lots of energy…yeah, you can work a job…if you're just going to do fentanyl than you're going to have to be willing to…do what you have to do to get money every 10 minutes." (Focus Group 3 Participant)

"Yeah, heroin has-- it's its own thing. I t's not, like, where fentanyl's a pharmaceutical drug, right. Heroin's more of a-- heroin's the one you want, really." (Amber, Vancouver)

- Some were interested in fentanyl. Reasons included: perception of increased effectiveness of fentanyl for pain management in comparison to heroin, concerns around heroin not being strong enough given peoples' increased tolerance from using fentanyl, familiarity with fentanyl in contrast to not remembering or never having used pure heroin.

"Heroin's not the biggest pain medication where fentanyl is. You can use more heroin where fentanyl if you get a good decent supply of fentanyl you're [snaps fingers] up out of bed just like that. And whistling and doing dishes…" (Focus Group 5 Participant)

"I don't know. I've never really done that-- I don't think I've never done pure fent or heroin. I'd like to try it though." (Jack, Quesnel)

QUANTITATIVE FINDINGS: PREFERRED MODE OF USE FOR SAFE(R) SUPPLY

Out of 537 participants in the 2021 HRCS, 365 or 67.9% specified any opioid agonist therapy or opioid safe(r) supply option. Participants were asked to indicate their preferred mode of use for a safe(r) supply of opioids.

Participants could choose more than one mode of use.

Preferred mode of use	n (%)
Smoke	179 (49.0%)
Snort	22 (6.0%)
Inject	114 (31.2%)
Swallow	97 (26.6%)
Other	15 (4.1%)

QUALITATIVE FINDINGS: PREFERENCE FOR OPIOID SAFE(R) SUPPLY

- Beyond expanding safe(r) supply options to include heroin and fentanyl,participants flagged that expanding options for mode of consumption (e.g.inhalable forms of heroin and fentanyl) and models that are low- barrier and accessible is needed to make safe supply as accessible as possible and reduce peoples' reliance on the toxic,unregulated supply

"Inhalation– people are not– we're not being appropriately serviced. It's all being for people mainly on opiates and opioids and injectors." (Focus Group 1 Participant)

"I could quite happily get heroin and get carries and you wouldn't see me. I'd pick up my carries. I'd be out working, doing whatever I wanted to do to get out of here…Like right now I take morphine, dillies and-- and diacetylmorphine and fentanyl simply because I don't want to go to the fucking clinic three times a day anymore. If I had carries, I would stick with one thing." (Focus Group 3 Participant)

POLICY RECOMMENDATIONS & FUTURE DIRECTION

Currently BC's safe(r) supply options are limited in terms of substances offered and available modes of consumption. As the quote below articulates, limited options contributes to a continued reliance on the illicit and toxic supply:

"Because I know that for most people it doesn't really– just the existing options, the range of options, doesn't really satisfy most people's needs. Most users I know are still using some form of street drug or another." (Oscar, Vancouver)

Policy Recommendations:

- Expanding opioid safe(r) supply options with a focus on providing a regulated supply of heroin/diacetylmorphine
- Expanding safe(r) supply options to include inhalable forms
- To meet the needs of people who use drugs, safe(r) supply policies and programming should be developed in consultation with people with lived/living experience at every stage

REFERENCES

1. BC Coroners Service. Illicit drug toxicity deaths in BC (to September 30, 2022). Available: https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/illicit-drug.pdf. Cited Nov 9, 2022
2. BC Coroners Service. Illicit drug toxicity type of drug data (to Aug 31st 2022). Available: https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/illicit-drug-type.pdf. Cited Nov 9, 2022
3. Canadian Association of People Who Use Drugs (2019). Safe Supply Concept Document. Available: https://vancouver.ca/files/cov/capud-safe-supply-concept-document.pdf. Cited Nov 9, 2022
4. Government of British Columbia, & BC Centre on Substance Use (2020). Risk mitigation in the context of dual public health emergencies. Available: https://www.bccsu.ca/wp-content/uploads/2020/04/Risk-Mitigation-in-the-Context-of-Dual-Public-Health-Emergencies-v1.5.pdf. Cited Nov 9, 2022
5. BC Ministry of Mental Health and Addictions, & Ministry of Health (2021). Access to Prescribed Safer Supply in British Columbia: Policy Direction. Available: https://www2.gov.bc.ca/assets/gov/overdose-awareness/prescribed_safer_supply_in_bc.pdf. Cited Nov 9, 2022
6. BC Coroners Service (2022). BC Coroners Service Death Review Panel: A Review of Illicit Drug Toxicity Deaths. Available: https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/review_of_illicit_drug_toxicity_deaths_2022.pdf. Cited Nov 9, 2022
7. BC Centre for Disease Control (2022). Unregulated Drug Poisoning Emergency Dashboard (Opioid Agonist Treatment Indicators). Available: https://public.tableau.com/app/profile/bccdc/viz/UnregulatedDrugPoisoningEmergencyDashboard/Introduction. Cited Sept 30, 2022