

OVERDOSE PREVENTION CENTERS IN NEW YORK CITY: AN EVALUATION OF THEIR IMPACT ON NEIGHBORHOOD-LEVEL FATAL AND NON-FATAL OVERDOSE

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Background:

More than one million people have died from overdose in the United States (US) in the past twenty years. Overdose prevention centers (OPCs) are considered a promising tool in the US, yet evidence on their effectiveness in the US is lacking. We assessed the impact that opening the first two publicly recognized OPCs in the US had on overdose in surrounding neighborhoods.

Methods:

The study period spanned January 1, 2020-December 31, 2023, and focused on the two OPCs that opened in New York City (NYC) on November 30, 2021. Using locations of overdose deaths and emergency medical service responses to nonfatal overdoses, we examined, respectively, mean bimonthly overdose deaths and mean bimonthly nonfatal overdoses. We created 500-meter buffers around each OPC and around other harm reduction programs and opioid treatment programs in NYC. We then used the augmented synthetic control method and created a “synthetic” control consisting of donor catchment areas that most closely matched the pre-intervention trends in the “treated” catchment areas surrounding the OPCs. This approach allowed us to compare post-implementation outcome patterns around the OPC sites to the matched areas.

Results:

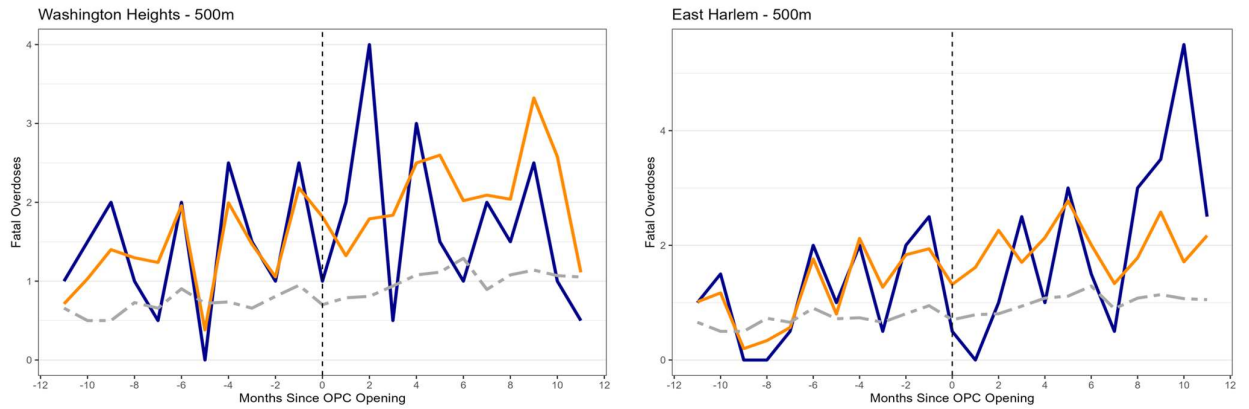
We found no evidence that the opening of the OPC services had a significant effect on bimonthly fatal or nonfatal overdose within a 500-meter buffer (Figure 1); results were replicated using alternative buffer definitions, decedent subgroups, and incident dates and times to reflect OPC operation.

Conclusion:

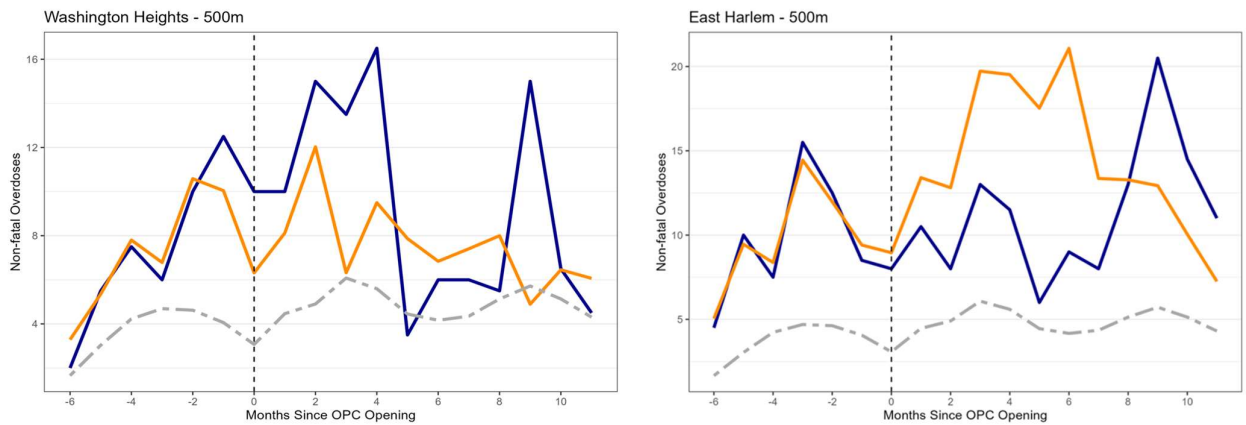
Unique aspects of the local context in NYC, including the operation of longstanding harm reduction services on site prior to the OPC opening, substantial diffusion of overdoses across the city, and a citywide increase in overdoses during our study period, may explain the lack of a neighborhood-level impact on overdoses. Future research will examine the effect of OPCs on health outcomes (including overdose) among individuals who use these services.

Figure 1. Bimonthly fatal and nonfatal overdose trends by OPC site, pre- and post-OPC opening, in the 500 meters surrounding the OPC (blue), a matched synthetic control of 500-meter buffers in other NYC neighborhoods (orange), and all NYC neighborhoods (grey).

Bimonthly fatal overdose trends



Bimonthly nonfatal overdose trends



— OPC Neighborhood — Synthetic OPC Neighborhood — All Neighborhoods

Disclosure of Interest Statement:

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If accepted, we understand that we are expected to provide a disclosure of interest slide or include such statements on a poster.