

Overdose Prevention Centers: Research Findings from US-based sites

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Testimony for H.72
Vermont Senate Health and Welfare
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Scope of Peer-reviewed Science on OPS

- Over 100 articles published in the peer-reviewed medical and epidemiological literature on OPS
- Scientists in Europe, Canada, Australia, Mexico and the United States
- Academic disciplines of studies include epidemiology, medicine, sociology, anthropology, psychology, economics, criminology, law, and public health.
- Study methods have included quantitative, qualitative, ethnography, and cost-benefit analyses.
- Articles in the top medical journals of the world: *NEJM*, *the Lancet*, *JAMA*, *AJPH*, *British Medical Journal*

OPS evaluations in United States

- Unsanctioned OPS in unnamed US city (2014-20)
- New York City sanctioned OPS (2021 – ongoing)
- San Francisco sanctioned OPS (2022)
- Cost-effectiveness

An Unsanctioned OPS in the US

- Opened in 2014 in an unnamed location
- Two separate rooms: one for injection and one for post-injection
- 6 stainless steel tables + 1 table for assisted injections
- A trained staff person stationed in each room
- Safe sterile equipment, disposal of needles, oximeter and naloxone on-site
- Tablet for inputting data



Photo by Greg Scott, PhD

Evaluation of an Unsanctioned Safe Consumption Site in the United States

6 Citing Articles

August 6, 2020

N Engl J Med 2020; 383:589-590

DOI: 10.1056/NEJMc2015435

Metrics

TO THE EDITOR:

Nearly 70,000 people in the United States die each year from a drug overdose.¹ Opioid-


Table 1. Injections, Opioid-Involved Overdoses, and Overdose Deaths at an Unsanctioned Safe Consumption Site, 2014 through 2019.*

Year	Injection Events	Opioid Overdoses	Overdoses per 1000 Injections	Overdose Deaths
2014	350	0	0.00	0
2015	1,076	1	0.93	0
2016	1,536	1	0.65	0
2017	1,759	3	1.71	0
2018	2,867	13	4.53	0
2019	2,926	15	5.13	0
Total	10,514	33	3.14	0

Kral, Lambdin, Wenger, and Davidson New Engl J Med 2020

Reduced Emergency Department Visits and Hospitalisation with Use of an Unsanctioned Safe Consumption Site for Injection Drug Use in the United States



Barrot H. Lambdin, PhD^{1,2,3} , Peter J. Davidson, PhD⁴, Erica N. Browne, MS¹, Leslie W. Suen, MD², Lynn D. Wenger, MSW, MPH¹, and Alex H. Kral, PhD¹


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J Gen Intern Med DOI: 10.1007/s11606-021-07312-4

People using the safe consumption site:

- were 27% less likely to visit the emergency department (95% CI: 12%, 46%)
- had 54% fewer emergency department visits (95% CI: 33%, 71%)
- were 32% less likely to be hospitalized (95% CI: 4%, 57%)
- spent 50% fewer nights in hospital (95% CI: 1%, 85%)

Effect of an Unsanctioned Safe Consumption Site in the United States on Syringe Sharing, Rushed Injections, and Isolated Injection Drug Use: A Longitudinal Cohort Analysis

 Suen, Leslie W. MD, MAS^{a,b}; Davidson, Peter J. PhD^c; Browne, Erica N. MS^d; Lambdin, Barrot H. PhD^d; Wenger, Lynn D. MSW, MPH^d; Kral, Alex H. PhD^d

[Author Information](#) 

JAIDS Journal of Acquired Immune Deficiency Syndromes: February 1, 2022 - Volume 89 - Issue 2 - p 172-177

People using the safe consumption site had:

- 83% lower rates of receptive syringe sharing (IRR 0.17, 95% CI=0.03, 1.02)
- 23% lower rates of injecting in an isolated location (IRR 0.77 95% CI=0.54, 1.27)
- 6% lower rates of rushed injections (IRR 0.94, 95% CI= 0.70, 1.30)

* Note that none of these were statistically significant at $p < 0.05$ level



Contents lists available at [ScienceDirect](#)

Drug and Alcohol Dependence

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



Improved syringe disposal practices associated with unsanctioned safe consumption site use: A cohort study of people who inject drugs in the United States

Alex H. Kral^{a,*}, Barrot H. Lambdin^{a,b,c}, Lynn D. Wenger^a, Erica N. Browne^a, Leslie W. Suen^b, Peter J. Davidson^d

People using the safe consumption site had:

- Comparable risk of any improper syringe disposal in prior 30 days (relative risk= 1.03; 95% CI=0.53, 1.17).
- 58% lower rates of the number of improperly disposed syringes per number of injections in prior 30 days (incident rate ratio= 0.42; 95% confidence interval=0.18, 0.88).



Contents lists available at ScienceDirect

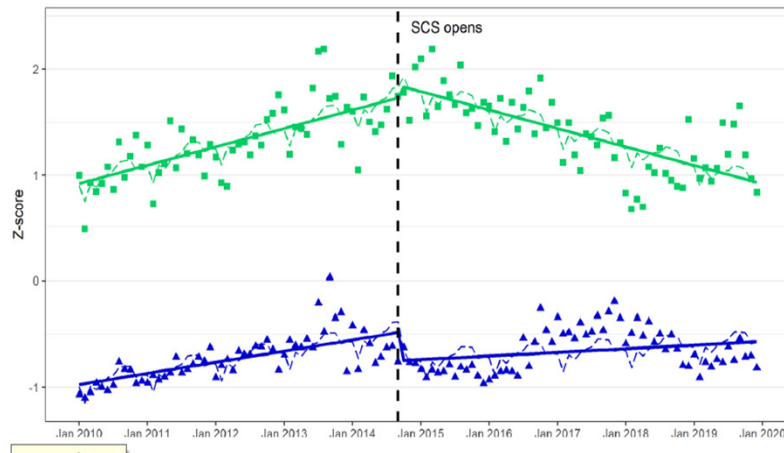
Drug and Alcohol Dependence

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

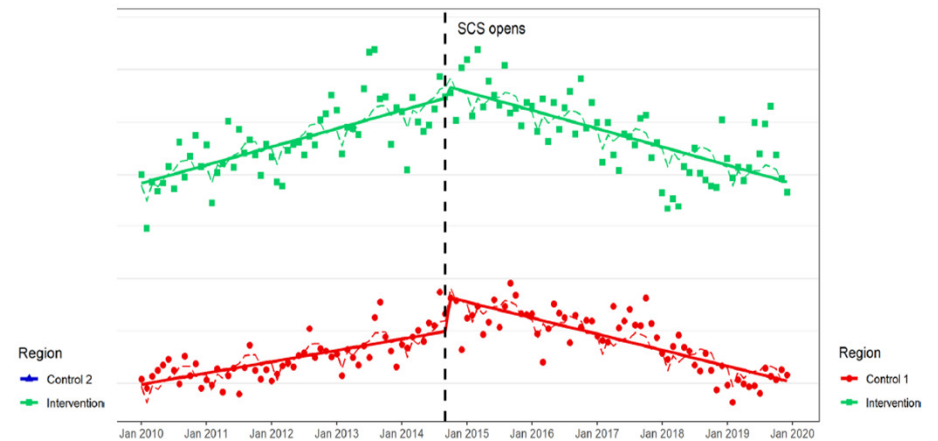


Impact of an unsanctioned safe consumption site on criminal activity, 2010–2019

Peter J. Davidson^{a,*}, Barrot H. Lambdin^b, Erica N. Browne^b, Lynn D. Wenger^b, Alex H. Kral^b



A



Summary of Results from Unsanctioned OPS in the US

OPS help the people who use them by

- Preventing overdose deaths
- Preventing emergency department use and hospitalization

OPS help the neighborhoods in which they are located by

- Reducing crime
 - Reducing syringes in public settings
- 

OPS effectiveness in United States: NYC

- Nearly 6,000 drug consumption events,
- 54 overdose interventions with naloxone or oxygen, no fatalities (Harocopos et al *JAMA Netw Open*)



Research Letter | Substance Use and Addiction

First 2 Months of Operation at First Publicly Recognized Overdose Prevention Centers in US

Alex Harocopos, PhD, MSc; Brent E. Gibson, PhD; Nilova Saha, LCSW; Michael T. McRae, PhD; Kailin See; Sam Rivera; Dave A. Chokshi, MD, MSc

Introduction

In New York City (NYC), there were 2062 overdose fatalities in 2020, the deadliest year on record for NYC and the US.¹ Fentanyl and its analogs were the most common substances involved in overdose deaths in NYC, present in 77% of such deaths in 2020.¹ A characteristic of fentanyl-involved overdose is rapid onset of overdose symptoms²; however, with timely administration of oxygen or naloxone, deaths can be averted.





In response to unprecedented numbers of overdose deaths, on November 30, 2021, NYC implemented overdose prevention center (OPC) services at 2 syringe service programs operated by OnPoint NYC. Also known as supervised consumption sites, OPCs are health care facilities that aim to improve individual and community health, increase public safety, and reduce consequences of drug use, including overdose deaths, public drug use, and syringe litter.^{3,4} Operating in more than 10 countries, OPCs offer supervised, hygienic spaces in which people can use preobtained drugs and


+ Invited Commentary

Author affiliations and article information are listed at the end of this article.

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Original Investigation | Public Health 

November 13, 2023

Overdose Prevention Centers, Crime, and Disorder in New York City

Aaron Chalfin, PhD¹; Brandon del Pozo, PhD, MPA, MA²; David Mitre-Becerril, PhD³

[» Author Affiliations](#) | [Article Information](#)

JAMA Netw Open. 2023;6(11):e2342228. doi:10.1001/jamanetworkopen.2023.42228

- Compared neighborhoods around OPCs to neighborhoods around syringe services programs
- No significant changes were detected
 - in violent crimes or property crimes recorded by police,
 - 911 calls for crime or medical incidents, or
 - 311 calls regarding drug use or unsanitary conditions observed in the vicinity of the OPCs.

More Results from NYC study

- There was a significant decline in low-level drug enforcement
 - a reduction in arrests for drug possession near the OPCs of 82.7% (95% CI, –89.9% to –70.4%) and
 - a reduction in their broader neighborhoods of 74.5% (95% CI, –87.0% to –50.0%).
- Significant declines in criminal court summonses issued
 - in the immediate vicinity by 87.9% (95% CI, –91.9% to –81.9%) and
 - in the neighborhoods around the OPCs by 59.7% (95% CI, –73.8% to –38.0%)

OPC pilot in San Francisco

- Opened January 18, 2022
- Mayoral official declaration allowed the City to waive bureaucratic hurdles to quickly implement the Mayor's Tenderloin Emergency Intervention Plan, which included TLC and increased policing
- TLC included an outdoor OPS
- Pilot closed December 4, 2022

Will people come?

Will people use TLC services?

Will people feel comfortable spending time at TLC?

Data Sources: Guest data, QR Scan Project, ethnography



Guest Use of TLC: QR Scan project

124,100
visits

Total visits

1.7
hrs/visit

Median time
spent by all
TLC guests
(per visit)

2.8
hrs/visit

Median time
spent by guests
in overdose
prevention area
(per visit)

18,291
hrs/mo

Estimated time
spent by TLC
guests
(per month)

Caveats:

- Guests can use TLC & privacy area more than once per day
- Technological difficulties led to missing timestamps for some entries & exits

Total on-site activities

28,096

1/10/2022 - 12/11/2022

Total referrals to services

6,120

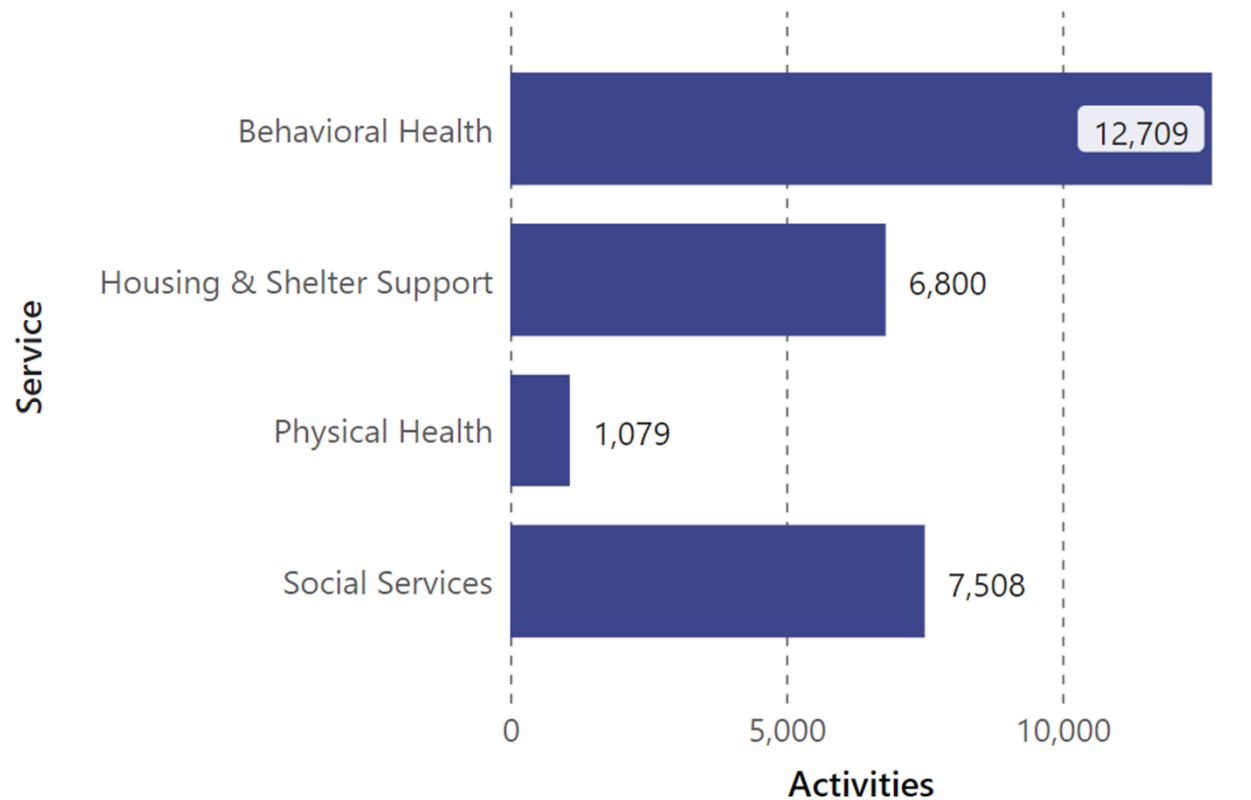
1/10/2022 - 12/11/2022

Total linkages to services

2,927

1/10/2022 - 12/11/2022

Number of on-site activities at the Tenderloin Center



<https://sf.gov/data/increasing-connections-care-people-tenderloin>

Will people overdose?

Will people who overdose die at TLC?

Data Sources: Critical incident report; Ethnography





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

International Journal of Drug Policy

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



Research Paper

Evaluating oxygen monitoring and administration during overdose responses at a sanctioned overdose prevention site in San Francisco, California: A mixed-methods study



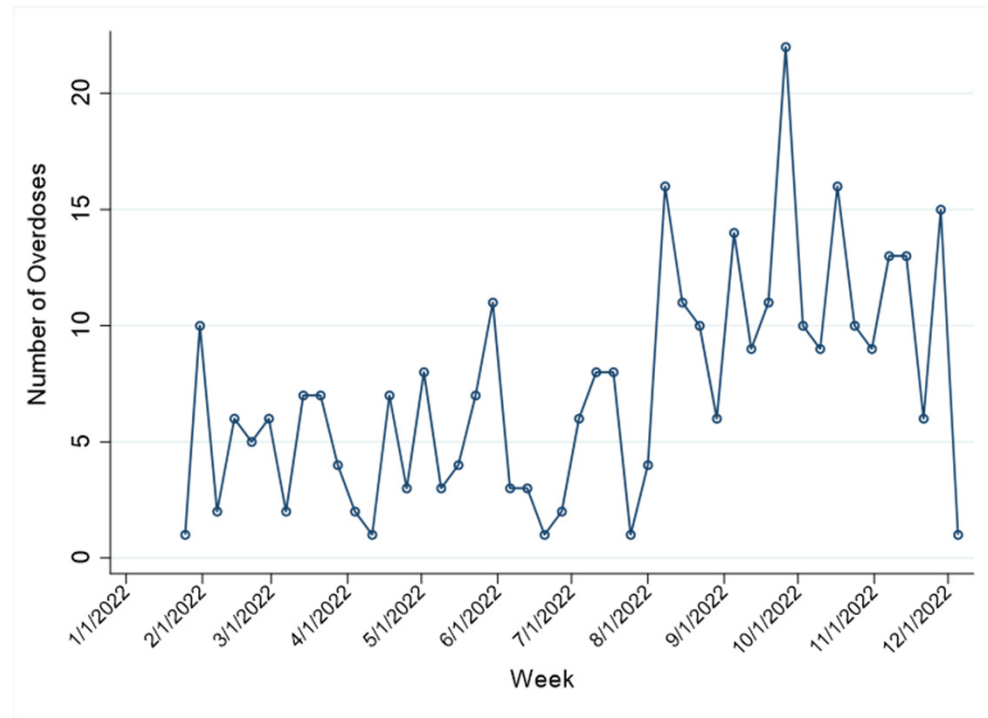
Leslie W. Suen^{a,*}, Lynn D. Wenger^b, Terry Morris^b, Veronica Majano^b, Peter J. Davidson^c, Erica N. Browne^b, Bradley Ray^b, Cariné E. Megerian^b, Barrot H. Lambdin^b, Alex H. Kral^b

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- **333** overdoses
- **0** people died at TLC
- **75%** involved calling 911 due to SF policy



Will TLC bring people from other neighborhoods to the area?

Will there be an increase in public drug use and improperly discarded drug use equipment in the area?

Data Sources: Guest data; Systematic observation data



TLC guest data

From February 28 to May 17, all guests were asked from what neighborhood they were coming

Two adjacent neighborhoods accounted for **96%** of visits:



93.9% came from the Tenderloin

1.7% came from South of Market





Impact of a high-volume overdose prevention site on social and drug disorder in surrounding areas in San Francisco

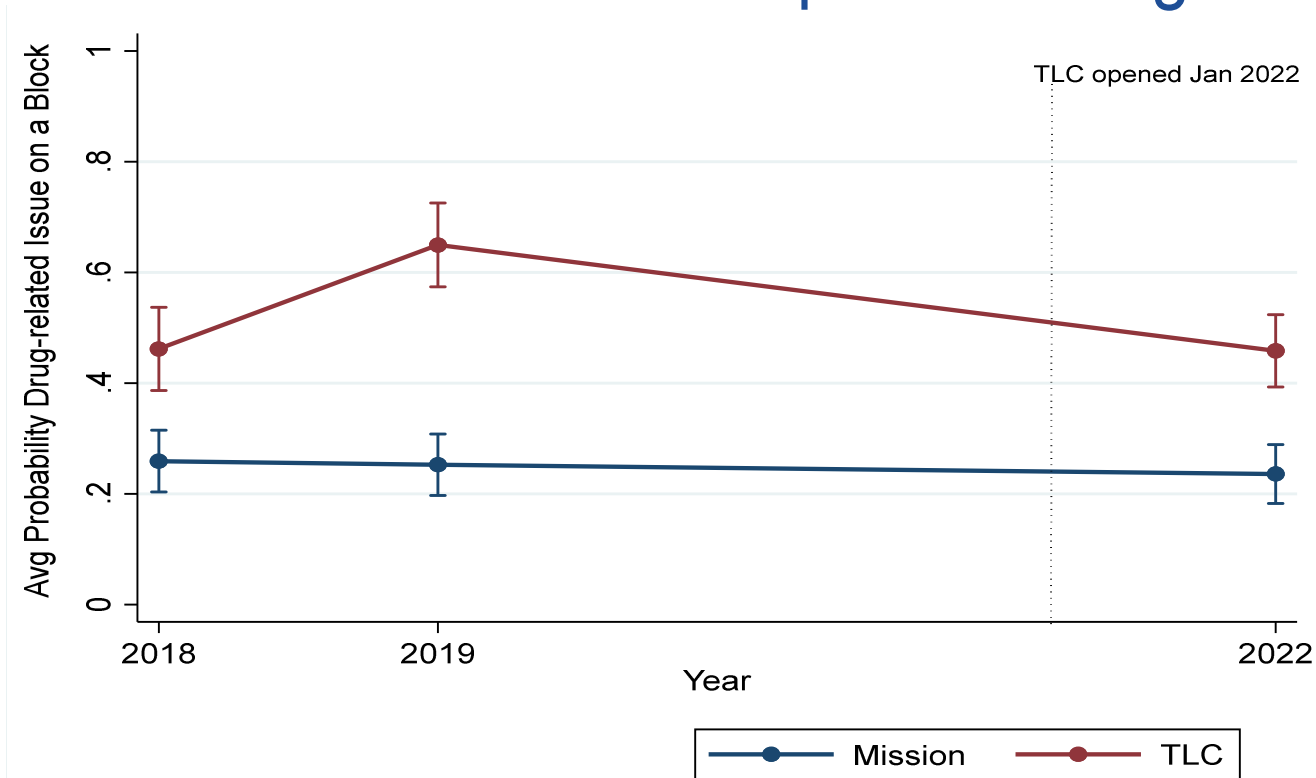
[Peter J. Davidson](#)^a  , [Lynn D. Wenger](#)^b, [Terry Morris](#)^b, [Veronika Majano](#)^b,
[Erica N. Browne](#)^b, [Barrot H. Lambdin](#)^b, [Leslie W. Suen](#)^c, [Alex H. Kral](#)^b

500-meter radius around TLC (the OPS) &
Mission Neighborhood Resource Center (comparison)

Two research assistants walked each side of all blocks
Recorded all drug & homelessness related activities & artifacts

Data was collected from July-September in 2018, 2019 & 2022
(skipped shelter-in-place COVID years)

Estimated Average Probability of Any Drug-Related Issue* Noted Around TLC vs. Comparison Neighborhood



In 2019, there was a 65% chance of finding a drug-related issue on any given block in the TLC area. And in 2022 the chance was 46%.

*Drug-related issues: people smoking drugs, injecting drugs, selling drugs; discarded needle caps; discarded full needles; discarded baggies, cookers, pipes

Cost-effectiveness of OPS in US

- **San Francisco** (Irwin et al *Drug Alc Dep*)
 - Each dollar spent on OPS would generate \$2.33 in savings,
 - Total annual net savings of \$3.5 million for a single 13-booth OPS annually
- **Baltimore** (Irwin et al *HRJ*)
 - Single OPS would save \$7.8 million annually
- **Providence** (Chambers et al *Int J Drug Policy*)
 - The OPS would save \$1.1 million annually compared to syringe service program
- **New York City** (Behrends et al *J Sub Abuse Treat*)
 - One OPS would save \$0.8-\$1.6 million annually
 - Four OPS would save \$2.9-\$5.7 million annually

Summary of Peer-reviewed Science

- The science is rigorous and extensive.
- Every peer-reviewed study has found positive impact of OPS
 - on people who use them and
 - the communities in which they are placed.
- No peer-reviewed study has found any negative impact of OPS.

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Questions?

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