

The science behind overdose prevention centers (OPCs)

Testimony to Vermont House Committee on Human Services

April 27th, 2023



people
place &
health
collective



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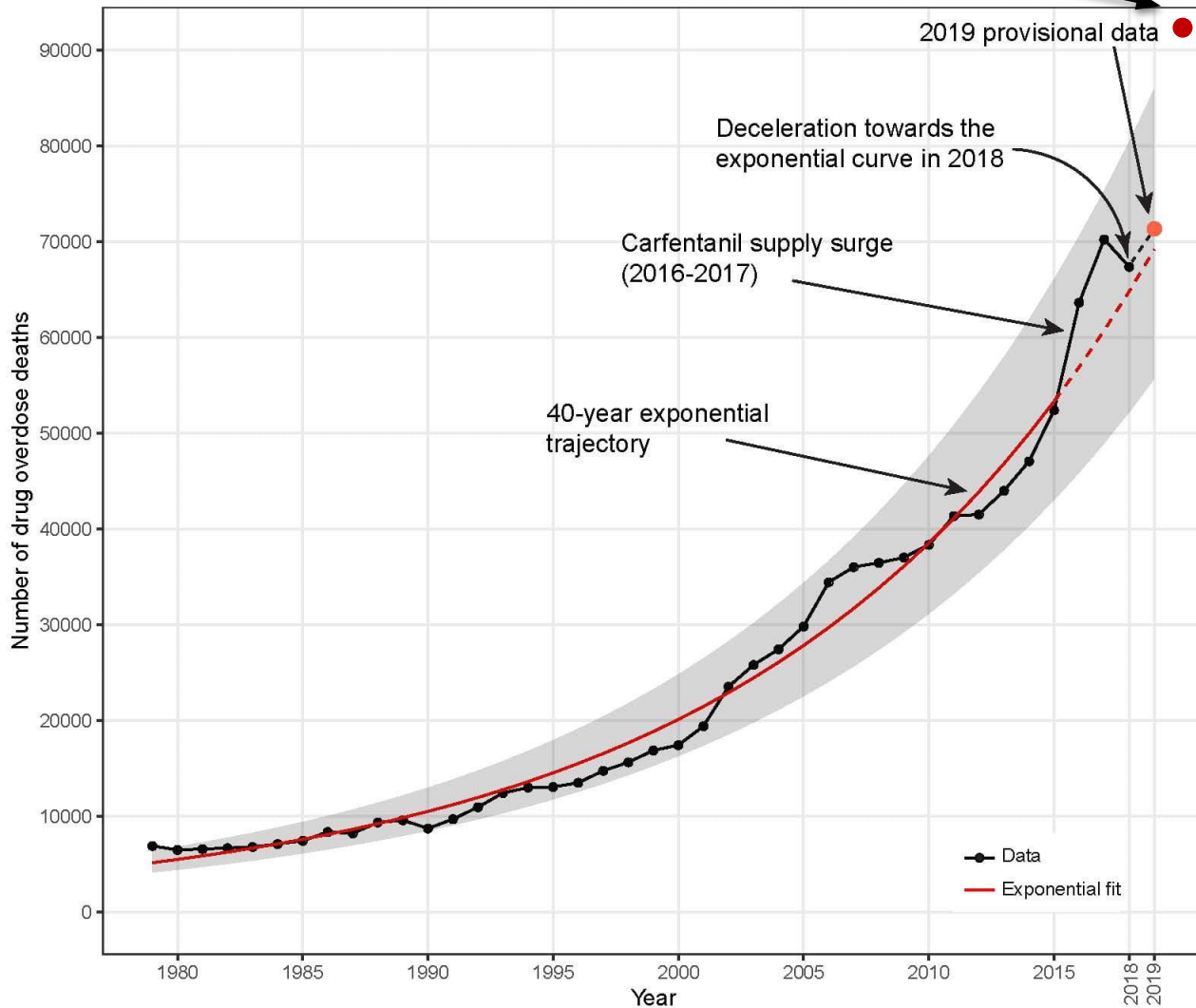
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Number of overdose deaths in 2021: 106,699

Number of overdose deaths in 2020: 91,799

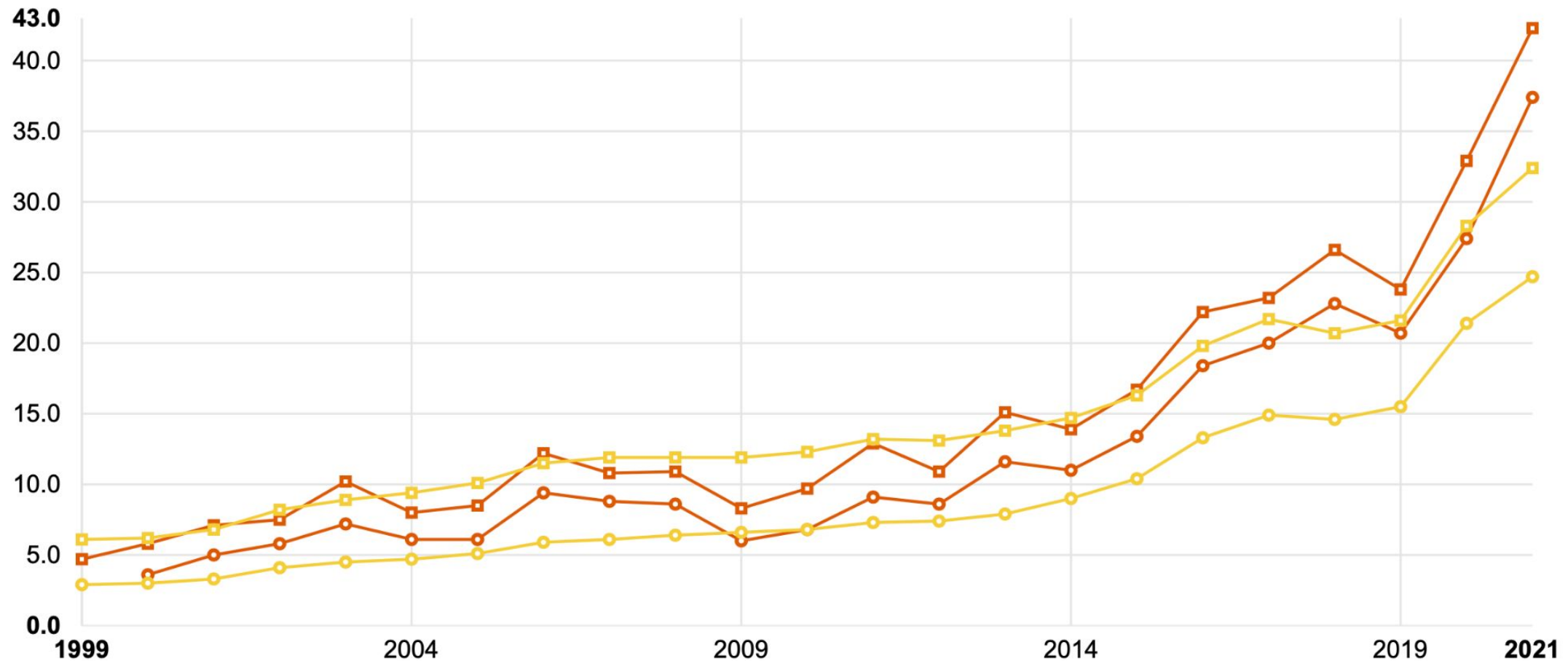


Drug overdose deaths have been increasing exponentially for four decades

Source: Jalal & Burke, *Addiction*, 2021

Source: <https://www.cdc.gov/nchs/products/databriefs/db428.htm>

Overdose mortality rates in Vermont have quintupled since 2009 and are now exceed the nationwide average



○ Opioid Overdose Death Rate (Age-Adjusted) □ All Drug Overdose Death Rate (Age-Adjusted)
■ United States ■ Vermont

Source: Kaiser Health (<https://www.kff.org/other/state-indicator/opioid-overdose-death-rates/>)

What are overdose prevention centers (OPCs)?

OPCs are spaces where people can consume *pre-obtained* substances under the supervision of trained staff who can intervene in the event of an overdose or medical emergency

OPC clients can access medical care and other support services, including referrals to treatment programs

There are more than 200 OPCs operating in ~14 countries

OPCs are also known as supervised consumption facilities, harm reduction centers, or drug consumption rooms



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39





Source: <https://gothamist.com/news/inside-nycs-supervised-drug-injection-sites-the-first-in-the-nation>

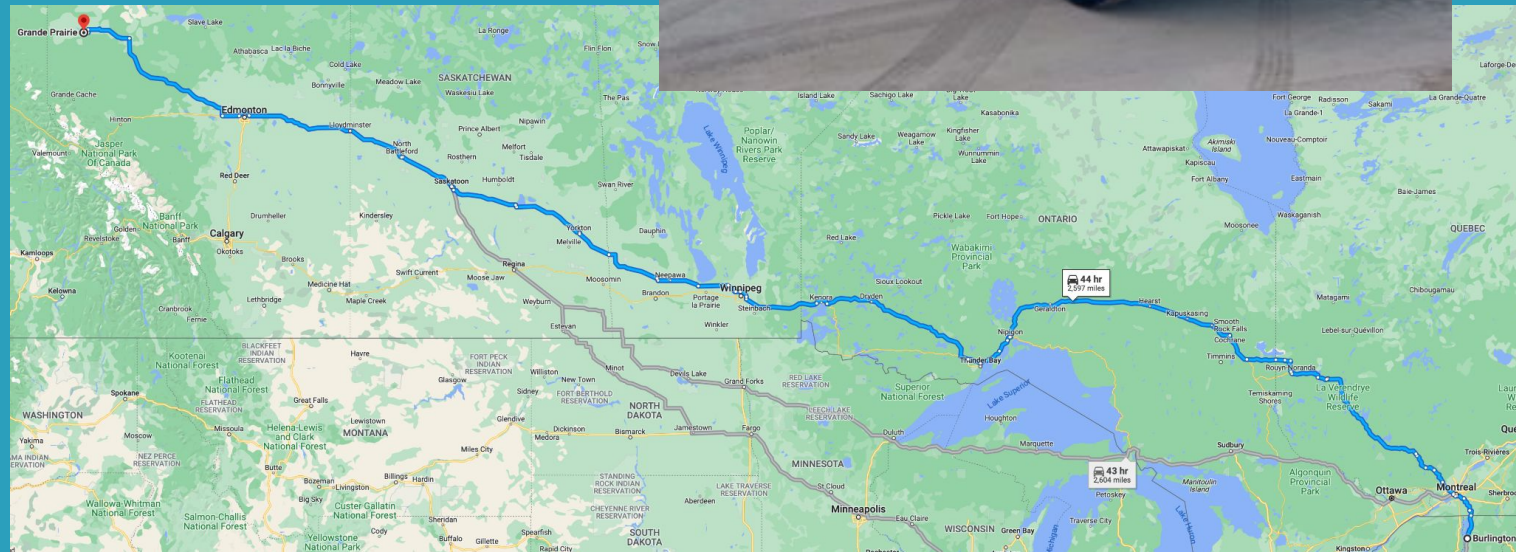


Mobile and integrated OPCs in Canada





OPCs in remote & rural areas





Between 03/2019 and 07/2022,
Northreach OPC had:

- 28,847 visits from 446 people
- 422 overdose interventions with no deaths



**Do OPCs reduce
community overdose
rates?**

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 premature mortality in North America. Internationally, more than 65 supervised injecting facilities (SIFs), where drug users can inject pre-obtained illicit drugs, have been opened as part of various strategies to reduce the harms associated with drug use. We sought to determine whether the opening of an SIF in Vancouver, BC, Canada, was associated with a reduction in overdose mortality.

Methods We examined population-based overdose mortality rates for the period before (Jan 1, 2001, to Sept 20, 2003) and after (Sept 21, 2003, to Dec 31, 2005) the opening of the Vancouver SIF. The location of death was determined from provincial coroner records. We compared overdose fatality rates within an a priori specified 500 m radius of the SIF and for the rest of the city.

Findings Of 290 decedents, 229 (79.0%) were male, and the median age at death was 40 years (IQR 32–48 years). A third (89, 30.7%) of deaths occurred in city blocks within 500 m of the SIF. The fatal overdose rate in this area decreased by 35.0% after the opening of the SIF, from 253.8 to 165.1 deaths per 100 000 person-years ($p=0.048$). By contrast, during the same period, the fatal overdose rate in the rest of the city decreased by only 9.3%, from 7.6 to 6.9 deaths per 100 000 person-years ($p=0.490$). There was a significant interaction of rate differences across strata ($p=0.049$).

Interpretation SIFs should be considered where injection drug use is prevalent, particularly in areas with high densities of overdose.

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Lancet 2011; 377: 1429–37

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See [Comment](#) page 1385

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Methods

Design: population-based retrospective study

Sample: all deaths deemed by the provincial coroner to be caused by an accidental illicit drug overdose in the City of Vancouver between Jan 2001 and Dec 2005

Location of death estimated using six-digit postal code

Area of interest: all blocks within 500 metres (~550 yards) of the OPC

Quasi-control: blocks >500m from the OPC

Outcome: rate difference in OD mortality between the pre-OPC (Jan 1, 2001 – Sep 20, 2003) and post-OPC (Sep 21, 2003 – Dec 31, 2005) periods



Results

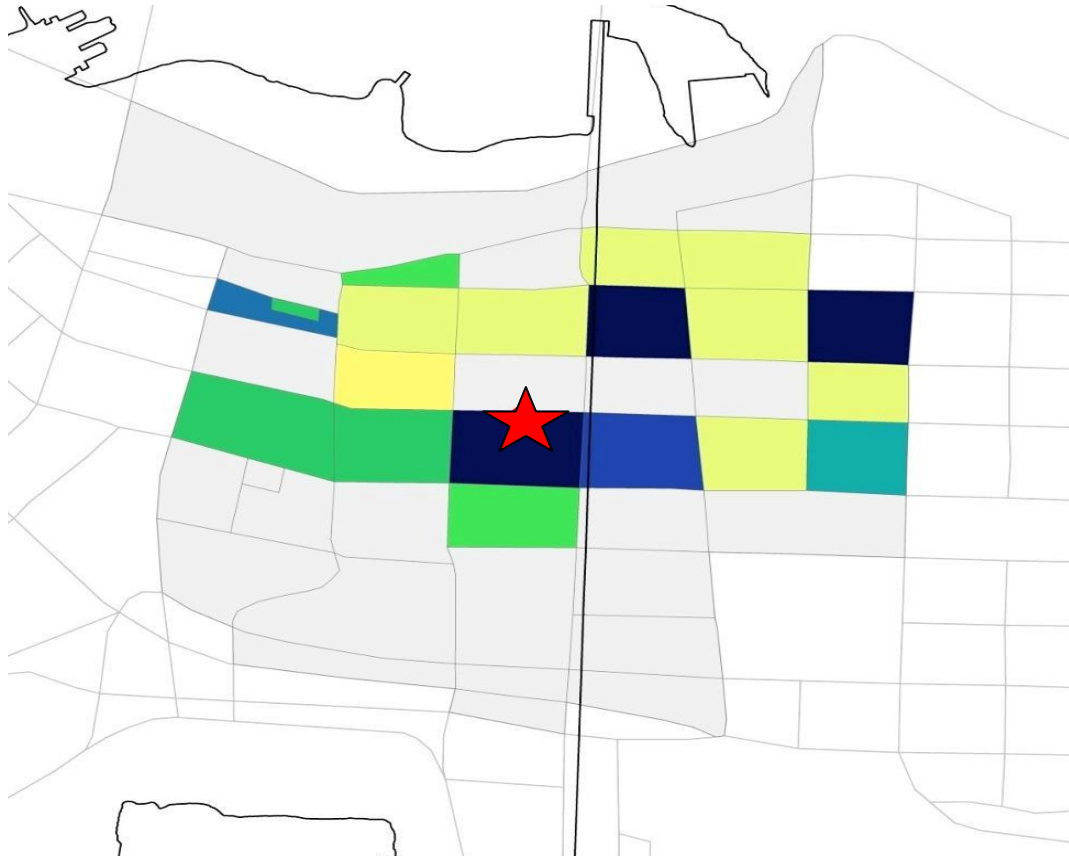
Overdose mortality rate pre-/post-OPC, stratified by proximity to the facility

	<500 meters of the OPC		>500 meters of the OPC	
	Pre-OPC	Post-OPC	Pre-OPC	Post-OPC
Number of overdoses	56	33	113	88
Overdose rate (95%CI)	254 (187 – 320)	165 (109 – 221)	8 (6 – 9)	7 (6 – 8)
Percent reduction (95%CI)	35% (1% - 58%)		9% (-20% - 31%)	

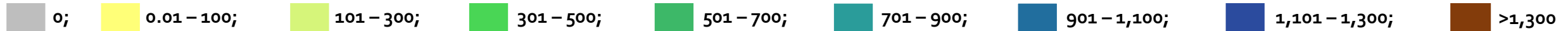
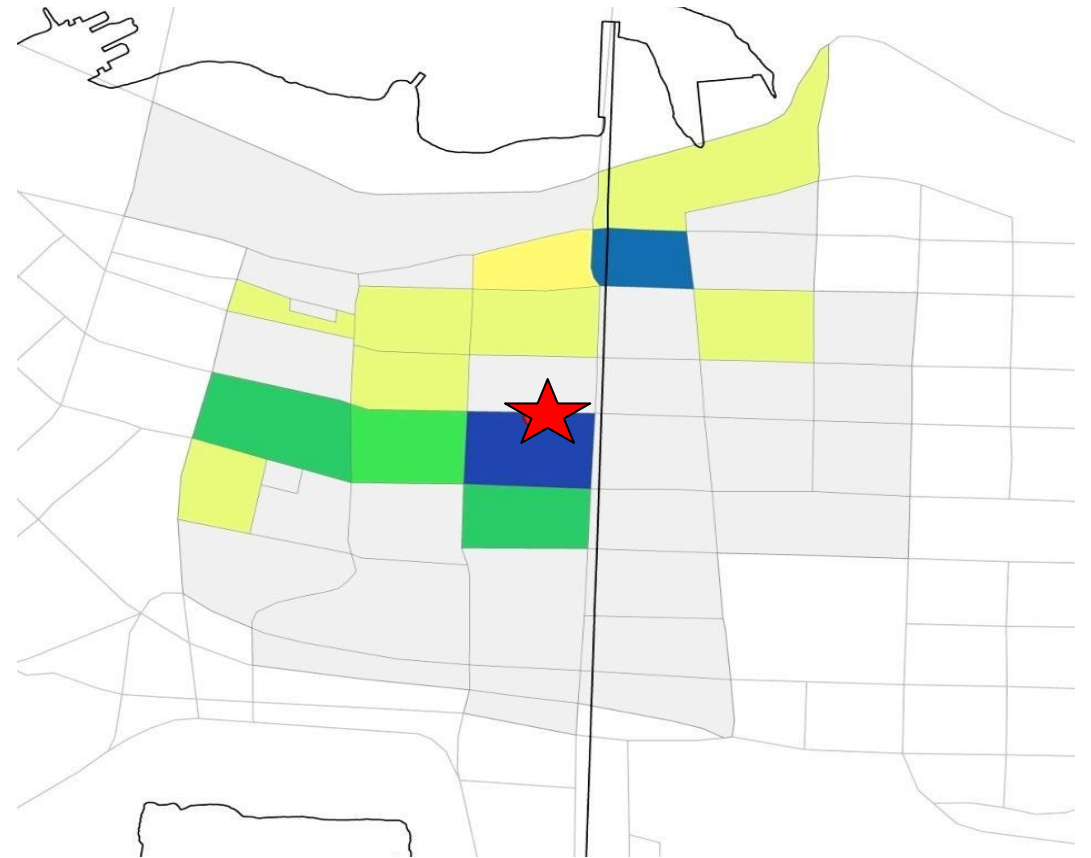
Results

Fatal OD rates (per 100,000 person-years) before and after the opening of the OPC

Pre-OPC: Jan 1, 2001 – Sep 20, 2003



Post-OPC: Sep 21, 2003 – Dec 31, 2005



Using an OPC at least weekly reduced the risk of all-cause mortality by 54%

- Community-recruited cohort of more than 2,100 people who use drugs in Vancouver
- Followed for more than 10 years
- Effect was independent of many other risk factors for death
- Overdoses were noted as the cause of death in 17% of 112 cases

The protective effect of OPC use on mortality extends beyond overdose reversal and is observed with weekly use.

RESEARCH ARTICLE

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

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**Do OPCs help people
enter treatment?**



Of the 621 participants **not accessing treatment** at baseline, 261 (42%) enrolled in some form of treatment after 24 months of follow-up

Source: DeBeck et al., *Drug Alcohol Dependence*, 2011

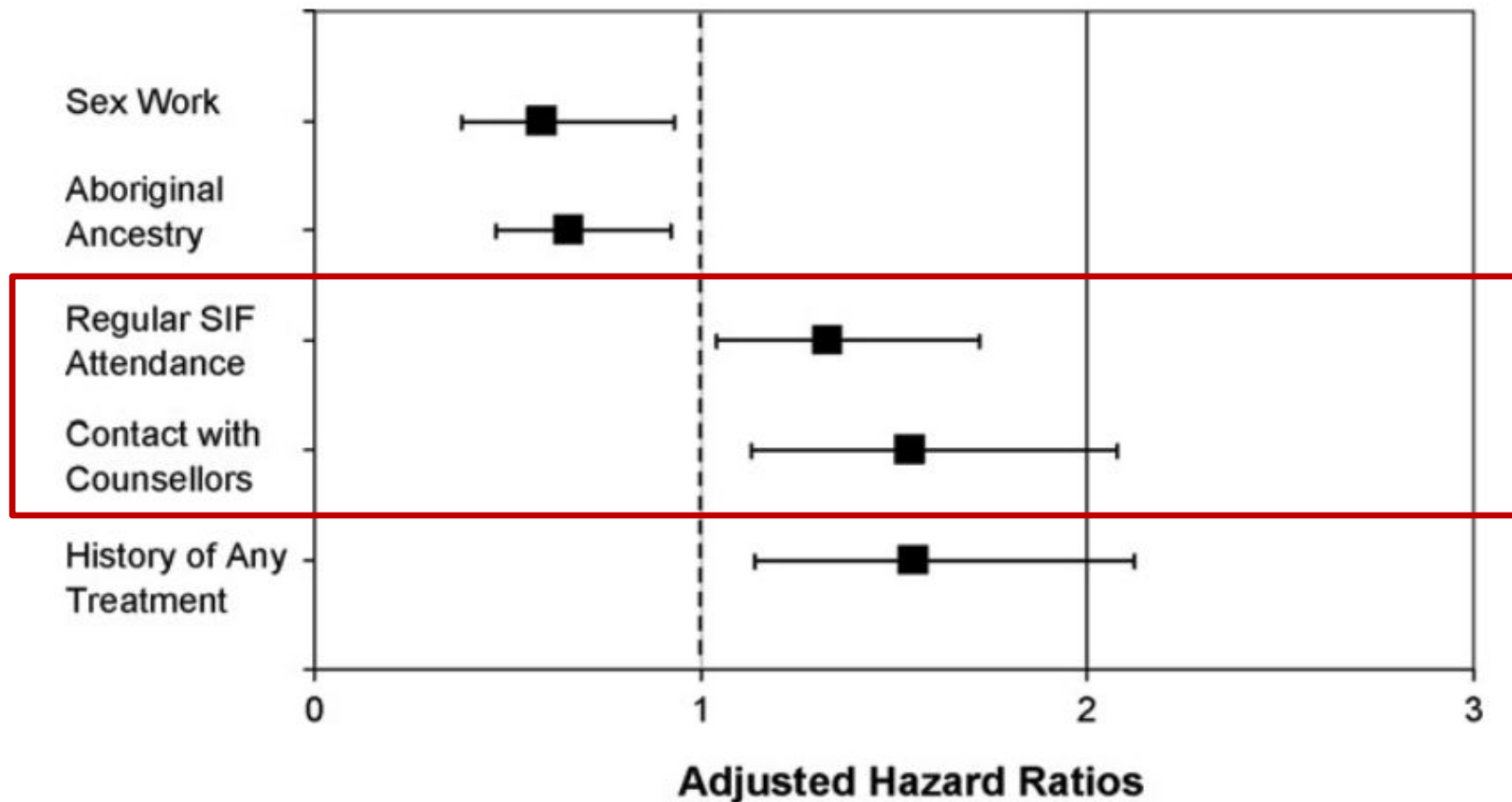





Figure 1. Factors associated with time to enrolment in addiction treatment among clients of Vancouver’s supervised injection facility. *Notes:* ‘Regular SIF Attendance’ was measured at baseline and defined as visiting the SIF at least once per week vs. visiting the SIF less than once per week; ‘Contact with Counsellors’ refers to meeting with an addictions counselor at the SIF and was measured through data linkage to the SIF administrative database; ‘History of Any Treatment’ was defined as any history of engaging in any type of addiction treatment programs.

Original article

Impact of drug consumption rooms on non-fatal overdoses, abscesses and emergency department visits in people who inject drugs in France: results from the COSINUS cohort

P. Roux ^{1,*†} M. Jauffret-Roustide,^{2,3,4†} C. Donadille,¹
L. Briand Madrid,¹ C. Denis,^{5,6,7,8} I. Célérier,⁹ C. Chauvin,² N. Hamelin,¹⁰
G. Maradan,⁹ M.P. Carrieri,¹ C. Protopopescu ¹ L. Lalanne,^{10,11†}
M. Auriacombe ^{6,7,8†} and the COSINUS Study Group

French cohort study of OPCs

Estimated probabilities of overdose, abscesses, and emergency department visits over 12 months among people who used an OPC, compared to participants who used other harm reduction services

- ❖ Overdoses: 1% versus 3% (**down** by 67%)
- ❖ Abscesses: 3% versus 14% (**down** by 79%)
- ❖ ED visit: 17% versus 41% (**down** by 59%)

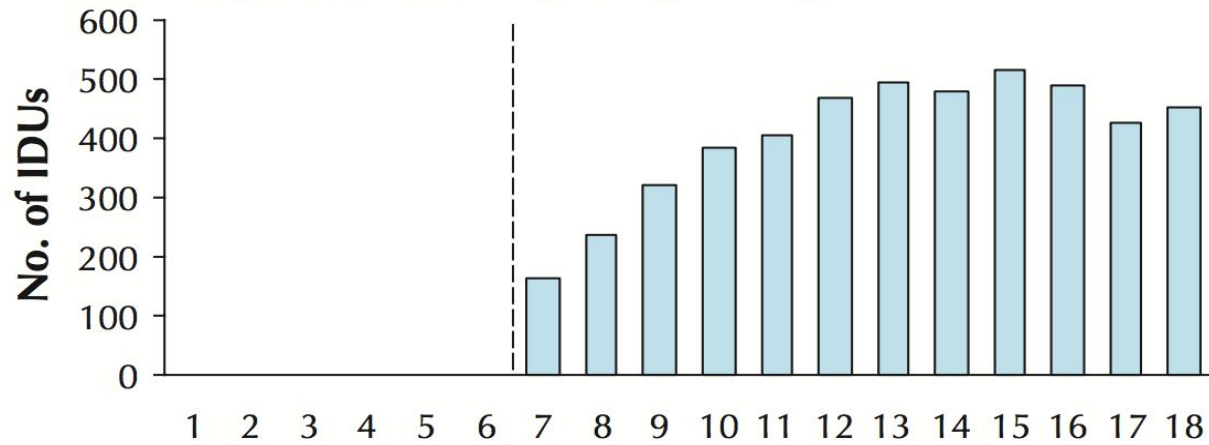




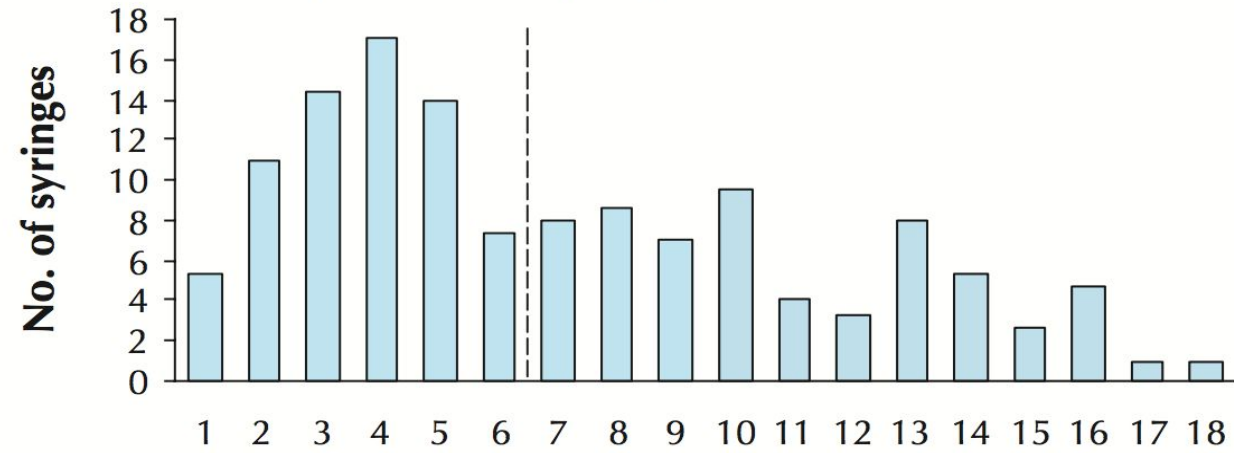
**Do OPCs have an impact
on public disorder and
crime?**

OPCs reduce public injection drug use and injection-related litter

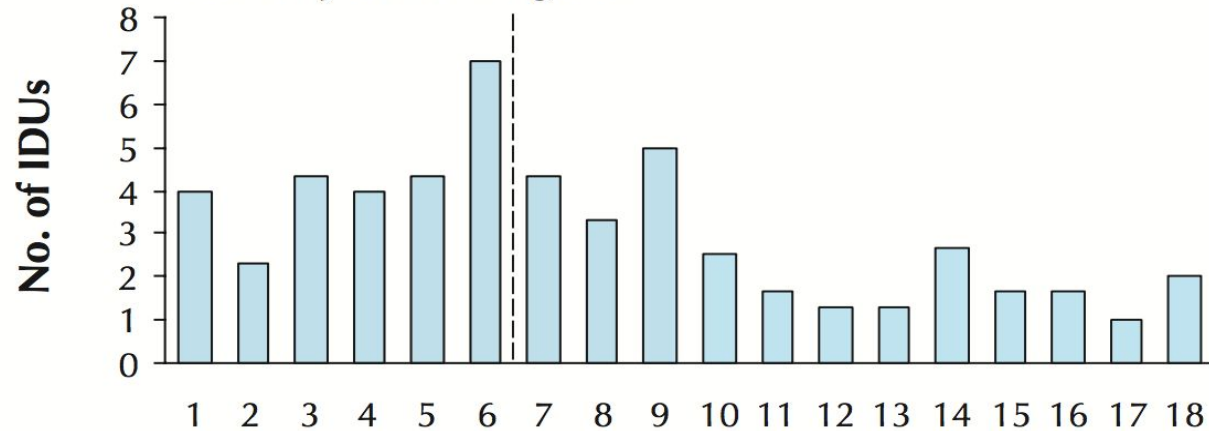
Daily use of safer injecting facility



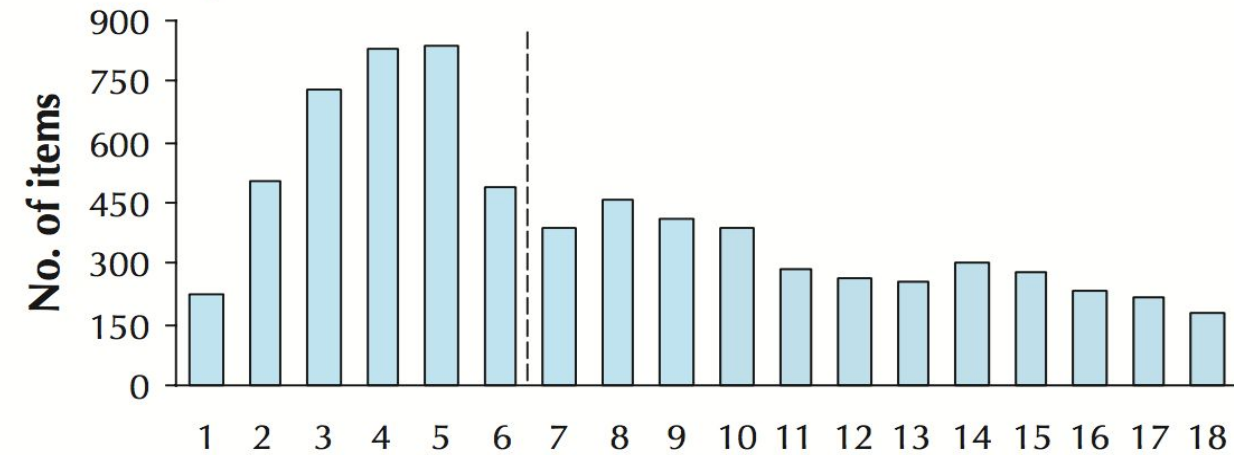
Publicly discarded syringes



Public injection drug use



Injection-related litter



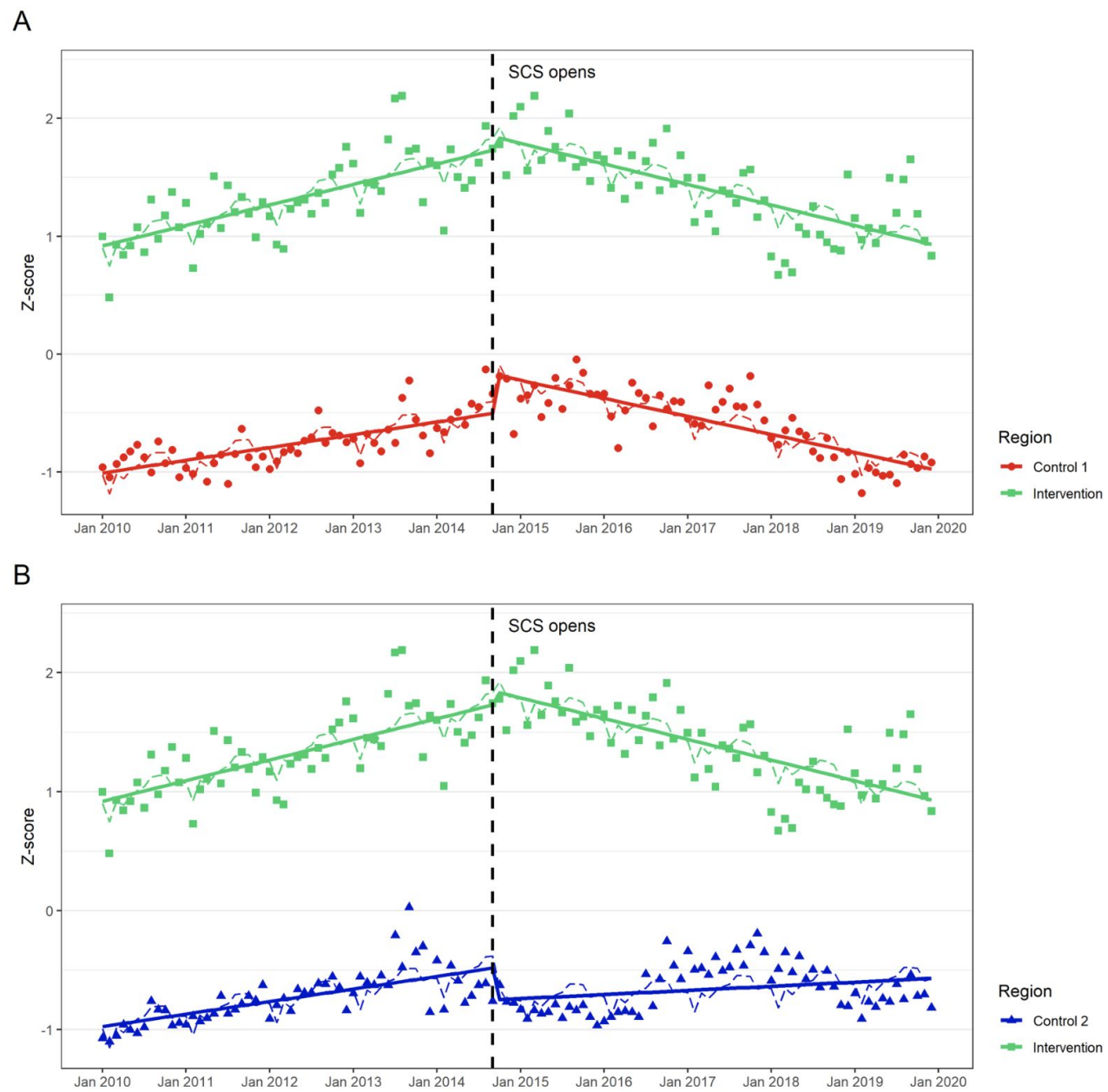


Fig. 2. Monthly standardized counts of police incident reports of assault, burglary, larceny theft, or robbery and estimated trends in crime between January 2010 and December 2019 within the 500 m area surrounding the Safe Consumption Site (SCS; Intervention) and two control areas: A. location-based control (Control area 1) and B. characteristic-based (Control area 2). Data are presented as z-scores; the vertical dashed line represents when the SCS was opened.

RHODE ISLAND'S HARM REDUCTION CENTER PILOT PROGRAM

Preventing overdoses, saving lives

216-RICR-40-10-25

TITLE 216 – DEPARTMENT OF HEALTH

CHAPTER 40 – PROFESSIONAL LICENSING AND FACILITY REGULATION

SUBCHAPTER 10 – FACILITIES REGULATION

PART 25 – Harm Reduction Centers

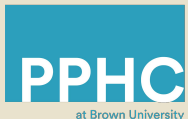
Source: RIDOH (<https://health.ri.gov/addiction/about/harmreductioncenters/>)

Source: RICARES (<https://ricares.org/ops/>)





- ★ Partners, staff, and advocates at our local harm reduction & recovery organizations
- ★ Study participants for their countless contributions to the research
- ★ The **wonderful staff, faculty, and students at the People, Place & Health Collective (PPHC)**, particularly Max Krieger, Jackie Goldman, William Goedel, Alex Collins, Jesse Yedinak, Alex Macmadu, and Abdullah Shhipar for their assistance with this presentation
- ★ Magda Cerdá, Thomas Kerr, and many others for their collaborations and mentorship
- ★ Our students at Brown School of Public Health



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appreciations & gratitude.



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keep in touch!