

Harm reduction interventions in British Columbia, Canada: Evidence and Challenges...

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Land acknowledgment

I live and work on the traditional, unceded homelands
of the **Coast Salish Peoples**



x^wməθkwəy̓əm
(Musqueam)



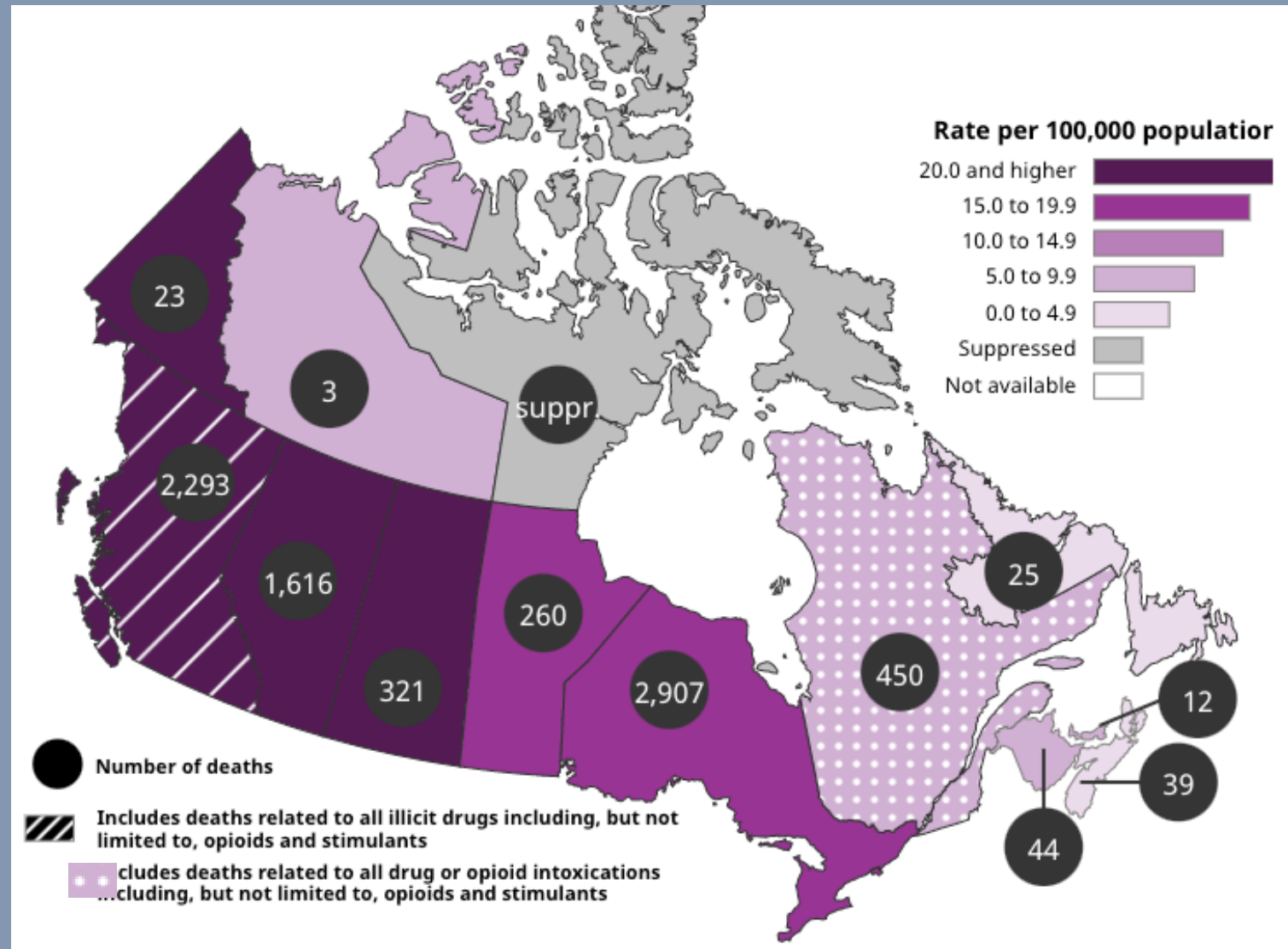
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(Squamish)



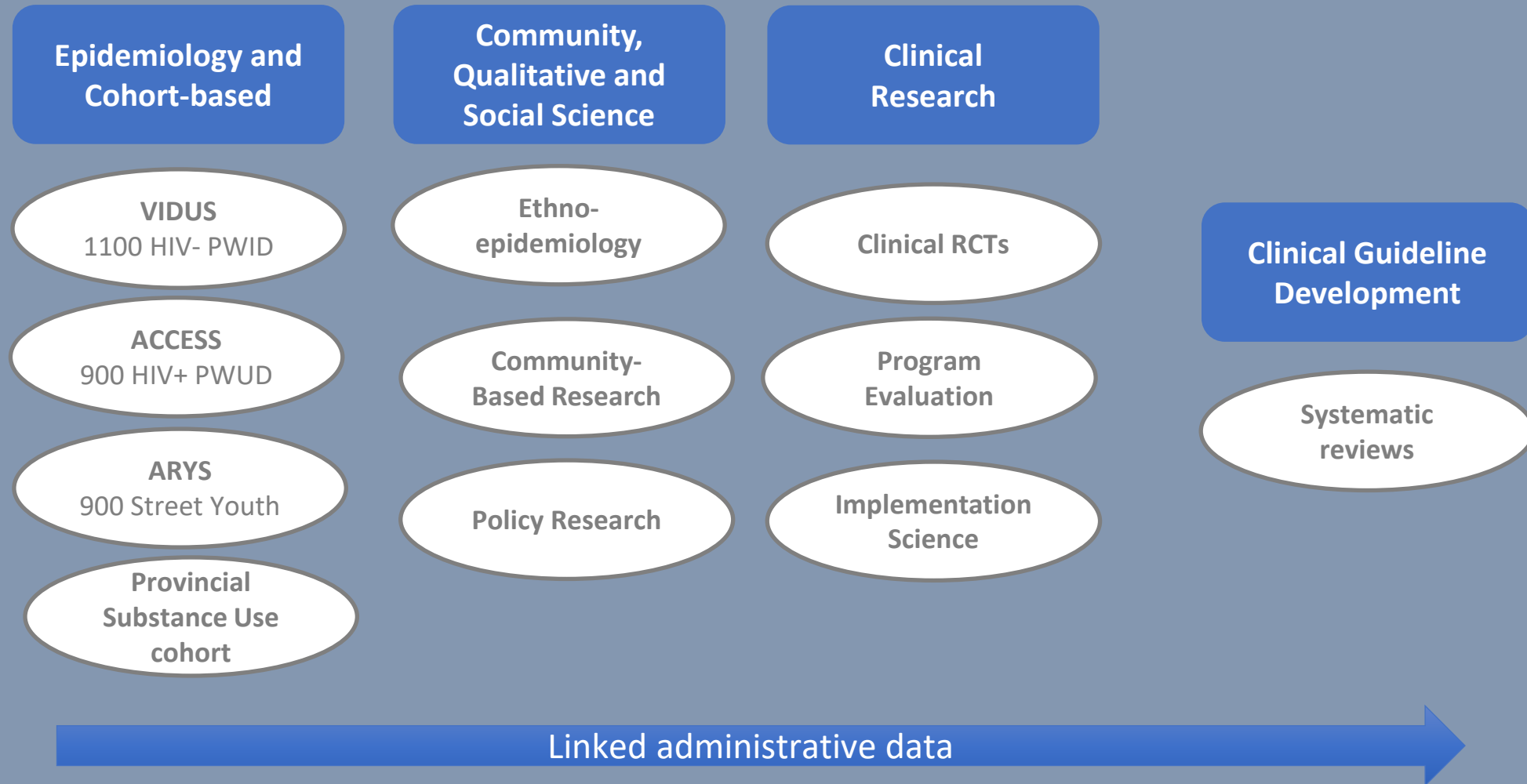
Səlílwətaʔ/Selilwitulh
(Tsleil-Waututh)

Overdose crisis in Canada

- ▶ 21.2 deaths per 100,000 population
- ▶ Province of British Columbia: 45.3 deaths per 100,000 person years in 2023



Research Program Overview – BC Centre on Substance Use



Take Home Naloxone

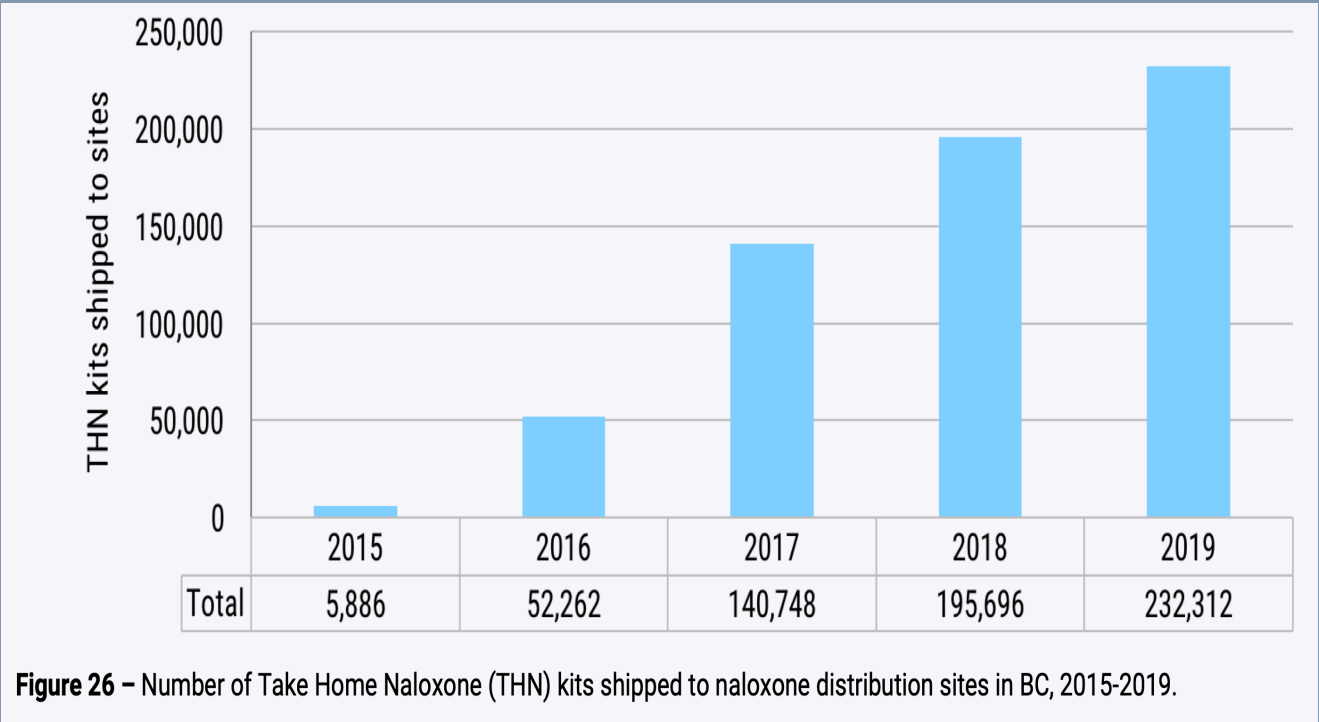
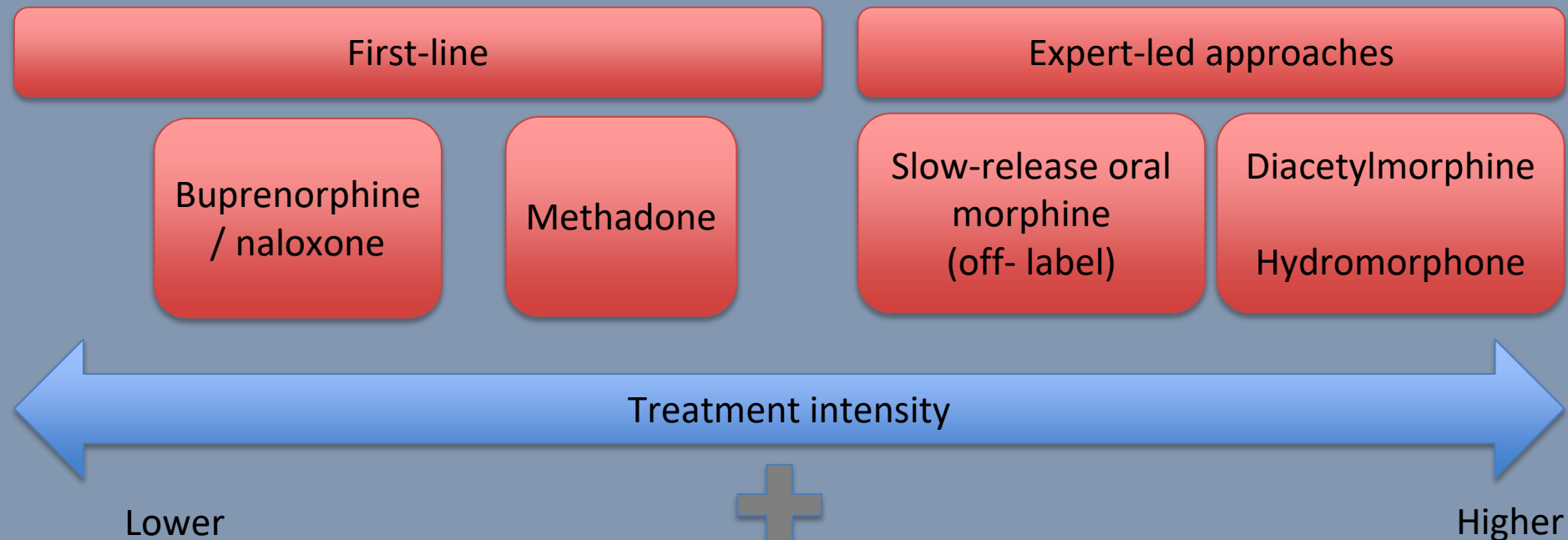


Figure 26 – Number of Take Home Naloxone (THN) kits shipped to naloxone distribution sites in BC, 2015-2019.

What about Opioid Agonist Therapy?

Low uptake of and retention in conventional approaches

Medications for opioid use disorder (MOUD)



Evidence-based Harm Reduction across the spectrum

- Education
- Access to injection supplies
- HIV/HCV testing
- Supervised Consumption Sites
- Naloxone kits

CRISM
National
Guideline

for the Clinical Management of

OPIOID USE
DISORDER



CIHR IRSC
Canadian Institutes of Health Research
Institut de recherche en santé
caractéristiques de la recherche

CRISM-ICRAS
Canadian Research Initiative in Substance Misuse
Institut de recherche en santé
caractéristiques de la recherche

Supervised Drug Consumption Services



Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study



Brandon D L Marshall, M-J Milloy, Evan Wood, Julio S G Montaner, Thomas Kerr

Summary

Background Overdose from illicit drugs is a leading cause of more than 65 supervised injecting facilities (SIFs), where drugs are opened as part of various strategies to reduce the harms associated with the opening of an SIF in Vancouver, BC, Canada, was associated with a



RESEARCH ARTICLE

Supervised injection facility use and all-cause mortality among people who inject drugs in Vancouver, Canada: A cohort study

Mary Clare Kennedy^{1,2*}, Kanna Hayashi^{1,3}, M-J Milloy^{1,2}, Evan Wood^{1,2}, Thomas Kerr^{1,2}

Kennedy et al, PLOS Medicine, 2019

Overdose prevention sites (OPS)

- Sanctioned in 2016 in response to ministerial order in BC
- Less medicalized and lower-barrier than federal SCS
 - Few clinical services
 - Primarily staffed by people with lived/living experience of drug use
 - 25+ OPS in BC






RESEARCH REPORT

ADDICTION

SSA

Health impacts of a scale-up of supervised injection services in a Canadian setting: an interrupted time series analysis

Mary Clare Kennedy^{1,2}  | Kanna Hayashi^{1,3}  | M-J Milloy^{1,2}  |
Miranda Compton⁴ | Thomas Kerr^{1,2}

↑ SCS use & addiction treatment enrollment

↓ syringe sharing & public injection

Modelling the combined impact of interventions in averting deaths during a synthetic-opioid overdose epidemic

- Estimated # of overdose deaths averted by: **(1) opioid agonist therapy (2) supervised consumption sites; (3) take-home naloxone;**



The study estimated that without the scale up of harm reduction strategies, the number of overdose deaths in B.C. would have been 2.5 times as high.

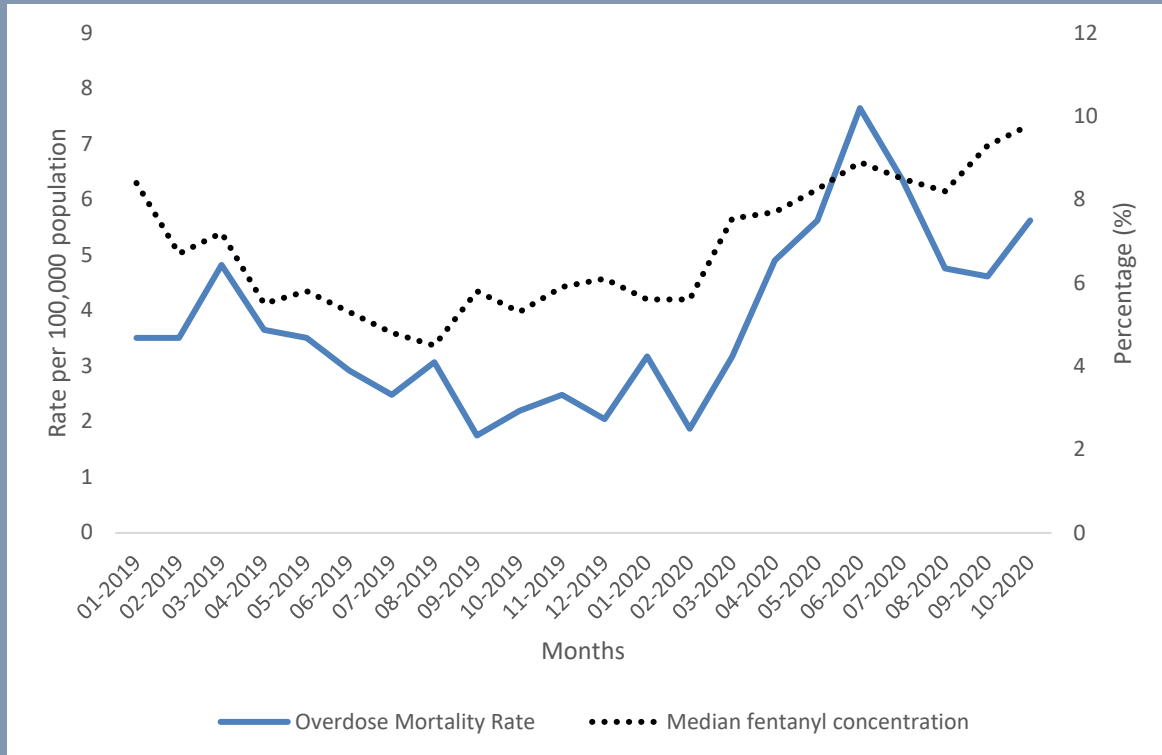
Drug Checking Programs



- Anonymous
- Provides information about what is in the drugs people intend to consume/share
- Facilitate informed decision making
- Challenges with uptake...

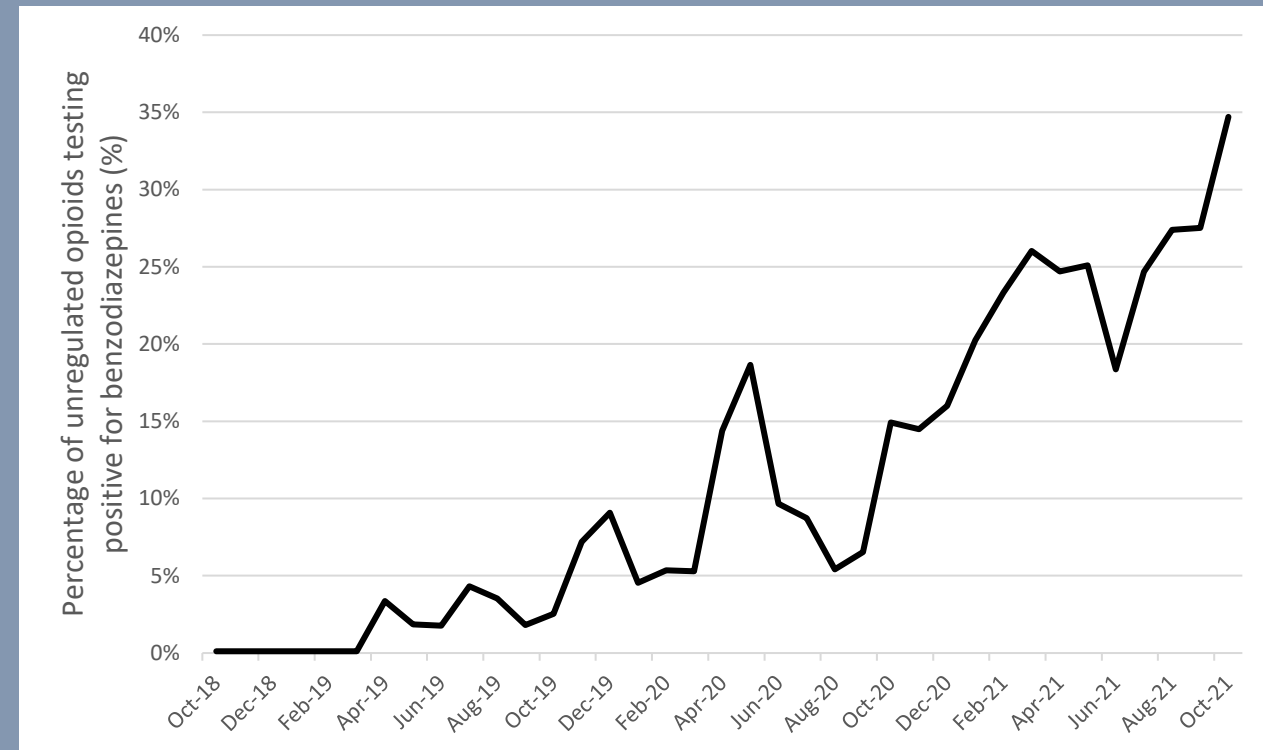
Drug Checking as Surveillance: What's in the unregulated drug supply?

Fentanyl concentration and overdose mortality rate in Vancouver, BC



Kennedy et al., American Journal of Preventative Medicine, 2024

Unregulated opioids containing benzodiazepines, Vancouver, BC



Tobias et al. American Journal of Epidemiology, 2022

Safer supply

- Primarily a medical model of prescribing pharmaceutical alternatives to the toxic unregulated drug supply
- Seeks to overcome limitations of conventional OAT
- Rationale: providing people with drugs of known content and purity will **reduce their reliance on the toxic, unregulated, and unpredictable drug supply, and thereby reduce overdose risk.**

Substances offered

Opioids

- Hydromorphone (HDM)
- Morphine
- Fentanyl patch
- Fentora
- **iOAT:** All inj. HDM + 2 DAM
- **TiOAT:** HDM tablets

Stimulants

- Dexedrin
- Methylphenidate
- Dextroamphetamine
- Ritalin

Benzodiazepines

- Clonazepam
- Diazepam

Effect of Risk Mitigation Guidance opioid and stimulant dispensations on mortality and acute care visits during dual public health emergencies: retrospective cohort study

Amanda Slaunwhite,^{1,2,3} Jeong Eun Min,³ Heather Palis,^{2,4} Karen Urbanoski,^{5,6} Bernie Pauly,^{5,7} Brittany Barker,^{5,6,8,9} Alexis Crabtree,^{1,2} Paxton Bach,^{10,11} Emmanuel Krebs,^{3,12} Laura Dale,³ Louise Meilleur,⁸ Bohdan Nosyk^{3,9}

All-cause mortality:

Opioid dispensations of ≥ 1 day (AOR = 0.39, 95% CI: 0.25 to 0.60)

Opioid dispensations of ≥ 4 days (AOR: 0.45, 95% CI: 0.27 to 0.75)

Overdose mortality:

Opioid dispensations of ≥ 1 day (AOR = 0.09, 95% CI: 0.04 to 0.21)

Opioid dispensations of ≥ 4 days (AOR = 0.11, 95% CI: 0.04 to 0.32)

Stimulant but not opioid provision associated with a significant decrease in the odds of acute care visits

The Value of a Longitudinal Cohort-based Approach?

Epidemiology and Cohort-based

VIDUS
1100 HIV- PWID

ACCESS
900 HIV+ PWUD

ARYS
900 Street Youth

**Provincial
Substance Use
cohort**

- Community recruited = ↓ selection effects
- Allows for before and after studies, and evaluations of naturally occurring experiments
- Linked administrative data strengthens exposure and outcome ascertainment
- Potential to support other research activities (e.g., basic science, modelling)
- Most harm reduction interventions cannot be evaluated via RCTs

Ongoing Challenges for Harm Reduction Research

Outdated “hierarchies of evidence”

Many programs are small in scale and reach

Lack of suitable research infrastructure, including cohort studies

Politicization of harm reduction research

Why does the toxic drug crisis continue in BC?

Ineffective and unbalanced drug policy

No coordinated substance use system of care

Rising toxicity of the drug supply

Incrementalism during a crisis

Stigma, discrimination and habituation

Acknowledgements

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- Our team of peer leaders and supporting drug user organizations



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OF BRITISH COLUMBIA