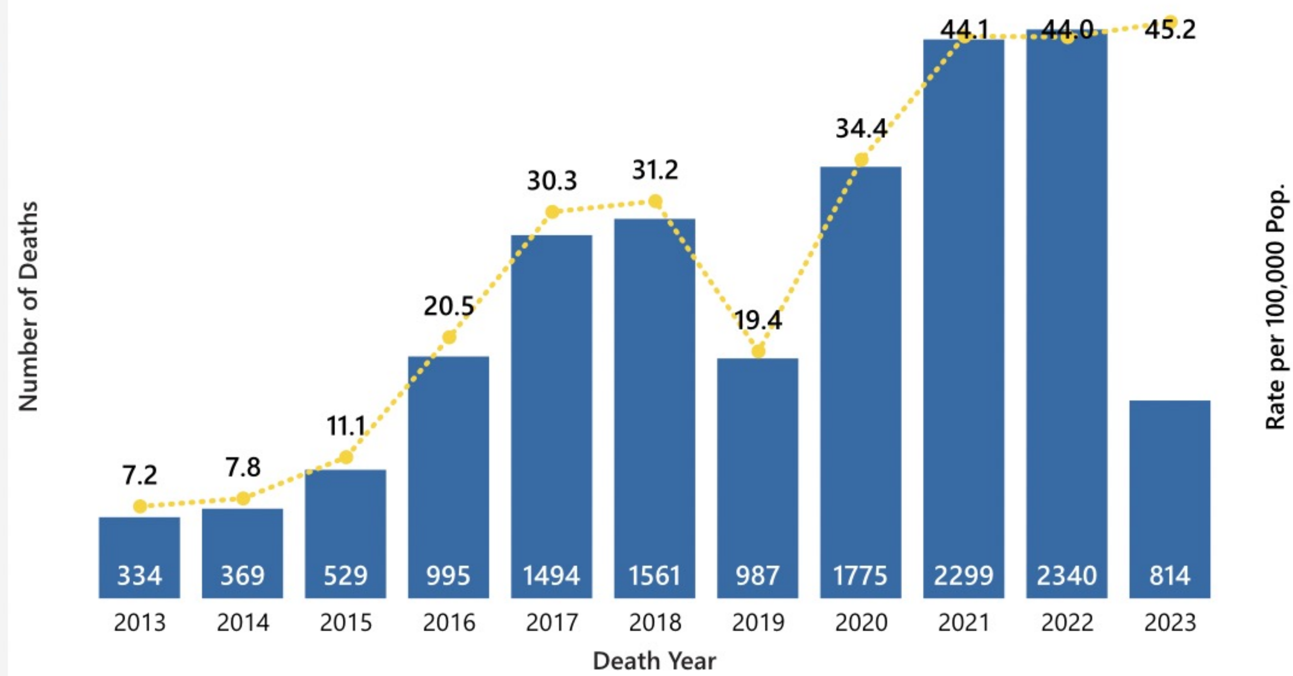
Addiction Care in Corrections

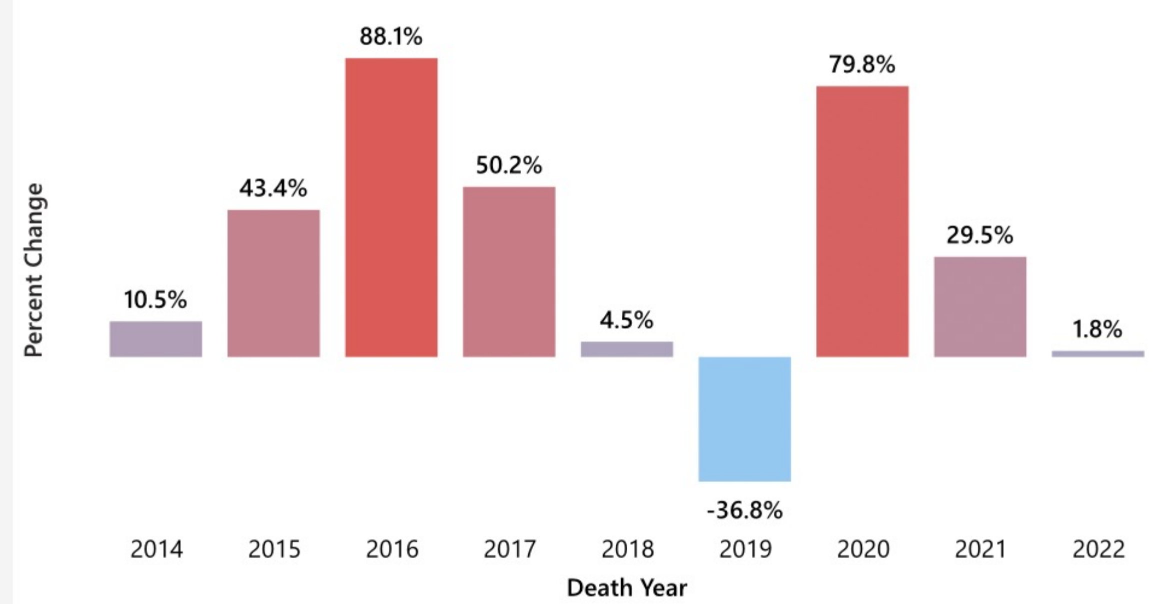
Dr Annabel Mead MBBS

Medical Director CHS

WCAF 2023

Unregulated Drug Deaths - BC





There was a 1.8% increase in unregulated drug deaths in 2022 over 2021.

BRITISH COLUMBIA Coroners Service

September 28. DOI:10.9778/cmajo.20200243

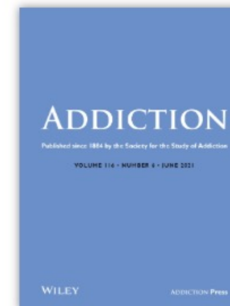
cmajOPEN
Research

Fatal overdoses after release from prison in British Columbia: a retrospective data linkage study

Stuart A. Kinner PhD, Wenqi Gan MD PhD, Amanda Slaunwhite PhD

n = 6106, 2015-2017
70% of observed deaths = overdose.
The incidence was markedly elevated in the first 2 weeks after release from prison.

ADDICTION
SSA SOCIETY FOR THE STUDY OF ADDICTION



Volume 116, Issue 6
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Research Report

Risk of overdose-related death for people with a history of incarceration

PROVINCIAL OVERDOSE COHORT

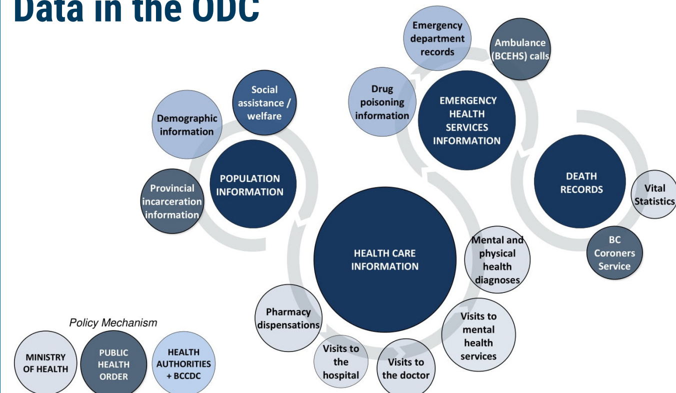
The Provincial Overdose Cohort **(ODC)** is a collection of information on people who had an overdose between January 1st, 2015 and December 31st, 2019 in BC. It was created to ensure people responding to the overdose crisis have up-to-date information on people at risk of experiencing an overdose.

What is the Provincial Overdose Cohort?

In response to BC's Provincial Health Officer declaring a Public Health Emergency in 2016 due to the increase in drug overdoses and deaths, data sources were linked using a shared data governance model to monitor and respond to the overdose crisis.

The ODC is based on collaboration between data users and data stewards in the ongoing development and use of these data, and focused on using data for action to prevent overdose-related harms and deaths

Data in the ODC



Data Refresh & Priority Setting

Every year data are refreshed to update health care and other population-level information.

Why?
To select annual project/analysis themes based on data needed to support overdose response efforts across the province

How?
Priorities identified by people with lived and living experience in drug use, and input from health authorities and partnering organizations

Important Findings/Action

Substance use disorder was associated with risk of cardiovascular disease. People with opioid or stimulant use disorder had highest CVD risk.

People have an increased risk of non-fatal overdose: 2 weeks after hospital discharge, day of entering prison, 4 weeks after release from prison, day of starting opioids for pain, ongoing use of benzodiazepines, and discontinuation of anti-psychotics.

People who had an overdose are more likely to have chronic health conditions associated with severe illness from COVID-19.

FOR MORE INFORMATION VISIT <http://www.bccdc.ca/provincial-overdose-cohort>

Last Updated: APRIL 4, 2022

British Columbia Ministry of Health · British Columbia Coroners Service · British Columbia Ministry of Social Development and Poverty Reduction · Provincial Health Services Authority · BC Centre for Disease Control · BCEHS · populationdata BC · First Nations Health Authority · island health · northern health · Interior Health

Increased risk of non-fatal overdose:

- *on day of entering prison*
- *4 weeks after release from prison*

BC Centre for Disease Control

Current landscape of Overdose events in BC Provincial Corrections

Tracking with PSLS : numbers underestimated

‘Code Blue’s for overdoses (hospital transfers)

40 events in the past 3 months

6 deaths from overdose in the past 9 months

Treatment of OUD:

pharmacological options & non-pharm

> JAMA Psychiatry. 2021 Sep 1;78(9):979-993. doi: 10.1001/jamapsychiatry.2021.0976.

Association of Opioid Agonist Treatment With All-Cause Mortality and Specific Causes of Death Among People With Opioid Dependence: A Systematic Review and Meta-analysis

15 RCTs, 35 primary cohort studies

Results: **Opioid agonist treatment** was associated with

- a lower risk of mortality *during* incarceration (RR, 0.06; 95% CI, 0.01-0.46)
- a lower risk of mortality *after release* from incarceration (RR, 0.09; 95% CI, 0.02-0.56).

Treatment of OUD:
pharmacological options & non-pharm

Opiate Agonist Therapies

Buprenorphine
- S/L tabs
- SUBLOCADE

Methadone

Slow Release Oral Morphine (SROM)

What are the challenges to initiating OAT in Corrections?

Assessment of OUD

Assessment of degree/type of withdrawal

Role of UDS

What are the options for initiating 1st line therapy – buprenorphine ?

Standard induction

Macro-induction

Buprenorphine-XR depot

Macro-dose Induction

JAMA Network Open

Original Investigation | Substance Use and Addiction

High-Dose Buprenorphine Induction in the Emergency Department for Treatment of Opioid Use Disorder

n = 391, case series

Examined the safety and tolerability of high-dose (>12 mg) buprenorphine induction for patients with OUD presenting to an emergency department (ED)

Results: No documented episodes of respiratory depression or excessive sedation.

Precipitated withdrawal was rare (0.8%of cases) and was not associated with dose

Conclusions: high-dose buprenorphine induction, adopted by multiple clinicians in a single-site urban ED, was safe and well tolerated in patients with untreated OUD

High-Dose Buprenorphine Induction in the Emergency Department for Treatment of Opioid Use Disorder *Herring et al*
JAMA Network Open. 2021;4(7):e2117128. doi:10.1001/jamanetworkopen.2021.17128

What are the options for initiating 1st line therapy – buprenorphine ?

Standard induction

Macro-induction

Buprenorphine-XR depot

‘Edmonton’ protocol:

- COWS > 12
- SBX 16 mg s/l, 8 mg one hour later
- 24 mg daily for one week
- Taper to 20mg, then 16mg daily

Open-label trial of a single-day induction onto buprenorphine extended-release injection for users of heroin and fentanyl

John J. Mariani MD[1,2] | Amy L. Mahony LMHC[1] | Samuel C. Podell BS[3] |

Abstract

Background and Objectives: Fentanyl and other highly potent synthetic opioids are the leading cause of opioid overdose deaths in the United States.

Methods: This study was an open-label, uncontrolled 12-week outpatient clinical trial to test the feasibility of a single-day induction onto extended-release buprenorphine (BXR) injection treatment for five adults (N = 5) with opioid use disorder using heroin-containing fentanyl. Participants were planned to receive three monthly BXR injections (300, 300, and 100 mg).

Results: After receiving 24 mg sublingual buprenorphine (SL-BUP), all five participants received the BXR 300 mg injection on the first day of induction. All five participants were retained for the full 3-month study period postinduction and received all three scheduled BXR injections.

Discussion and Conclusion: This study provides preliminary evidence supporting the feasibility of inducting users of heroin-containing fentanyl onto BXR 300 mg in a single day.

Scientific Significance: The ability to administer a long-acting injection of BXR that assures therapeutic serum levels for a month on the first day of treatment contact is a promising development for the treatment of OUD.

JAMA Netw Open. 2021 Jul; 4(7): e2117128.
Published online 2021 Jul 15. doi: 10.1001/jamanetworkopen.2021.17128

PMCID: PMC8283555
PMID: 34264326

Rapid Initiation of Extended-Release Buprenorphine in Patients Using Fentanyl and Fentanyl Analogs

John Mariani, Robert Dobbins, Amy Heath, Frank Gray, Howard Hassman

NCT Numbers: NCT03993392 and NCT04060654

Key Messages

- Fentanyl-positive (FEN+) subjects were successfully treated with extended-release buprenorphine (BUP-XR) and exhibited 24-week retention and abstinence rates comparable to subjects using a broad range of opioids
- Rapid initiation of BUP-XR 300 mg following a single 4-mg dose of transmucosal buprenorphine (BUP-TM) in FEN+ subjects was well-tolerated

CSAM October 21-23, 2021

Conclusions

- Initiating SUBLOCADE 300 mg following a single 4 mg dose of BUP-TM indicated a safety profile similar to that observed with SUBLOCADE induction per current labeling.[1]
- After SUBLOCADE injection, withdrawal symptoms and opioid craving scores improved within 12h. Improvements were sustained for 4 weeks.

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JOURNAL OF CORRECTIONAL HEALTH CARE

Cost Analysis of Buprenorphine Extended-Release Injection Versus Sublingual Buprenorphine/Naloxone Tablets in a Correctional Setting

James S.H. Wong, MSc,[1,2*] Sarah Masson, BScPharm, ACPR,[1] Alan Huang, BScPharm,[1] Deanna Romm, BSPN, RPN,[1] Maylene Fong, RN, MSN,[1] Tony Porter,[3] Nader Sharifi, MD, CCFP (AM), DABAM, CCHP-P,[1] Pouya Azar, MD, DABAM,[2] and Nickie Mathew, MD, ABPN, ABPM[1,2]

Table 4. Total Costs Over 28 Days Per Correctional Client

BUP-XR		*BUP/NX*	
Pharmacy cost	$659.25	Pharmacy cost	$146.70
Nursing cost	$67.78	Nursing cost	$273.06
Corrections cost	$14.78	Corrections cost	$562.38
Total cost	$741.81	Total cost	$982.14

*BUP-XR (**SUBLOCADE**) can*

- *reduce the risks of diversion and nonmedical use associated with other forms of OAT*
- *ensure greater safety to clients, and*
- *reduce the time and resources of correctional and health care staff.*

We demonstrate that when factoring in the added costs of medication preparation, administration, monitoring, and personnel, it is more economical to provide BUP-XR than BUP/NX (at ACCW)

How can we manage diversion of medication ?

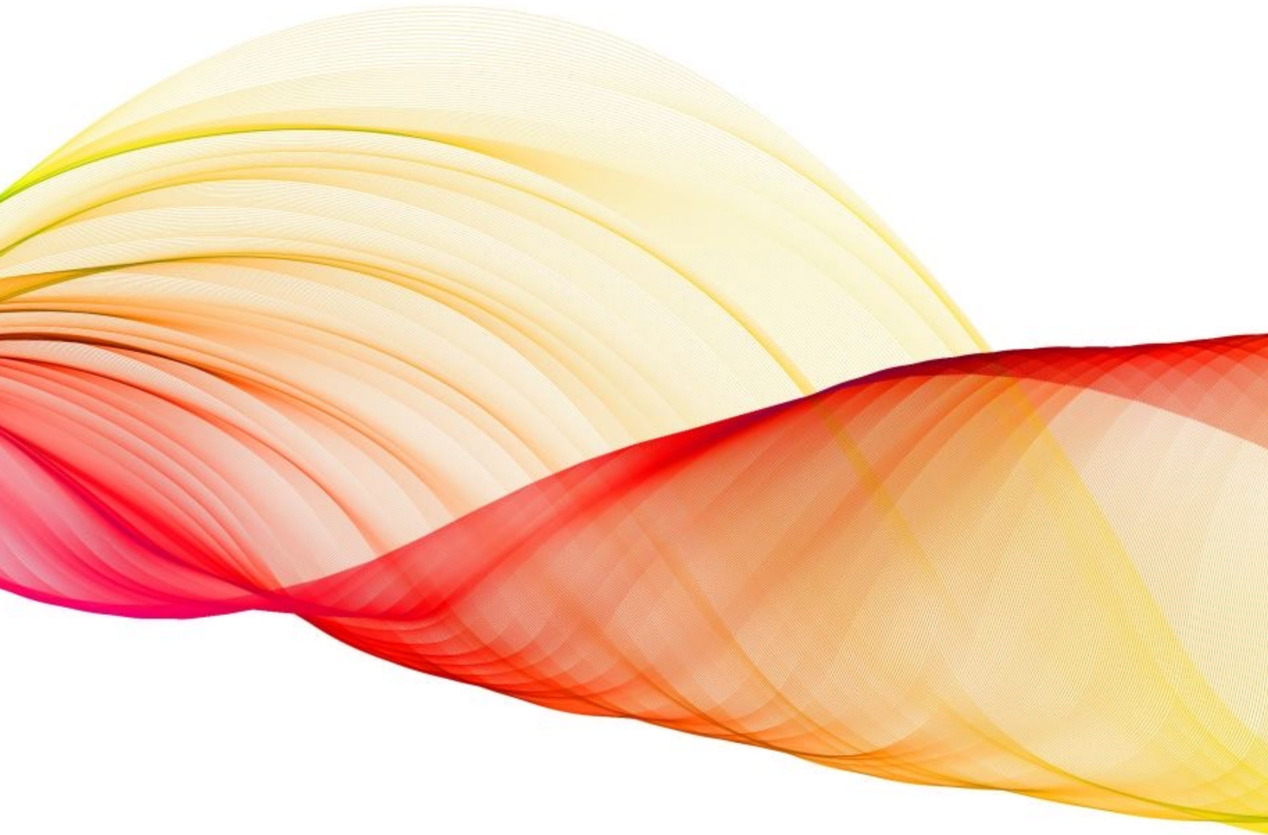
Could diversion of s/l buprenorphine be a good thing ??

SBX film / crush tabs / BUP-XR

Post-dose witnessing protocols

Ensure accessibility of OAT to all

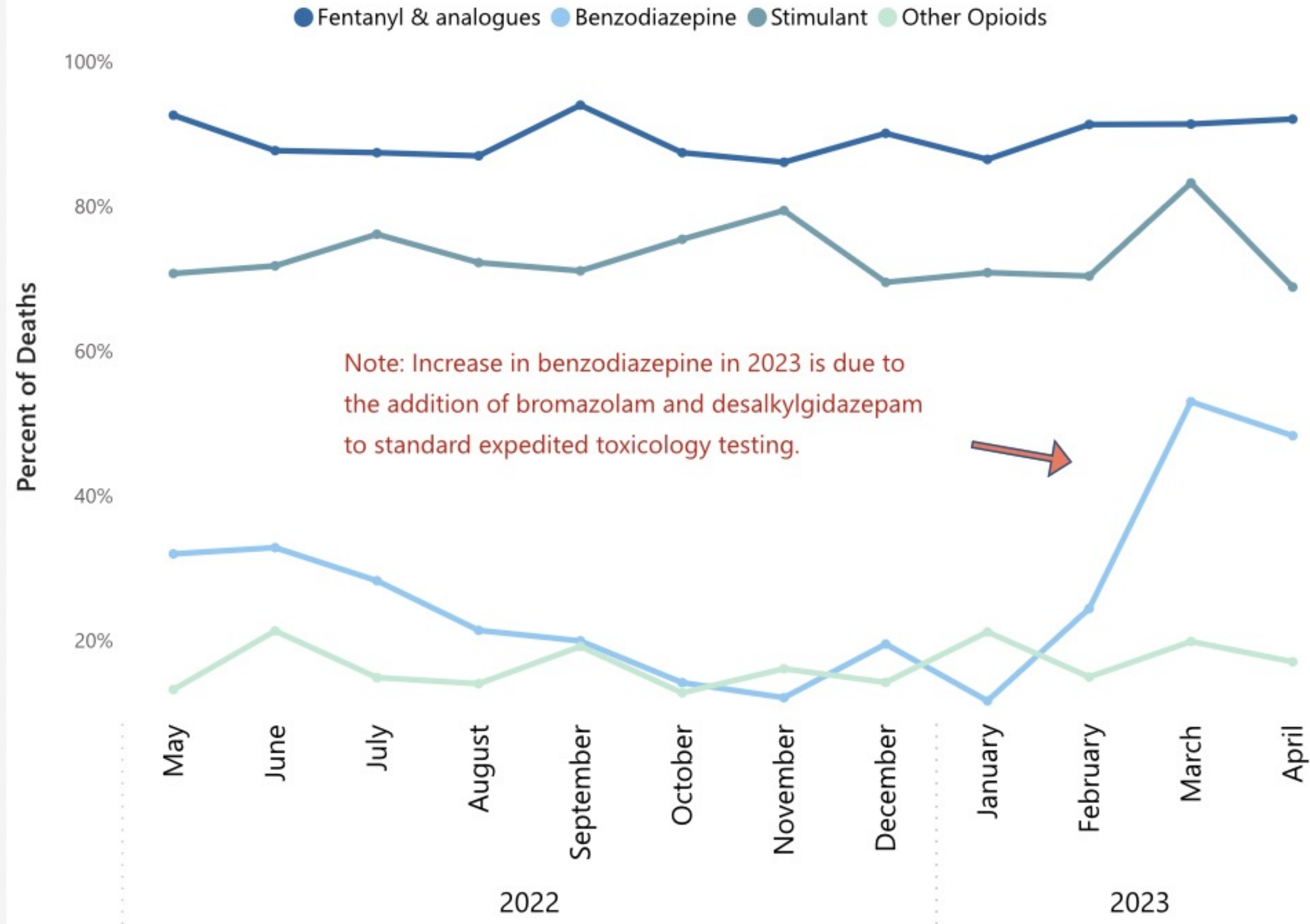
Taper off OAT, and re-initiate prior to release ?



How can we best manage benzodiazepine withdrawal ?

Diagnostic challenges in the setting of concurrent OWS.

Consider BZRA challenge, then structured taper of diazepam (or pregabalin)?



BRITISH COLUMBIA Coroners Service

Treatment of OUD:

pharmacological options & non-pharm

Early engagement

- Prompt treatment of OWS and rapid induction onto OAT
- Same day access to prescribers (physician on call, nurse prescribers)

Maximize retention on treatment

- BUP-ER may reduce stigma and medication diversion

Psychosocial treatments

- Dedicated living units (pods) to recovery / Therapeutic Communities
- Structured group and 1:1 counselling

Harm reduction

Treatment of OUD:

pharmacological options & non-pharm

Minimize availability of licit & illicit substances

Increased monitoring of at-risk individuals

Naloxone:

CO response with intranasal Narcan

Education:

risk of OD with reduced tolerance

annabel.mead@cw.bc.ca