

Caring for hospital patients who inject drugs

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Three things you can do tomorrow

1. Apply “harm reduction” and “trauma-informed care” approaches with hospital patients who inject drugs
2. Sufficiently treat opioid withdrawal to enable medical treatment in hospital
3. Facilitate evidence-based treatment of opioid use disorder, starting in hospital

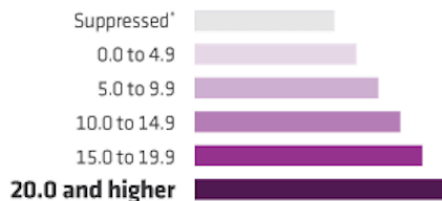


First principles

- All patients deserve evidence-based treatment
- Addiction is a chronic, remitting-relapsing illness and not a moral failing
- Addiction means continued use despite harm
- There are ways to use drugs more safely
- People with addiction can't recover if they're dead

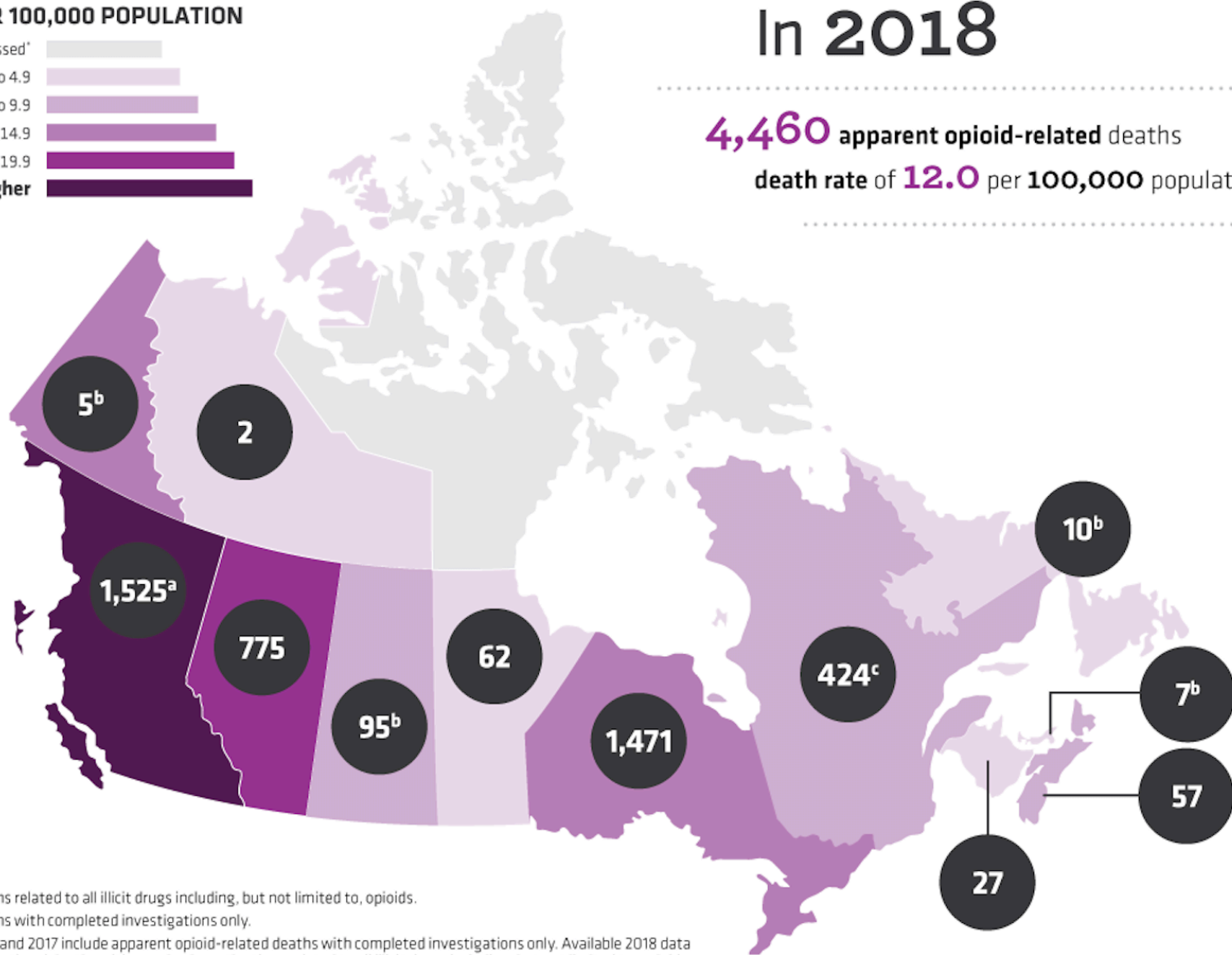
● Number of deaths in 2018

RATE PER 100,000 POPULATION



In 2018

4,460 apparent opioid-related deaths
death rate of **12.0** per **100,000** population



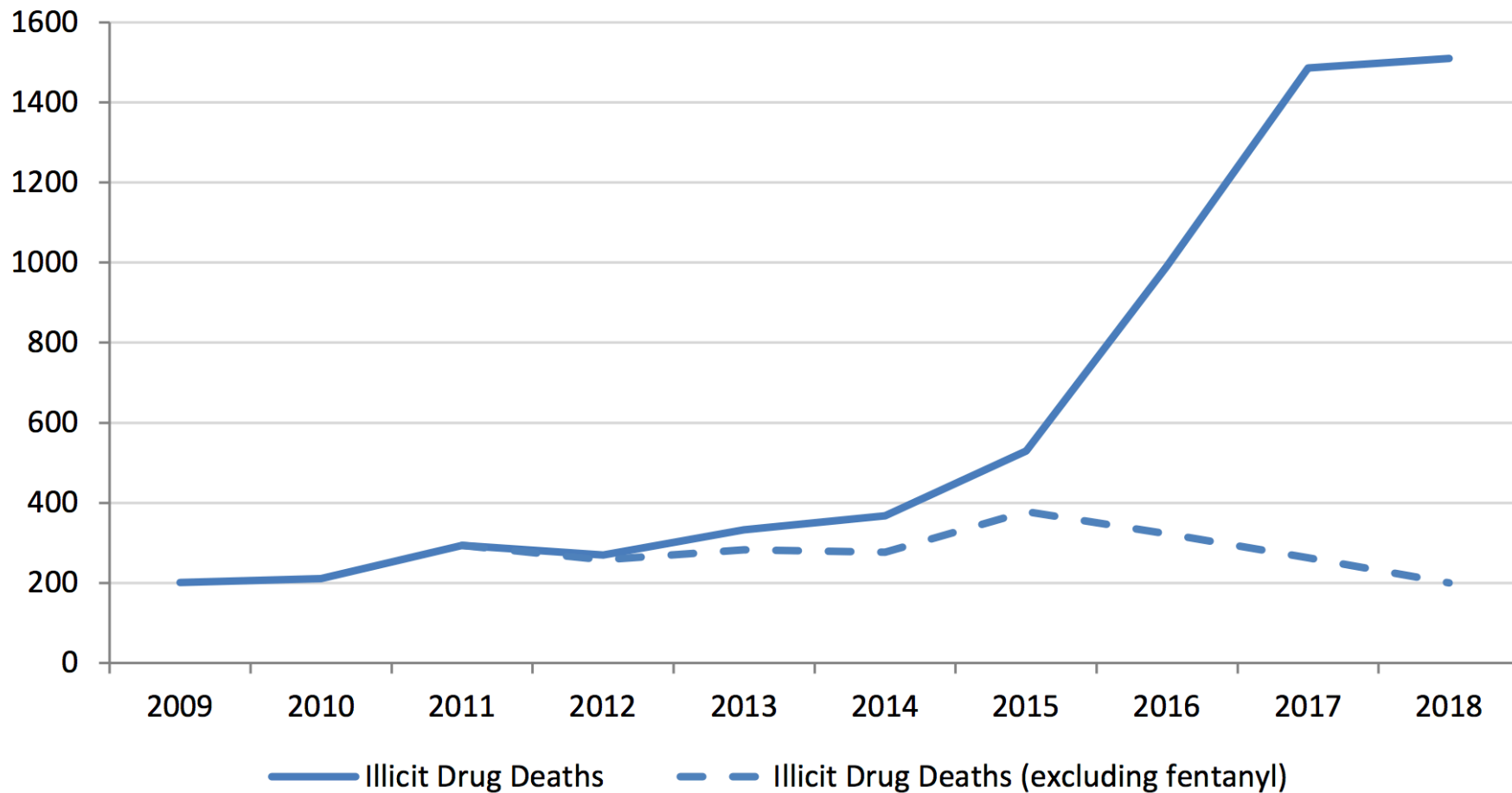
^a Includes deaths related to all illicit drugs including, but not limited to, opioids.

^b Includes deaths with completed investigations only.

^c Data for 2016 and 2017 include apparent opioid-related deaths with completed investigations only. Available 2018 data include unintentional deaths with ongoing investigations related to all illicit drugs including, but not limited to, opioids.

* Data may be suppressed in provinces or territories with low numbers of cases.

Overdose Deaths in British Columbia, 2009-2018



Increasing rates of infective endocarditis related to injection drug use

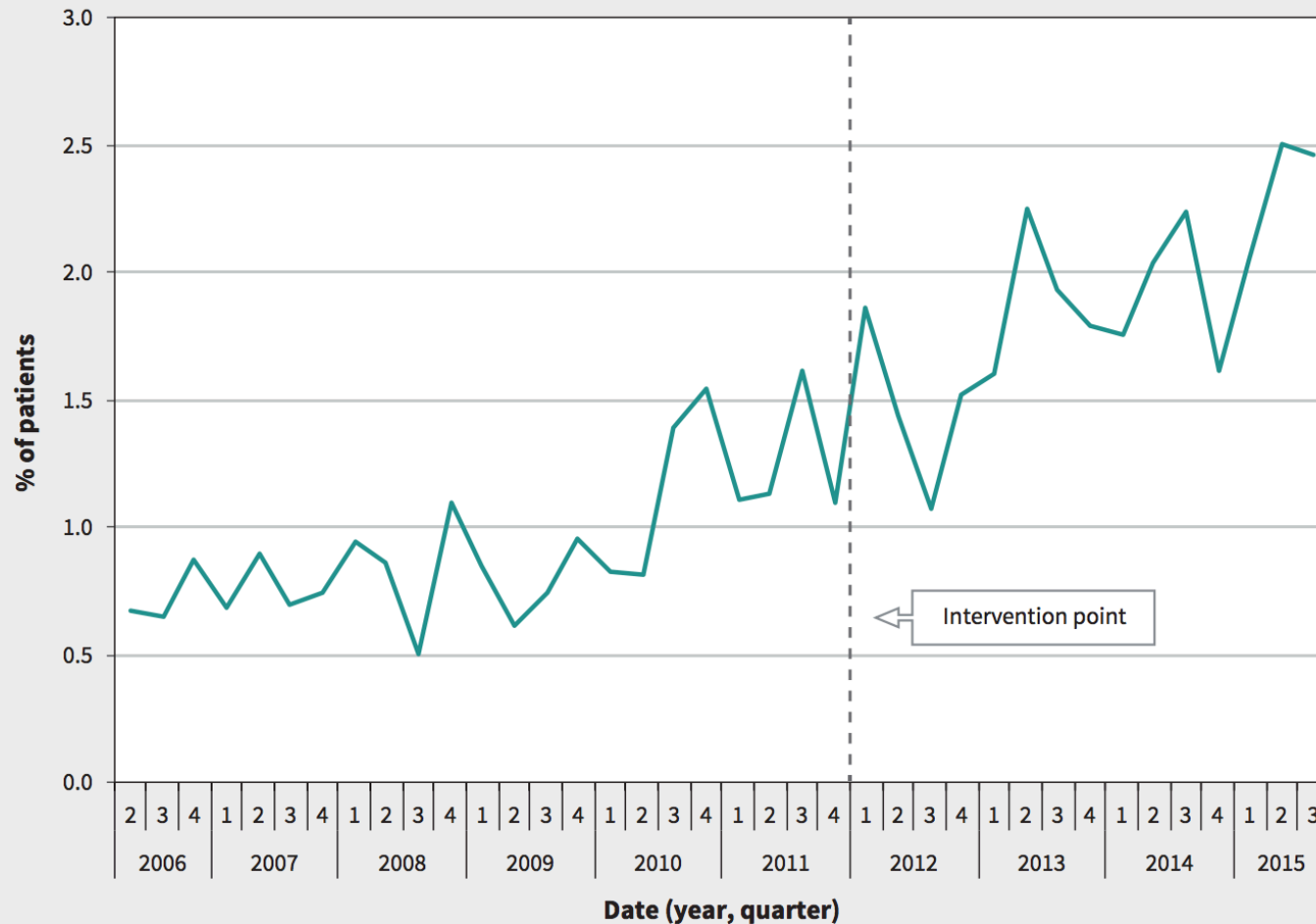
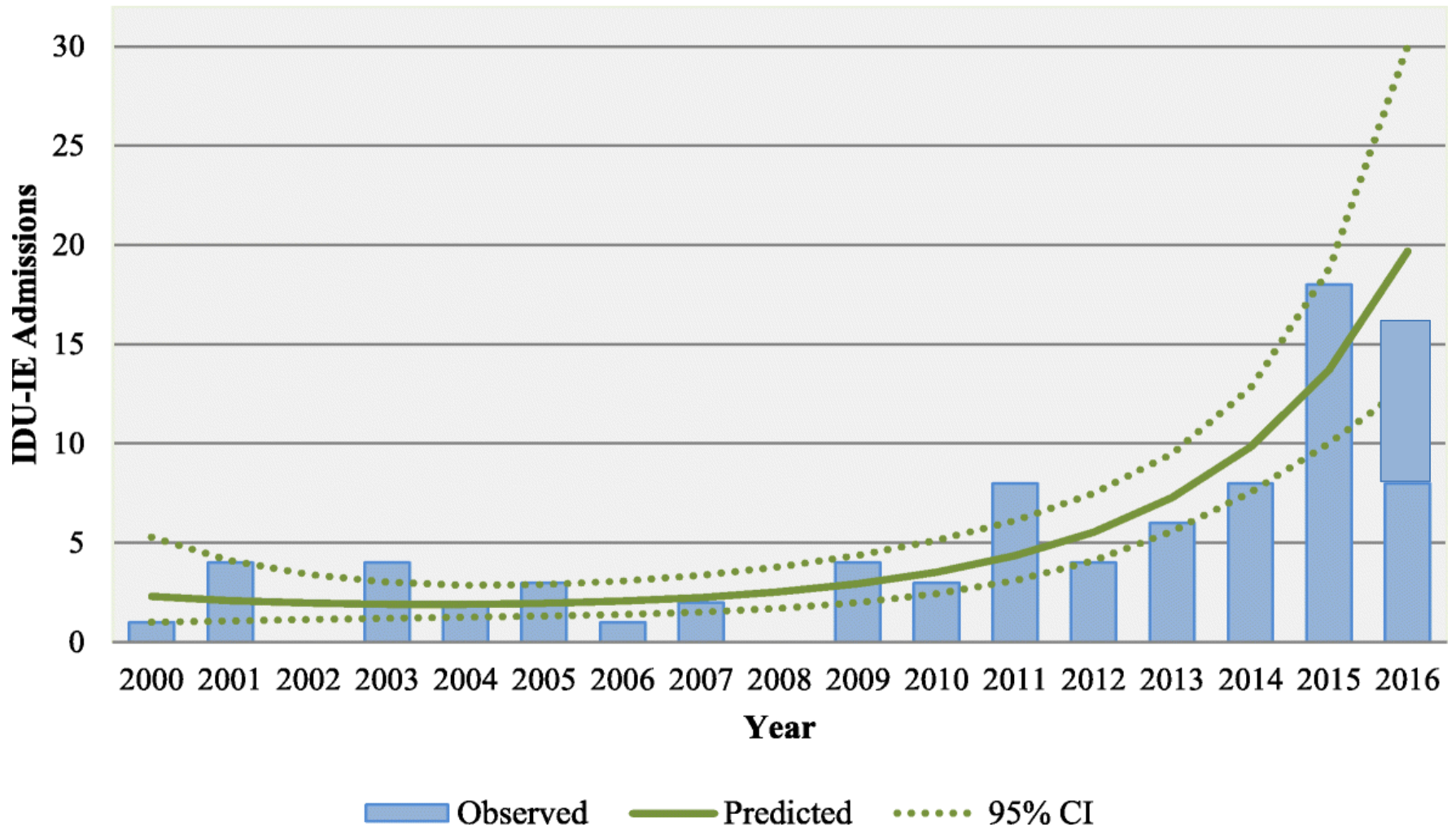


Figure 1: Quarterly percentage of patients with evidence of injection drug use admitted with infective endocarditis. The point at which traditional controlled-release oxycodone was removed from the market is marked as “intervention point.”

Increasing rates of infective endocarditis related to injection drug use



Increasing rates of hepatitis C

Figure 4.2. Incidence of acute hepatitis C, by age group — United States, 2000–2015



Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)



Nova Scotia sees spike in number of newly diagnosed HIV cases: health authority

BRETT BUNDALE

HALIFAX

THE CANADIAN PRESS

PUBLISHED JULY 19, 2018

Nova Scotia has posted a significant increase in HIV infections so far this year, prompting the health authority to issue an urgent advisory warning about the communicable disease.

CBC | MENU

news The urgent search for undiagnosed HIV among Halifax's most vulnerable

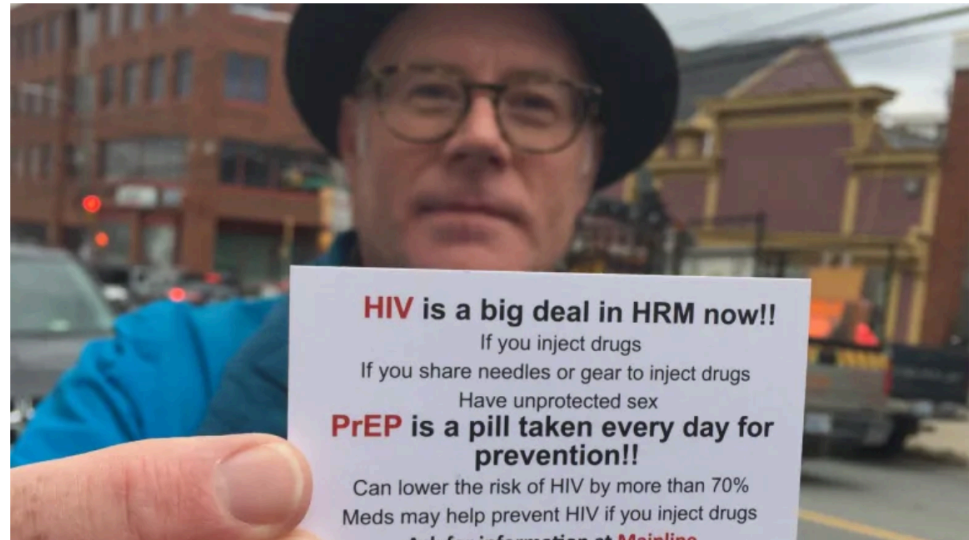
The urgent search for undiagnosed HIV among Halifax's most vulnerable



HIV cases have spiked this year and 1 infectious diseases doc says it's time to 'sound the alarm'



Elizabeth Chiu · CBC News · Posted: Oct 18, 2018 4:20 PM AT | Last Updated: October 20, 2018



Street outreach nurse Rick Swaine holds a card about the spike in HIV cases among injection drug users in Halifax. (Elizabeth Chiu/CBC)

HIV cases show sharp increase in Fredericton, Oromocto areas



Frequent testing for sexually transmitted diseases encouraged by public health officials

CBC News · Posted: Sep 14, 2018 8:45 PM AT | Last Updated: September 14, 2018



After an increase in reported HIV cases in the Fredericton and Oromocto areas, Horizon Health Network is encouraging frequent testing for sexually transmitted diseases.

MOBILE OUTREACH STREET HEALTH




**Mi'kmaw
Native
Friendship
Centre**



Hospitals as high risk environments

Abstinence only policies (written or unwritten), inadequate pain & withdrawal management, stigma



Lack of harm reduction supports, involuntary discharge



Increased morbidity and mortality

Contents lists available at [ScienceDirect](http://www.sciencedirect.com)

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

Hospitals as a ‘risk environment’: An ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs



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ABSTRACT

People who inject drugs (PWID) experience high levels of HIV/AIDS and hepatitis C (HCV) infection that, together with injection-related complications such as non-fatal overdose and injection-related infections, lead to frequent hospitalizations. However, injection drug-using populations are among those most likely to be discharged from hospital against medical advice, which significantly increases their likelihood of hospital readmission, longer overall hospital stays, and death. In spite of this, little research has been undertaken examining how social–structural forces operating within hospital settings shape the experiences of PWID in receiving care in hospitals and contribute to discharges against medical advice. This ethno-epidemiological study was undertaken in Vancouver, Canada to explore how the social–structural dynamics within hospitals function to produce discharges against medical advice among PWID. In-depth interviews were conducted with thirty PWID recruited from among participants in ongoing observational cohort studies of people who inject drugs who reported that they had been discharged from hospital against medical advice within the previous two years. Data were analyzed thematically, and by drawing on the ‘risk environment’ framework and concepts of social violence. Our findings illustrate how intersecting social and structural factors led to inadequate pain and withdrawal management, which led to continued drug use in hospital settings. In turn, diverse forms of social control



I had to get out of there while I could move because I was losing so much weight... When I begged and begged to get some help [i.e., prescription opioids], they couldn't, weren't gonna do anything and so I just said, “Fine, I'm leaving.” [...] I was concerned [*about the health consequences of leaving hospital*]. You know, I got this other thing [*opiate dependency*] and it's...it's like you're stuck between a rock and a hard spot. I mean, how can I even fight off the infection if I can't stop puking and shitting? [*Participant #15, Caucasian Female, 47 years old*]

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^b Faculty of Health Sciences, Simon Fraser University, Burnaby, BC, Canada

[*Security guards*] yell and scream at you...When there's nobody around, [they say], “You fucking junkie.” [...] A few times, I've been shaken down [searched] by [*security guards*] even though [I had] nothing to get high [i.e., *had no drugs in her possession*]. They search you, destroy your property, cause a scene, and make sure everybody there knows that you're a drug addict. [...]They use their authority to pull power trips more or less. It's not right. [*Participant #12, Aboriginal Female, 29 years old*]

in ongoing observational cohort studies of people who inject drugs who reported that they had been discharged from hospital against medical advice within the previous two years. Data were analyzed thematically, and by drawing on the ‘risk environment’ framework and concepts of social violence. Our findings illustrate how intersecting social and structural factors led to inadequate pain and withdrawal management, which led to continued drug use in hospital settings. In turn, diverse forms of social control



They [*i.e. nurses*] don't give rigs [*i.e. syringes*] to us...I think that they should. If not, we're reusing our rigs or we're having to risk getting kicked out for stealing them or people'll be sharing them. [...] I know one girl was using her same rig for days to the point where it was tearing and she was suffering every time she'd do her fix. She just didn't have it in her to go and try and steal clean rigs. Whereas for me, my friend that I was with had no problem. She would just sneak in and grab some for both of us. [*Participant #30, Aboriginal Female, 28 years old*]

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^b Faculty of Health Sciences, Simon Fraser University, Burnaby, BC, Canada

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If you're sharing a room with somebody, there's always that threat that somebody's just gonna come in and not realize you're in there [*the bathroom*] and open [*the door*]. [...] I think they pretty much have zero tolerance in [*the hospital*]. I was worried about getting kicked out and then not getting the proper health care that I needed to get better. [...] I'd turn the tap so, if they came in my room to check to see if I was okay, then they'd hear the water running so they'd figure oh she's just in the bathroom. [*Participant #25, Caucasian Female, 44 years old*]

discharged from hospital against medical advice within the previous two years. Data were analyzed thematically, and by drawing on the 'risk environment' framework and concepts of social violence. Our findings illustrate how intersecting social and structural factors led to inadequate pain and withdrawal management, which led to continued drug use in hospital settings. In turn, diverse forms of social control

ADMINISTRATIVE MANUAL

POLICY & PROCEDURE

Category: Administrative Overview	Policy Number: 1 - 140
Distribution: District-Wide	Page: 1 of 3
Approved by: _____ Chief Executive Officer	Effective Date: 04/03/2008 (O) Revised Date: 24/06/2008 (R)

BANNED ITEMS

Policy

To provide a safe environment it is necessary to prohibit certain articles and devices which may pose a threat either directly or indirectly to staff, patients and visitors.

Employees must consult management upon discovery of potentially illegal substances/items on or with a patient/client in a hospital. Under the laws of Canada and Nova Scotia, it is illegal to possess prohibited weapons (i.e. Switchblades, hand guns), stolen goods, and illegal drugs. To prevent the hospital from being charged with illegal possession, employees must report the existence of any potentially harmful or illegal items/substances to appropriate Management who will make arrangements to have the items/substances turned over to the police if/as required by law. In the ordinary course, when illegal items are surrendered, it is not necessary to reveal the name of the person who brought the illegal item/substance to the hospital/program to law enforcement authorities. If the police want to investigate further, they can obtain a search warrant to obtain the information.

“To prevent the hospital from being charged with illegal possession, employees must report the existence of any potentially harmful or illegal items/substances over to the police.”

“The patient will then be searched... if the patient refuses, he/she will be asked to leave the Emergency Department. If the patient refuses to leave the Emergency Department, the local police will be called.”

“If the patient’s chart has been flagged in relation to banned items, the Triage Nurse contacts Security. ... He/she is informed that Security is required to perform a search, using a metal detector, of the patient and his/her belonging, because of the patient’s history of bringing such items to the hospital. If the patient is resistive, the local police service will be called.”

law. In the ordinary course, when illegal items are surrendered, it is not necessary to reveal the name of the person who brought the illegal item/substance to the hospital/program to law enforcement authorities. If the police want to investigate further, they can obtain a search warrant to obtain the information.



SOUTH SHORE DISTRICT HEALTH AUTHORITY

TITLE: Law Enforcement Interaction	NUMBER: SSH-AD-110-222
Effective Date: 2014-12-02 (YYYY-MM-DD)	Page 1 of 20
Review Date: 2017-12-02 (YYYY-MM-DD)	
Applies To: All SSH employees and physicians	
Source: Risk Management	Approved By: Senior Leadership Team 2014-12-02

TABLE OF CONTENTS – see end of document

PURPOSE

Ensure that interactions with law enforcement agencies are consistent throughout the District and are compliant with Federal or Provincial statutes, such as *Personal Health*



“Employees must report the existence of any illegal items/substances to appropriate Management/Shift Coordinator/Security Department personnel who will make arrangements to have the items/substances turned over to the police.”

Review Date: 2017-12-02 (YYYY-MM-DD)

“Illegal paraphernalia is any equipment, product, or material that is modified for making, using, or concealing illegal drugs or substances.”

“If the patient/client refuses to surrender illegal items they will be asked to leave the premises. Law enforcement may be called to assist if the patient/client refuses to leave the premises or the patient’s medical condition prohibits the patient leaving.”

Ensure that interactions with law enforcement agencies are consistent throughout the District and are compliant with Federal or Provincial statutes, such as *Personal Health*

**1. Apply “harm reduction”
and “trauma-informed
care” approaches with
hospital patients who
inject drugs**

Harm reduction

- Meeting people “where they are”
- Helping people identify and achieve their goals with non-judgment
- Promoting health without requiring abstinence from substances as a prerequisite

NDC 0006-0749-11

Zocor[®]
(Simvastatin) Tablets

40 mg

Each tablet contains 40 mg of simvastatin.

NDC 0310-0725-00 90 tablets

CRESTOR[®]
rosuvastatin calcium

5mg tablets

Rx only
Manufactured for:
AstraZeneca Pharmaceuticals LP
Wilmington, DE 19850
By: JPR Pharmaceuticals, Inc.
Centerville, PR 00729

90 tablets NDC 0003-6178-05

20 mg
PRAVACHOL[®]

30 Tablets Rx only NDC 0009-2150-30

Caduet[®] (MTC)
(amlodipine besylate/
atorvastatin calcium)

NOVARTIS NDC 0076-0223

Lescol[®]
(fluvastatin sodium)

Rx and 30 Tab NDC 0009-404-00

Livalo[®]
(pitavastatin) tablets

4 mg*

Rx Only

Kovata

Mevacor[®]
(Lovastatin)

Each tablet contains 40 mg

60 Tablets



EXTENDED RELEASE

STEP 1

STOP SMOKING AID

2106 2WOKING AID

Mint

roside

Trauma-informed care

5 principles:

1. Trauma awareness and acknowledgment
2. Safety and trustworthiness
3. Choice, control, and collaboration
4. Strengths-based and skills-building care
5. Cultural, historical, and gender issues

CREATING CULTURALLY SAFE CARE

in Hospital Settings for People who use(d) Illicit Drugs

AUTHORS: Bernie Pauly RN, Ph.D, Jane McCall, MN, Joanne Parker, MA, Cat McLaren, BA, Annette J. Browne, RN, Ph.D, Ashley Mollison, MA

HEALTH CARE AND ILLICIT DRUG USE

People who use, previously used or are presumed to use, illicit drugs face challenges getting good health care and often have poorer health than the rest of the population. The stigma and criminalization associated with illicit drug use is increased for people living in poverty, impacting health and acting as a barrier to accessing care.¹ Negative experiences in hospitals can lead people to avoid seeking care and, if admitted, to leave before their care is complete.

Hospital nurses are critical to helping people access the care they need, shaping patients' hospital experiences, and ensuring supports are in place when people leave the hospital. However, there are few models or guidelines to help nurses provide ethical, safe and appropriate care when working with people who use(d) illicit drugs and face poverty and homelessness.

The concept of cultural safety has been used to guide nursing practice in ways that counteract the problems of stigma, discrimination and inequitable access to care, particularly when working with Indigenous peoples.² Cultural safety has been endorsed by organizations

OUR RESEARCH QUESTIONS:

1. What is culturally safe care in acute care settings for people who use(d) illicit drugs and face multiple social disadvantages?
2. How can nurses enhance delivery of culturally safe, competent and ethical nursing care to people who identify as currently or previously using illicit drugs?

OUR RESEARCH METHODS:

We conducted a qualitative, ethnographic study in a large acute care hospital, exploring patients' and nurses' views on culturally safe care and the role of the hospital environment in fostering or limiting that care. We did in-depth individual interviews with 34 participants, including 15 patients (8 male, 6 female and 1 transgendered person), 12 nurses and 7 acute care managers or educators. We also spent time (275 hours over 12 months) on two different hospital units to observe nurses' work with patients, and studied the hospital's organizational policies and documents (e.g., philosophy of care, mission and mandate, substance use policies).

Two advisory committees were involved in all stages of the research project: one included nurses, and the other included peers from the Society of Living Illicit Drug Users (SOLID), a peer run organization for people who use(d) illicit drugs. We worked with both advisory groups to develop interview questions

1. Culturally safe care fosters engagement and participation of people who have experience with substance use and marginalization in shaping the care they and their peers receive.

2. Culturally safe care recognizes that people's health, health care, priorities and experiences are influenced by history and policies that criminalize drug use.

3. Culturally safe care considers how past histories of trauma and violence, layers of disadvantage and stigma may affect patients' ability to engage with providers and care plans.

4. Culturally safe care emphasizes relationships and trust as priority outcomes.

5. Culturally safe care requires a culture of respect and safety within the unit or workplace, where all patients are valued and seen as deserving of care.

Working with patients who use drugs

1. Assess substance use
2. Discuss difference between drug use, risky use, and addiction
3. Review potential harms
4. Explore goals regarding their substance use
 - Use same, reduce harms
 - Use less, reduce harms
 - Stop using (abstinence), reduce harms

TITLE

HARM REDUCTION FOR PSYCHOACTIVE SUBSTANCE USE

SCOPE

Provincial

DOCUMENT #

HCS-33

APPROVAL AUTHORITY

Clinical Operations Executive Committee

INITIAL EFFECTIVE DATE

December 16, 2013

SPONSOR

Executive Director, Communicable Disease Control
Executive Director, Addiction & Mental Health

REVISION EFFECTIVE DATE

February 8, 2019

PARENT DOCUMENT TITLE, TYPE AND NUMBER

Not applicable

SCHEDULED REVIEW DATE

February 8, 2020

NOTE: The first appearance of terms in bold in the body of this document (except titles) are defined terms – please refer to the Definitions section.

If you have any questions or comments regarding the information in this document, please contact the Policy & Forms Department at policy@ahs.ca. The Policy & Forms website is the official source of current approved policies, procedures, directives, standards, protocols and guidelines.

OBJECTIVES

Alberta Health Services (AHS) is committed to offering a **harm reduction approach** with individuals, families, and communities who are harmed or may be harmed by **psychoactive substance** use. Psychoactive substances includes a whole class of substances, legal or illegal (including controlled drugs such as alcohol, tobacco and prescription drugs). This policy is intended:

- To clarify the responsibility of **health care providers** to provide **patients** who use psychoactive substances with accessible, equitable, non-judgmental, compassionate



“Patients who use psychoactive substances have the right to receive equitable, non-judgmental, and evidence-based health care services regardless of whether the substances they use are legal or illegal”

Clinical Operations Executive Committee

December 16, 2013

“Individuals with lived experience have expertise to contribute as partners in the creation of programs, policies, and harm reduction strategies designed to serve them, and their input is valued and respected”

~~If you have any questions or comments regarding the information in this document, please contact the Policy & Forms Department~~

“Programs, services, and health care providers across the care continuum shall provide low threshold access to harm reduction services, treatment, and/or referral for patients (e.g., opioid agonist therapy, managed alcohol program)”

(including controlled drugs such as alcohol, tobacco and prescription drugs). This policy is intended:

- To clarify the responsibility of **health care providers** to provide **patients** who use psychoactive substances with accessible, equitable, non-judgmental, compassionate

IWK Health Centre

Care For Women In The Perinatal Centre (PNC) Who Substance Use During Pregnancy

Definition:

Substance Use – A current and regular destructive pattern of excessive use/misuse of non-physician prescribed drugs and/or alcohol, leading to clinically significant impairment or distress (socially, occupational, medical, or legal).

For the purposes of this policy the term “Substance Use” will refer to use of illicit drugs, alcohol and of prescribed medications in a non-prescribed manner.

A. POLICY

The spectrum of care offered to women, children, and their families includes health promotion, prevention and early intervention strategies, and follow-up. The harm reduction approach is used in the care of pregnant women who substance use, although abstinence is the goal. This model of care recognizes that substance use management to minimize risk may be necessary. Part of a harm reduction approach is to provide a trusting, nonjudgmental environment and maintain care for women who continue to substance use.

8. It is recognized that not all women are able to abstain from substance use and that no woman will voluntarily experience withdrawal:

- a. PNC Health Care Team recommendations for managing withdrawal (done in consultation with the primary addiction physician as appropriate) will be considered in the physician's plan of care and medical orders.

Definition:

9. In the event that an illegal substance is found:

- a. Protection Services must be notified. Two members of the Protection Services staff will come to the PNC to dispose of the substance as per the IWK Health Centre, centre-wide policy. A PNC nurse will document the event on the Progress Notes of the woman's health record.
- b. PNC Health Care Team members will discuss with the woman, her need for continued use of illegal substances.
- c. PNC Health Care Team will request the woman's permission to consult with her addiction team.
- d. The attending physician will be notified regarding the incident.
- e. A follow-up plan will be made and documented by the primary physician or other PNC Health Care Team member.

- f. A supportive plan of care will be developed.

8. It is recognized that not all women are able to abstain from substance use and that no woman will voluntarily experience withdrawal:

- a. PNC Health Care Team recommendations for managing withdrawal (done in consultation with the primary addiction physician as appropriate) will be

What if I suspect a woman has illegal substances in her possession? Can a search of her belongings be performed?

Answer:

It is not the IWK Health Centre policy to search a patient or her belongings for illegal drugs and substances.

- b. PNC Health Care Team members will discuss with the woman, her need for continued use of illegal substances.
- c. PNC Health Care Team will request the woman's permission to consult with her addiction team.
- d. The attending physician will be notified regarding the incident.
- e. A follow-up plan will be made and documented by the primary physician or other PNC Health Care Team member.

- f. A supportive plan of care will be developed.

A

**2. Sufficiently treat
opioid withdrawal to
enable medical
treatment in hospital**



Euphoria

Normal

Withdrawal

Tolerance and Physical Dependence

Acute use

Chronic use

Treating opioid withdrawal

- Opioids
 - Right medication
 - Right dose
 - Eventually, right long-term & discharge plans
- Non-opioid adjuncts?
 - Acetaminophen
 - Ibuprofen
 - Dimenhydrinate
 - Clonidine

Dosing strategies

- “Home dose” – expect around 48-72mg hydromorphone daily
- 1000-1500mg oral morphine equivalents daily
 - = hydromorphone 200–300mg PO daily
 - = hydromorphone 30mg PO q3h
- Consider starting at 1/3 to 1/2 of “home dose”
- Dose & response, titrate to effect
- Frequent re-assessments, communication

3. Facilitate evidence-based treatment for opioid use disorder, starting in hospital

Management of opioid use disorders: a national clinical practice guideline

Julie Bruneau MD MSc, Keith Ahamad MD, Marie-Ève Goyer MD MSc, Ginette Poulin MD, Peter Selby MBBS MHSc, Benedikt Fischer PhD, T. Cameron Wild PhD, Evan Wood MD PhD; on behalf of the CIHR Canadian Research Initiative in Substance Misuse

■ Cite as: *CMAJ* 2018 March 5;190:E247-57. doi: 10.1503/cmaj.170958

The full guideline in English and French is available in Appendix 1 at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.170958/-/DC1

CMAJ Podcast on [soundcloud.com/cmajpodcasts/170958-guide-eng](https://www.soundcloud.com/cmajpodcasts/170958-guide-eng); entrevue en français au <https://www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.170958/-/DC1>

See related [https://doi.org/10.180209](https://doi.org/10.1503/cmaj.180209)

“Detox”?

Opioid use disorder is one of the most challenging forms of addiction facing the Canadian health care system, and a major contributor to the marked rises in opioid-related morbidity and death that Canada has been seeing in recent years. The evolving landscape of nonmedical opioid use has become increasingly dominated by prescription opioids diverted from the medical system and, more recently, by highly potent, illicitly manufactured synthetic opioids (e.g., fentanyl and its analogues, including carfentanyl).¹

The mean national rate of hospital admissions related to opioid poisonings increased from 9 hospital admissions per day in 2007/08 to more than 13 admissions per day in 2014/15.² A corresponding rise in injection of prescription opioids has been observed among people who inject drugs in Canada,^{3,4} and has been associated with an increased risk of hepatitis C and HIV infections.⁵⁻⁷ For 2016, the mean rate of apparent opioid-related overdose deaths has reached 7.9 per 100 000 population (i.e., corresponding to a total of 2861 fatalities), with the highest death rates reported for western Canada.⁸ This upsurge in opioid-related harms, including overdose deaths,^{2-6,8,9} underscores the critical need for coordinated, evidence-based approaches to prevention,

“Rehab”?

- This guideline strongly recommends opioid agonist treatment with buprenorphine–naloxone as the preferred first-line treatment when possible, because of buprenorphine’s multiple advantages, which include a superior safety profile in terms of overdose risk.
- Withdrawal management alone is not recommended, because this approach has been associated with elevated risks (e.g., syringe sharing) and death from overdose in comparison to providing no treatment, and high rates of relapse when implemented without immediate transition to long-term evidence-based treatment.
- This guideline supports using a stepped and integrated care approach, in which treatment intensity is continually adjusted to accommodate individual patient needs and circumstances over time, and recognizes that many individuals may benefit from the ability to move between treatments.

Opioid agonist therapy

- Methadone
- Buprenorphine (“Suboxone”)
- Slow release oral morphine (“Kadian”)

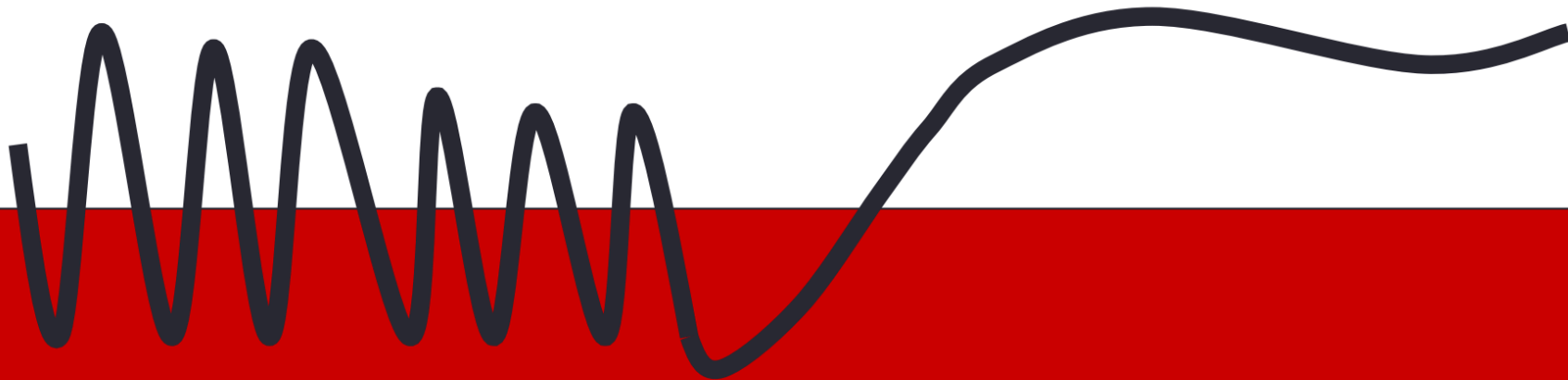
Euphoria

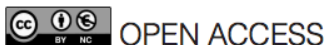
Normal

Withdrawal

Chronic use

Maintenance





Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies

Luis Sordo,^{1,2,3} Gregorio Barrio,⁴ Maria J Bravo,^{1,2} B Iciar Indave,^{1,2} Louisa Degenhardt,^{5,6} Lucas Wiessing,⁷ Marica Ferri,⁷ Roberto Pastor-Barriuso^{1,2}

¹National Centre for Epidemiology, Carlos III Institute of Health, Madrid, Spain

²Consortium for Biomedical Research in Epidemiology and Public Health (CIBERESP), Madrid, Spain

³Department of Medical Faculty, Complutense University, Madrid, Spain

ABSTRACT

OBJECTIVE

To compare the risk for all cause and overdose mortality in people with opioid dependence during and after substitution treatment with methadone or

out of buprenorphine treatment (2.20, 1.34 to 3.61). In pooled trend analysis, all cause mortality dropped sharply over the first four weeks of methadone treatment and decreased gradually two weeks after leaving treatment. All cause mortality remained stable

Methadone reduces all-cause mortality by 69%

Systematic review and meta-analysis.

1000 person years in and out of methadone treatment (unadjusted out-to-in rate ratio 4.80, 2.90 to 7.96) and

Buprenorphine reduces all-cause mortality by 55%

⁴National Drug and Alcohol Research Centre, University of New South Wales, Sydney, Australia

⁶Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Australia

⁷Sector Best Practices, Knowledge Exchange and Economic Issues, European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Lisbon, Portugal

STUDY SELECTION

Prospective or retrospective cohort studies in people with opioid dependence that reported deaths from all causes or overdose during follow-up periods in and out of opioid substitution treatment with methadone or buprenorphine.

DATA EXTRACTION AND SYNTHESIS

Two independent reviewers performed data extraction and assessed study quality. Mortality rates in and out of treatment were jointly combined across methadone or buprenorphine cohorts by using multivariate random effects meta-analysis.

is associated with substantial reductions in the risk for all cause and overdose mortality in people dependent on opioids. The induction phase onto methadone treatment and the time immediately after leaving treatment with both drugs are periods of particularly increased mortality risk, which should be dealt with by both public health and clinical strategies to mitigate such risk. These findings are potentially important, but further research must be conducted to properly account for potential confounding and selection bias in comparisons of mortality risk between opioid substitution treatments, with the understanding that



Cochrane
Library

Cochrane Database of Systematic Reviews

Oral substitution treatment of injecting opioid users for prevention of HIV infection (Review)

Reductions in potentially harmful drug use practices:

- illicit opioid use
- injecting use, frequency of injecting
- sharing & re-using of injecting equipment
- exchanges of sex for drugs or money

Original Investigation

Buprenorphine Treatment for Hospitalized, Opioid-Dependent Patients

A Randomized Clinical Trial

Jane M. Liebschutz, MD, MPH; Denise Crooks, MPH; Debra Herman, PhD; Bradley Anderson, PhD; Judith Tsui, MD, MPH; Lidia Z. Meshesha, BA; Shernaz Dossabhoy, BA; Michael Stein, MD

← Invited Commentary
page 1377

IMPORTANCE Buprenorphine opioid agonist treatment (OAT) has established efficacy for

7X more likely to engage in treatment after discharge

OBJECTIVE To determine whether buprenorphine administration during medical

75% vs. 11%

DESIGN, SETTING, AND PARTICIPANTS From August 1, 2009, through October 31, 2012, a total of 663 hospitalized, opioid-dependent patients in a general medical hospital were identified. Of these, 369 did not meet eligibility criteria. A total of 145 eligible patients consented to participation in the randomized clinical trial. Of these, 139 completed the baseline interview and were assigned to the detoxification (n = 67) or linkage (n = 72) group.

INTERVENTIONS Five-day buprenorphine detoxification protocol or buprenorphine induction, intrahospital dose stabilization, and postdischarge transition to maintenance buprenorphine OAT affiliated with the hospital's primary care clinic (linkage).

MAIN OUTCOMES AND MEASURES Entry and sustained engagement with buprenorphine OAT at 1, 3, and 6 months (medical record verified) and prior 30-day use of illicit opioids (self-report).

Addiction Medicine Consultations Reduce Readmission Rates for Patients With Serious Infections From Opioid Use Disorder

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¹Division of Infectious Diseases, ²Division of Emergency Medicine, and ³Section of Medical Toxicology, School of Medicine, Washington University in St Louis, Missouri

infections are common in this population, dangerous for the individual patient, and costly to the healthcare system [1]. The objective of this study was to determine whether inpatient consultation with an addiction medicine specialist improves clinical outcomes and reduces readmission rates for patients hospitalized with severe infectious complications of OUD.

METHODS

We performed a retrospective chart review of patients admit-

32X more likely to receive treatment for opioid use disorder

increased treatment for opioid use disorder (OUD), greater received infectious disease (ID) consultation were examined,

6X more likely to complete antibiotic therapy

Keywords. opioids; readmissions; bacterial infections; diagnosis codes for serious infections that generally require

80% less likely to leave AMA

The current opioid epidemic represents a significant burden on the healthcare system. Patients admitted for medical complications of opioid use disorder (OUD) have greater lengths of stay and higher readmission rates compared with the general population [1–3]. Some of the most serious medical complications of opioid use, particularly injection drug use (IDU), are infectious in nature, including bloodstream infections, infective endocarditis, osteomyelitis, epidural abscess, septic arthritis, necrotizing fasciitis, and myositis [1, 4]. These diagnoses generally warrant treatment with prolonged parenteral antimicrobial therapy.

(L. R. M.). Patient hospitalizations were included only if all of the following criteria were met: (1) infection was attributed to IDU or OUD by the ID consultant; (2) a prolonged course of parenteral antimicrobial therapy (defined as >2 weeks) was recommended by the ID consultant; and (3) the patient was not able to receive OPAT. Patients discharged to skilled nursing facilities, long-term care facilities, or able to receive parenteral antimicrobial therapy at dialysis centers were excluded from this review (n = 47) as they were able to receive intravenous antibiotics outside of the hospital. Each admission was treated as an independent event; there-

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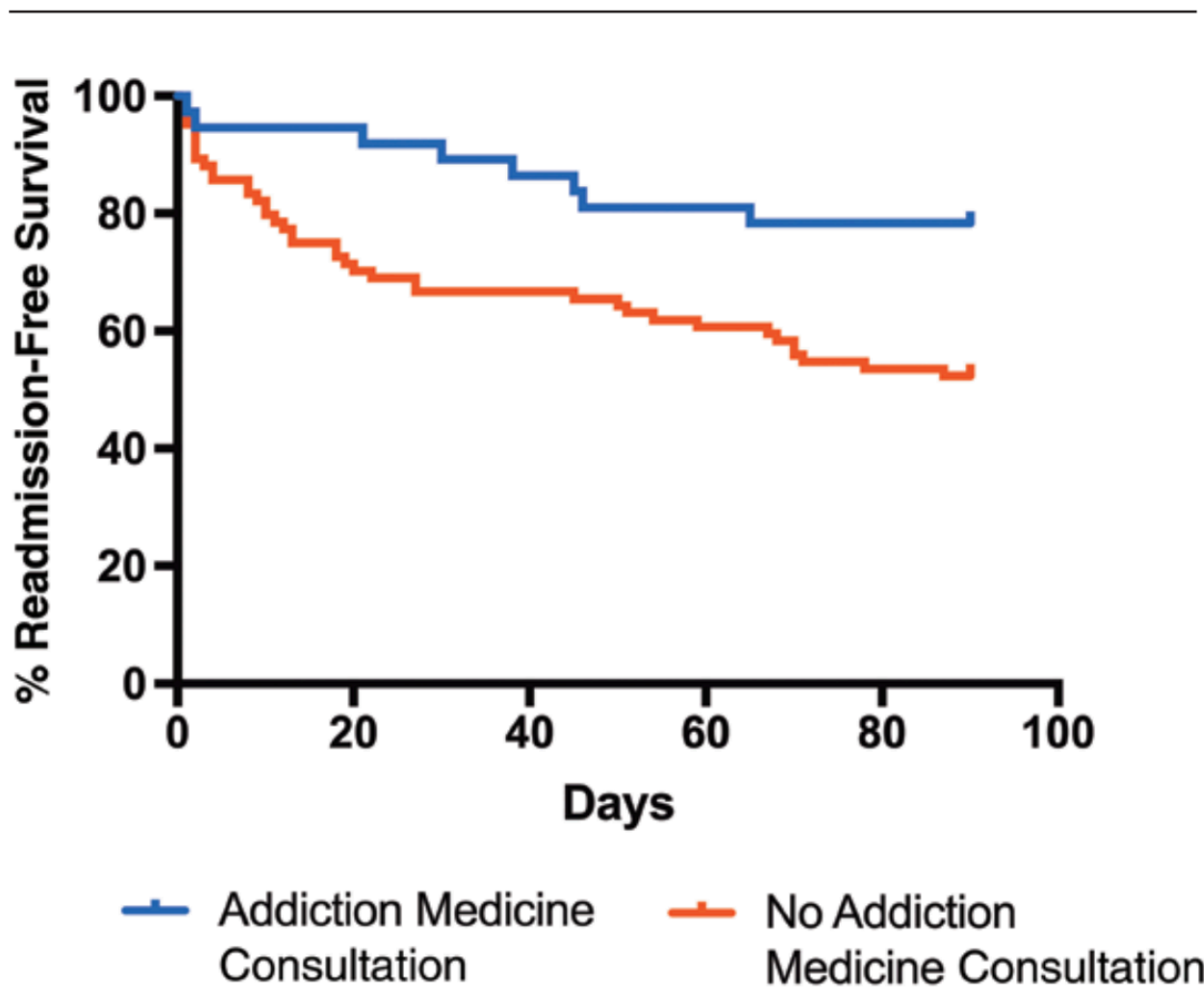


Figure 1. Kaplan-Meier plot showing percentage of readmission-free survival according to addiction medicine consultation. The survival estimates between the 2 groups is statistically significant ($P = .0085$; log-rank test).

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Starting OAT in hospital

- Focus on withdrawal first
- Benefits of a hospital setting
- Timing

- **Starting dose:**
 - **30 mg od:** if uncomplicated patient
 - **20 mg od:** if high risk for toxicity
 - **10 mg od:** if opioid naïve (release from incarceration with repeated past history of relapse upon release)
- **Titration:** rapid titration up to 60 mg od (increase by 10 mg every three days, or 15 mg every five days). Patient assessed by the MMT prescriber before every dose increase.

IF YOU RECEIVED THIS FAX IN ERROR,
PLEASE CALL 604-806-8886 IMMEDIATELY



PRESCRIBER'S ORDERS

NO DRUG WILL BE DISPENSED OR ADMINISTERED
WITHOUT A COMPLETED

METHADONE ORDERS:

Starting Immediately *OR* on tomorrow's MAR _____
Date

Discontinue all previous methadone orders and implement orders below:

- methadone 30 mg (thirty mg) daily at 09:00
numeric spelled out
- methadone _____ mg (_____ mg) BID at 09:00 and _____
numeric spelled out time
- methadone _____ mg (_____ mg) TID at 09:00, _____ and _____
numeric spelled out time time
- methadone _____ mg (_____ mg) QID at 09:00, _____, _____ and _____
numeric spelled out time time time
- methadone _____ mg (_____ mg) PRN x 1 (one) dose per 24 hours
numeric spelled out
- methadone 10 mg (ten mg) Q3H PRN – maximum 3 (three) PRN doses per 24 hours
numeric spelled out numeric spelled out

Hold methadone if patient is drowsy and not easily rousable

Ensure at least 3 hours between all scheduled and PRN methadone doses

Notify methadone prescriber STAT if methadone dose is held or missed for any reason

Contact methadone prescriber if patient is drowsy and difficult to rouse 3 hours post-dose			
Printed Name	Signature	College ID	Contact Number

Buprenorphine-naloxone

Standard induction

1. Wait for moderate opioid withdrawal
2. Buprenorphine 2-4 mg to start
3. Buprenorphine 2 mg q1h until comfortable, to a max dose of 12-16 mg on day 1
4. Follow-up on day 2 and titrate as needed

Micro-dosing induction

Day 1	0.5mg BID	0.5mg BID
Day 2	1mg BID	0.5mg TID
Day 3	2mg BID	1mg BID
Day 4	3mg BID	2mg BID
Day 5	4mg BID	2mg QID
Day 6	12mg once	4mg TID
Day 7	-	12-16mg once

Rapid Micro-Induction of Buprenorphine/Naloxone for Opioid Use Disorder in an Inpatient Setting: A Case Series

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⁶Surrey Memorial Hospital, Surrey, Canadian Province, Canada

⁷Complex Pain and Addiction Services, Vancouver General Hospital, Vancouver, Canadian Province, Canada

Background and Objectives: Buprenorphine/naloxone has been shown to be effective in the treatment of opioid use disorder. Due to its pharmacological properties, induction can be challenging, time-consuming, and result in sudden onset of withdrawal symptoms.

Methods: Retrospective case series ($n = 2$).

Results: Two patients with opioid use disorder were successfully started on buprenorphine/naloxone using a rapid micro-induction technique that did not cause precipitated withdrawal or require preceding cessation of other opioids.

Discussion and Conclusions: These cases provide an alternative method for starting buprenorphine/naloxone that offers unique

line therapy.^{8–11} Buprenorphine, a partial mu-opioid receptor agonist, can also be used to provide analgesia while carrying a more favorable safety profile compared to full mu-opioid agonists.^{12,13} It is often combined with naloxone, a competitive opioid receptor antagonist with minimal oral and sublingual absorption, to discourage intravenous use.¹⁴ When administered at target doses, buprenorphine/naloxone has been shown to decrease binding of other opioids, thereby decreasing the likelihood of overdose.¹⁵ This is due to

TABLE 2. Titration schedule for Case 2

	Buprenorphine/Naloxone*		Hydromorphone	
	Dosing	Total Daily Dose	Dosing	Total Daily Dose
Day 0	N/A		3 mg PO q4h regular 2-4 mg PO q4h PRN	24 mg
Day 1	0.5 mg SL q3h	2.5 mg	3 mg PO q4h regular 2-4 mg PO q4h PRN	26 mg
Day 2	1 mg SL q3h	8 mg	3 mg PO q4h regular 2-4 mg PO q4h PRN	24 mg
Day 3	12 mg SL daily	12 mg	Discontinued	

*Expressed as milligrams of buprenorphine in buprenorphine/naloxone sublingual tablet.

Inpatient addiction medicine consultation services

- Royal Alex Hospital (Edmonton)
- St. Paul's Hospital (Vancouver)
- St. Michael's Hospital (Toronto)
- Many more...



Original Investigation

Emergency Department–Initiated Buprenorphine/Naloxone Treatment for Opioid Dependence

A Randomized Clinical Trial

Gail D'Onofrio, MD, MS; Patrick G. O'Connor, MD, MPH; Michael V. Pantalon, PhD; Marek C. Chawarski, PhD; Susan H. Busch, PhD; Patricia H. Owens, MS; Steven L. Bernstein, MD; David A. Fiellin, MD

IMPORTANCE Opioid-dependent patients often use the emergency department (ED) for medical care.

OBJECTIVE To test the efficacy of 3 interventions for opioid dependence: (1) screening and referral to treatment (referral); (2) screening, brief intervention, and facilitated referral to community-based treatment services (brief intervention); and (3) screening, brief intervention, ED-initiated treatment with buprenorphine/naloxone, and referral to primary care for 10-week follow-up (buprenorphine).

DESIGN, SETTING, AND PARTICIPANTS A randomized clinical trial involving 329 opioid-dependent patients who were treated at an urban teaching hospital ED from April 7, 2009, through June 25, 2013.

INTERVENTIONS After screening, 104 patients were randomized to the referral group, 111 to the brief intervention group, and 114 to the buprenorphine treatment group.

MAIN OUTCOMES AND MEASURES Enrollment in and receiving addiction treatment 30 days after randomization was the primary outcome. Self-reported days of illicit opioid use, urine testing for illicit opioids, human immunodeficiency virus (HIV) risk, and use of addiction treatment services were the secondary outcomes.

+ JAMA Report Video and Author Video Interview at jama.com

+ CME Quiz at jamanetworkcme.com and CME Questions page 1670

PATIENT POPULATION

Adults with suspected or diagnosed Opioid Use Disorder (not currently treated with Opioid Agonist Therapy) who have consented to begin treatment with buprenorphine/naloxone

COMMON CAUTIONS/RELATIVE CONTRAINDICATIONS

Methadone ingestion within previous 72 hours, acute alcohol intoxication, current alcohol withdrawal, severe liver dysfunction, severe respiratory illness

PREPARATION & EDUCATION

- Cancel all opioid medication orders now
- Review ePMP or the DIS for concurrently prescribed opioid history
- Provide information sheets on buprenorphine/naloxone induction & p withdrawal.
- Provide Nova Scotia Health Authority "Take-Home Naloxone" Kit and t
- Consider referral to social work for housing, income, nutrition assistar
- Consider referral to MOSH

INVESTIGATIONS:

- liver enzymes (must be less than 5X normal)
- Urine HCG OR blood HCG for female patients

Consider:

- HIV screen; Hepatitis C screen; Hepatitis B surface antigen & surfac Hepatitis A IgG and IgM antibodies; Syphilis EIA screen
- ♂ Urine for Gonorrhea, Chlamydia; ♀ Vaginal swab for Gonorrhea,

MONITORING:

- Wait at least 12 hours after last ingestion of short-acting opioid; at leas long-acting opioid; and at least 72 hours after ingestion of methadone
- Assess patients for signs of opioid withdrawal using the Clinical Opiate Scale (COWS) at first sign of opioid withdrawal (see separate COWS sc
- Assess patient q2h until COWS is 9, then q1h until COWS is 12 or great
- When COWS score is 12 or greater, notify prescriber

SUPPORTIVE MANAGEMENT OF WITHDRAWAL SYMPTOMS:

- acetaminophen 975 mg PO q.i.d. PRN for pain
- ibuprofen 400 mg PO q4h PRN for headache and muscle/joint pain
- dimenhydrinate 25 mg to 50 mg PO q6h PRN for nausea/vomitir
- ondansetron 4 mg PO/SL q4h PRN for nausea/vomiting
- loperamide 4 mg PO PRN x1 for diarrhea, then 2 mg PO PRN with e (max. 16 mg in 24h

STEP 1 – Prescriber must verify COWS is greater than 12 and give approval to begin treatment before first dose is administered:

Buprenorphine/naloxone 4mg/1mg 1 tablet sublingual x 1 dose

OR

Buprenorphine/naloxone 2mg/0.5mg 1 tablet sublingual x 1 dose (consider if frail)

- Advise patient pre-moisten mouth with water and to dissolve tablet completely under tongue, which can take up to 10 minutes; DO NOT swallow saliva or tablet, talk, or drink during this time.
- Assess COWS 60 minutes after initial dose.
- If COWS increases, hold buprenorphine-naloxone and notify prescriber immediately Consider PRN medications for supportive management of precipitated withdrawal.

STEP 2 – Based on response 60 minutes after initial dose, select either [A] or [B]:

[A] If COWS score less than 7 when assessed 60 minutes after initial dose:

- No further buprenorphine-naloxone doses required for first 24 hours
- Proceed to STEP 3 or 4, as appropriate

[B] If COWS score 7 or greater when assessed 60 minutes after initial dose:

Buprenorphine/naloxone 2mg/0.5mg 1 tablet sublingual q1h, until COWS less than 7

- Maximum: buprenorphine/naloxone 16mg/4mg in the first 24 hours.
- Assess COWS 60 minutes after each dose.
- Once COWS score less than 7, notify prescriber and proceed to STEP 3 or 4

STEP 3 – Once COWS score less than 7 OR 16mg buprenorphine/naloxone dispensed in 24 hours:

- If patient is being admitted, write order for total dose of buprenorphine-naloxone received in first 24 hours as once daily, daily witnessed ingestion, while in ED or as inpatient.
- Contact consulting/admitting service to ensure ongoing prescribing

STEP 4 – Discharge (from Emergency Department only)

- Write discharge prescription for total dose of buprenorphine-naloxone received in Emergency Department per 24 hours as once daily, daily witnessed ingestion, for 5 days
- The prescription must be written on a NSPMP duplicate pad
- Contact follow-up provider of choice directly by phone if open (see referral sheet)
- Fax referral to follow-up provider of choice if closed (see referral sheet)

Harm reduction in hospital

Saint John Regional Hospital

INTRAVENOUS NEEDLE EXCHANGE POLICY, 4C North

Staff Protection Initiative

1. Sharps containers will be provided to all patients that might be using non-prescription parenteral drugs on 4CN.
2. Needles will be provided to patients using parenteral on an as-needed basis, to include periods of time whereupon access might be more difficult and in consideration of patients' frequency of substance abuse.
3. Safe injection sites will not be provided. Nevertheless, privacy will be respected in consideration of the similar privacy afforded other inpatients.
4. In unusual circumstances, the Internal Medicine Nurse Manager, will be consulted for assistance and/or recommendations. An attending physician or departmental chief may be consulted at the manager's discretion.
5. Patients with parenteral substance abuse problems that continue to inject non-prescription drugs will be encouraged to do so any place that is not their bed. This will minimize risk to staff and personnel.

Unsafe Sharps Risk Support Plan

Site Applicability

All PHC Acute Care Sites

Practice Level:

Basic: RN, RPN, LPN

Clinical Indication:

Patients who are identified as having an unsafe sharps risk and for whom an Unsafe Sharps Support Plan should be in place

Need to Know:

- Unsafe sharps definition: uncapped syringes that are left in precarious areas such as common areas (e.g. bathrooms), garbage cans, bedside table, bed linens, or on their person as it poses a risk to health care staff
- The goal is to eliminate the risk of unintended needle stick injury to any persons having contact with the patient or their belongings e.g. nurses, allied health, housekeepers, physicians, etc.
- The goal to reduce or stop substance use is a decision made over time and abstinence may not be the primary goal of care nor is it always achievable.

PRACTICE GUIDELINE

Assessment & Interventions:

If a patient is assessed to be an unsafe sharps risk (e.g. uncapped needles found in room, belongings, on person), the following actions should be taken:

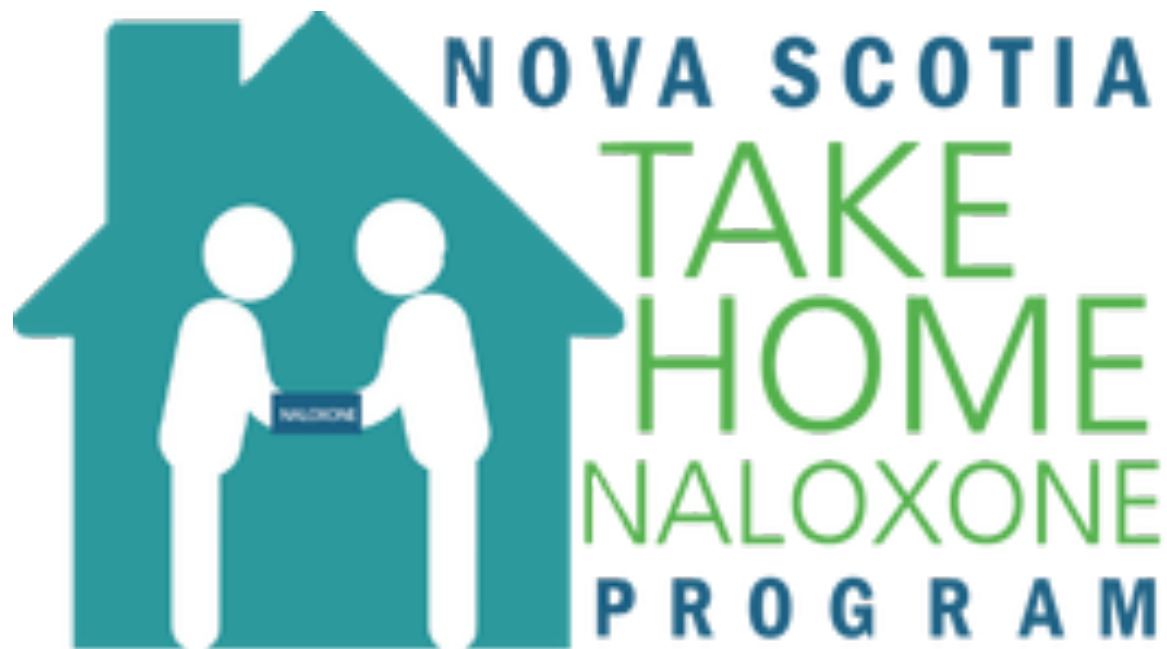
- Discuss unsafe sharps concern with patient
- Educate patient re: safe disposal of sharps
- Create patient specific sharps support plan in collaboration with Clinical Nurse Lead (CNL) (as per instructions on back of Unsafe Sharps Risk Support Plan)
- Notify Addiction Medicine Consult Team of concern and sharps support plan
- Place Unsafe Sharps Risk Support Plan in front of patient Kardex.
- Place sharps risk signage on patient's door
- Review Unsafe Sharps Risk Support Plan at review date for potential revisions or discontinuation

risk to health care staff

- The goal is to eliminate the risk of unintended needle stick injury to any persons having contact with the patient or their belongings e.g. nurses, allied health, housekeepers, physicians, etc.
- The goal to reduce or stop substance use is a decision made over time and abstinence may not be the primary goal of care nor is it always achievable.

Hospital in-reach





NOVA SCOTIA

TAKE
HOME

NALOXONE

PROGRAM

Supervised Consumption Service (SCS)

24/7 supervised consumption
service for Royal Alexandra
Hospital (RAH) inpatients.

*We look forward to meeting
you!*



Overdose Prevention Site @ St. Paul's Hospital

- Opened May 2018
- Serves inpatients and community
- Partnership between PHC, Raincity Housing and VCH

WHAT IT IS:

- A non-judgmental and safer place to use drugs in the West End.
- A confidential and respectful site to connect with support workers and peers.
- A place that provides monitoring of any overdoses and gets you emergency care if you need it.

WHAT IT OFFERS:

- Take-home naloxone kits and training.
- Clean injection supplies.
- Safe needle disposal.
- Peer support.
- Referrals to health and community services.
- Drug testing.

HOURS:

- Opens at **11 am** with last visit at **10:30 pm**. Open **7 days a week**.
- If you need emergency help when the OPS is closed, call 911 or visit St. Paul's Emergency Department.





Three things you can do tomorrow

1. Apply “harm reduction” and “trauma-informed care” approaches with patients who inject drugs
2. Sufficiently treat opioid withdrawal to enable hospital medical care
3. Facilitate evidence-based treatment of opioid use disorder in hospital

Diane Bailey
Lisa Barrett
Julia Belliveau
Matt Bonn
Emily Cameron
Sam Campbell
Jolene Cook
Emma Garrod
Leah Genge
HaliFIX OPS
HANDUP
John Fraser
Sam Hickcox
Sean Hurley
Elaine Hyshka
Lois Jackson
Susan Kirkland

Cindy MacIsaac
Dave Martell
Trish McKay
Ashley Miller
Patti Melanson
Kim Mosseler
Tiffany O'Donnell
Holly Richards
Steve Robinson
Ken Rockwood
Dave Saunders
Andrea Sereda
Rick Swaine
Natasha Touesnard
Colin Van Zoost
Duncan Webster

Dalhousie Faculty of Medicine
R.S. Smith Fellowship in Medical
Research

Canadian Society of
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Hui Lee Health Promotion
Scholarship

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