



Strategies for preventing overdose deaths

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October 27, 2020

Disclosures: I have no
conflicts of interest

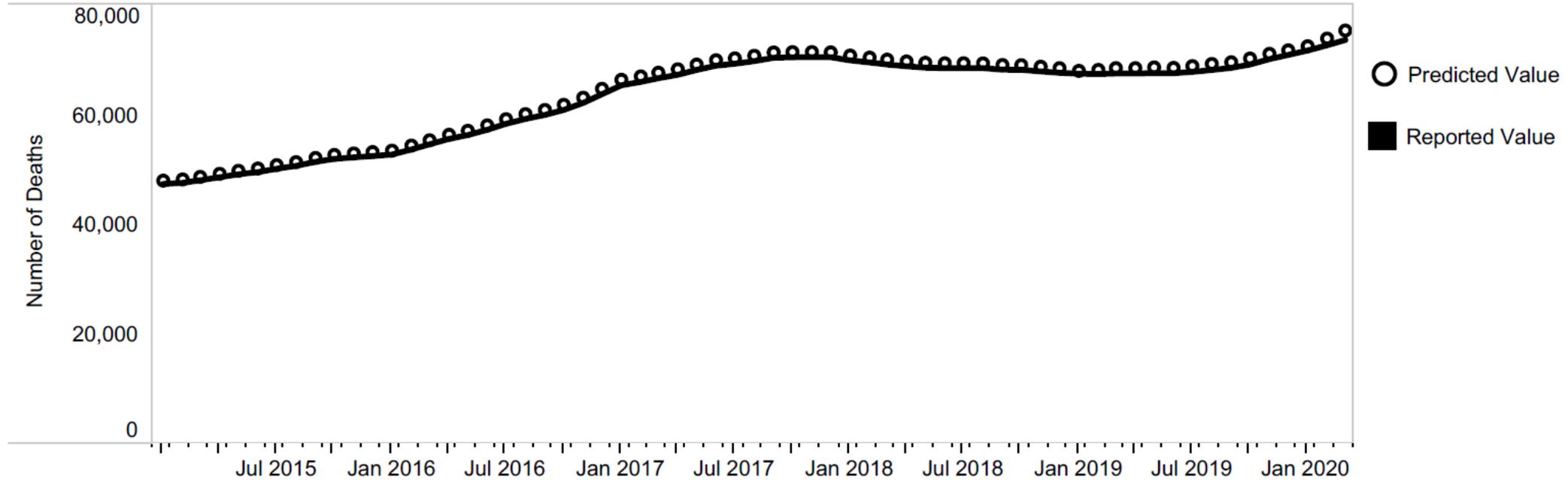
Overview

- Growing overdose mortality crisis
- Overdose prevention strategies
- Implementation challenges

Based on data available for analysis on:

10/4/2020

Figure 1a. 12 Month-ending Provisional Counts of Drug Overdose Deaths: United States



NOTES: *Reported* provisional counts for 12-month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Drug overdose deaths are often initially reported with no cause of death (pending investigation), because they require lengthy investigation, including toxicology testing. Reported provisional counts may not include all deaths that occurred during a given time period. Therefore, they should not be considered comparable with final data and are subject to change. *Predicted* provisional counts represent estimates of the number of deaths adjusted for incomplete reporting (see **Technical notes**). Deaths are classified by the reporting jurisdiction in which the death occurred. Percent change refers to the relative difference between the reported or predicted provisional numbers of deaths due to drug overdose occurring in the 12-month period ending in the month indicated compared with the 12-month period ending in the same month of the previous year. Drug overdose deaths are identified using ICD-10 underlying cause-of-death codes: X40–X44, X60–X64, X85, and Y10–Y14.

Monthly overdoses grew dramatically during the pandemic

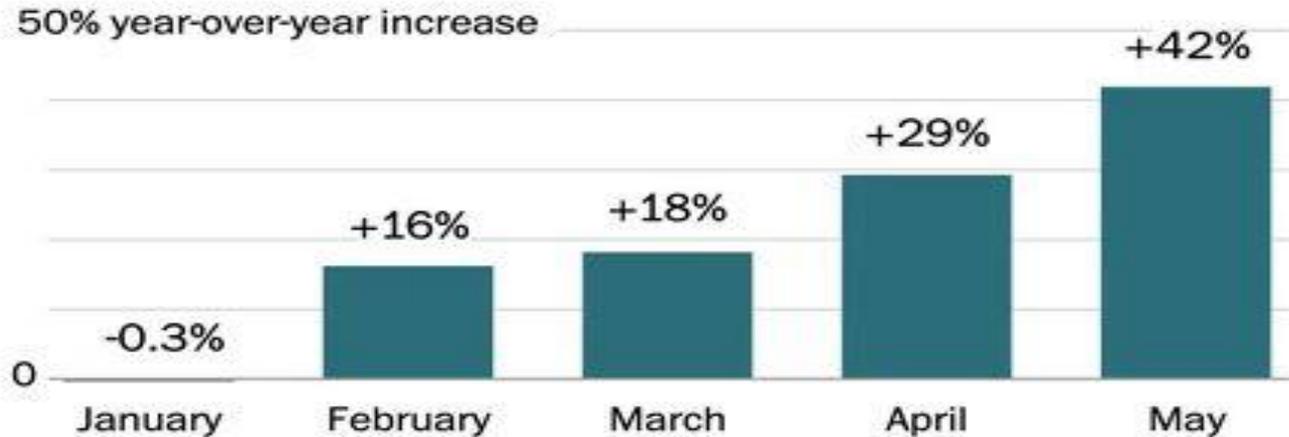
For every **10** suspected overdoses reported to ODMAP in **May 2019** ...



... **14** overdoses were reported in **May 2020**.



Overdoses increased up to 42% per month during the pandemic, as compared to the same months in 2019.



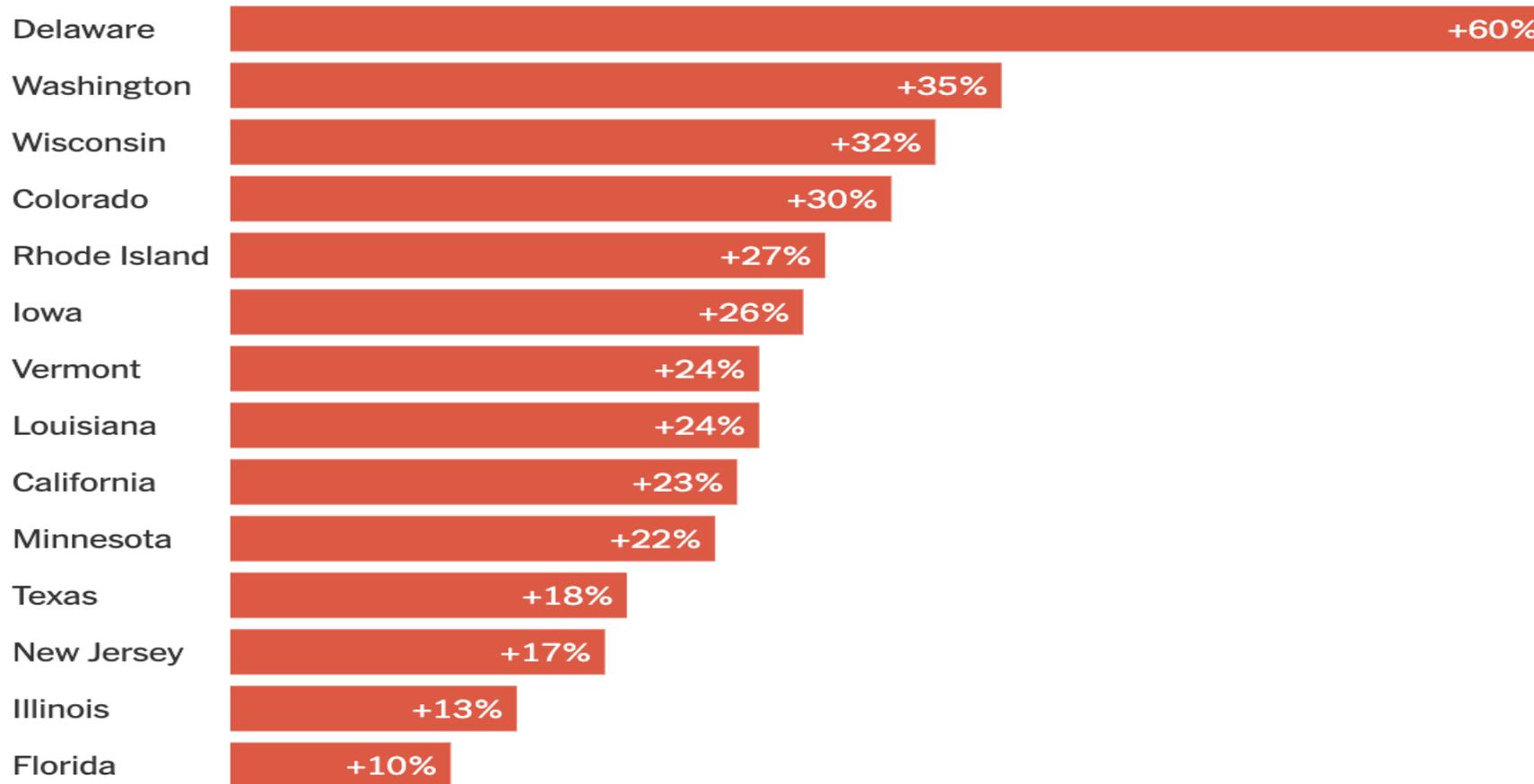
Note: Percent growth references the 1,201 agencies reporting to ODMAP by January 2019.

Source: ODMAP

ALYSSA FOWERS/THE WASHINGTON POST

Drug-related deaths have risen in 2020 in states across the country.

Increase in drug-related deaths from 2019 through the first portion of 2020.



All data is provisional. Definitions of what counts as a drug-related death vary by state. Data for Arizona, California, Florida, Minnesota, Tennessee, Texas, Washington and Wisconsin includes only a subset of counties within each state.

Source: State and local health departments, coroners and medical examiners

OD prevention strategies – Education and Naloxone distribution

- Overdose education and naloxone distribution
 - Rescue breathing
 - Naloxone dosing for reversal
 - Call 911
- Distribution through syringe service programs
- Pharmacy sales
- Prescribing from emergency departments, addiction medicine, and primary care
- Strong evidence of high acceptability and use among people who use drugs

Drug checking approaches

- Drug checking at festivals and music venues
- Distribution of fentanyl test strips
- Mass spectrometry testing of drug samples (Vancouver, Rhode Island, Chicago)
- There is emerging evidence that people adjust use practices (smaller dose, slower injection) to prevent overdose if fentanyl is present

Safe consumption sites

- Location where participants can consume drugs under supervision
 - Provision of sterile supplies and clean location to inject/use
 - “Cool down” rooms are common
 - Immediate response to potential overdose
- No reported deaths in any such facility
- In addition, strong evidence for reduced injection disease risk such as HIV/HCV

Safer supply

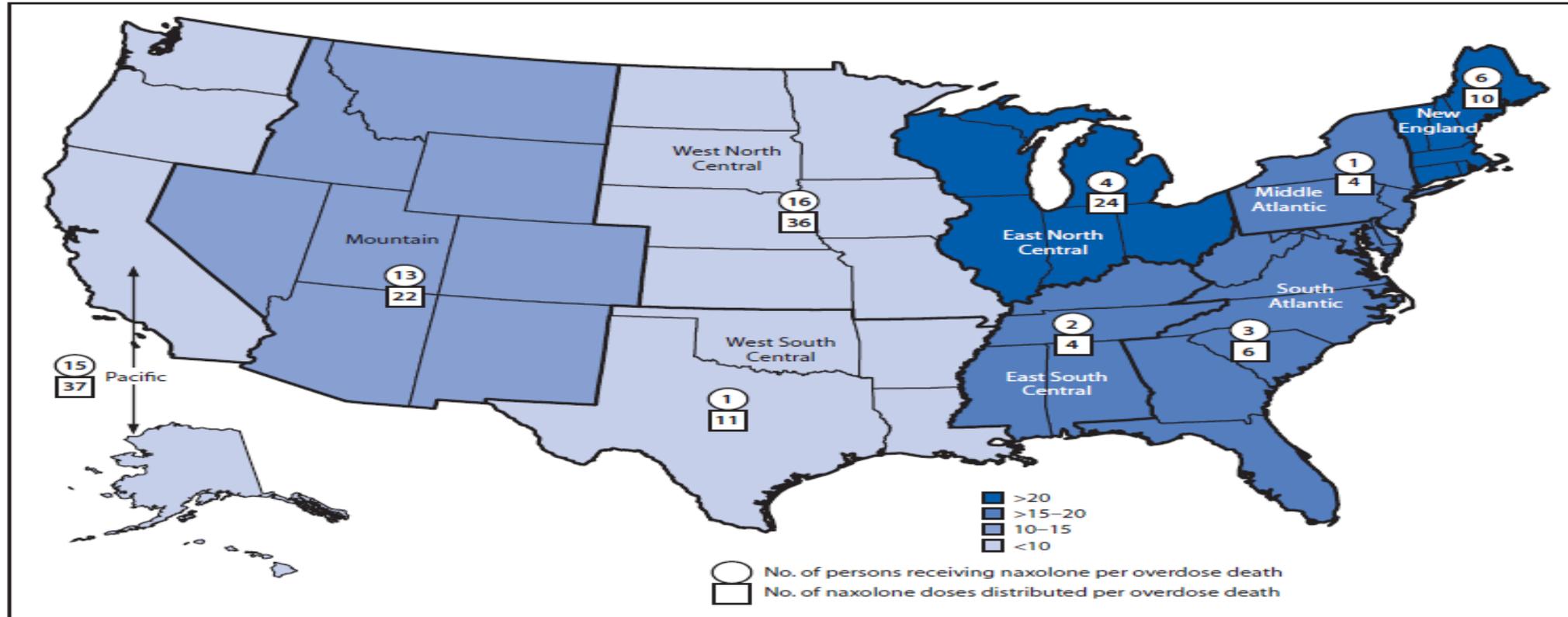
- Heroin assisted treatment – available in Switzerland, Germany, and Canada
- Deregulation of medication treatments
 - Any use of medication treatments is preferable to illicitly produced drug use

Implementation challenges

Naloxone distribution by SSPs varies by region

Morbidity and Mortality Weekly Report

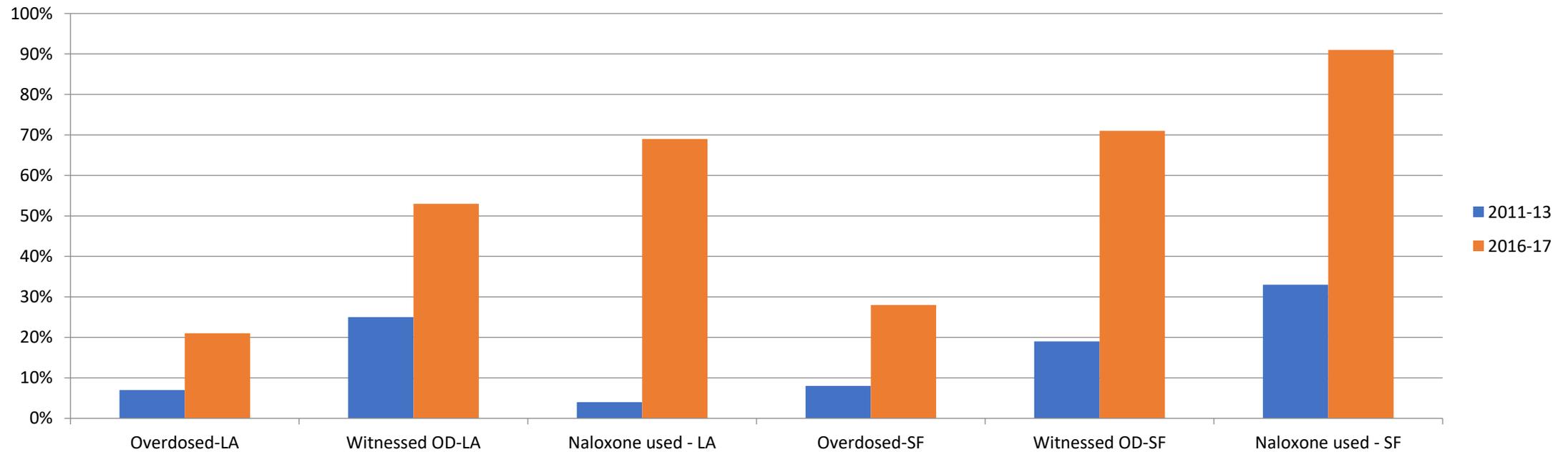
FIGURE 2. Opioid overdose deaths per 100,000 population and reach of syringe service program (SSP)-based overdose education and naloxone distribution programs,^{*,†} by U.S. Census division (N = 247 SSPs), 2019



* SSPs were asked how many people received naloxone and how many naloxone doses were distributed in the past 12 months from their program. Opioid overdose deaths and opioid overdose death rates were from 2017 National Center for Health Statistics (<https://www.cdc.gov/nchs/index.htm>) data. Data were geocoded to the census division where the SSP was based, not necessarily where the naloxone was distributed nor residence of the persons provided naloxone.

† Participating SSPs were identified by using the North America Syringe Exchange Network database.

Naloxone distribution and overdose reversals in LA & SF between 2013 and 2017



Updated from: Kral AH, Wenger L, Wheeler E, Scholar S, Casanova M, Davidson P, Dominguez Gonzalez K, Strike C, Bluthenthal RN. Trends in overdose, naloxone distribution and effective overdose prevention among PWID in two California cities, 2011-13 to 2016. 25th Harm Reduction International Conference. Montreal, Canada, May 14-17, 2017.

Fentanyl test strip uptake

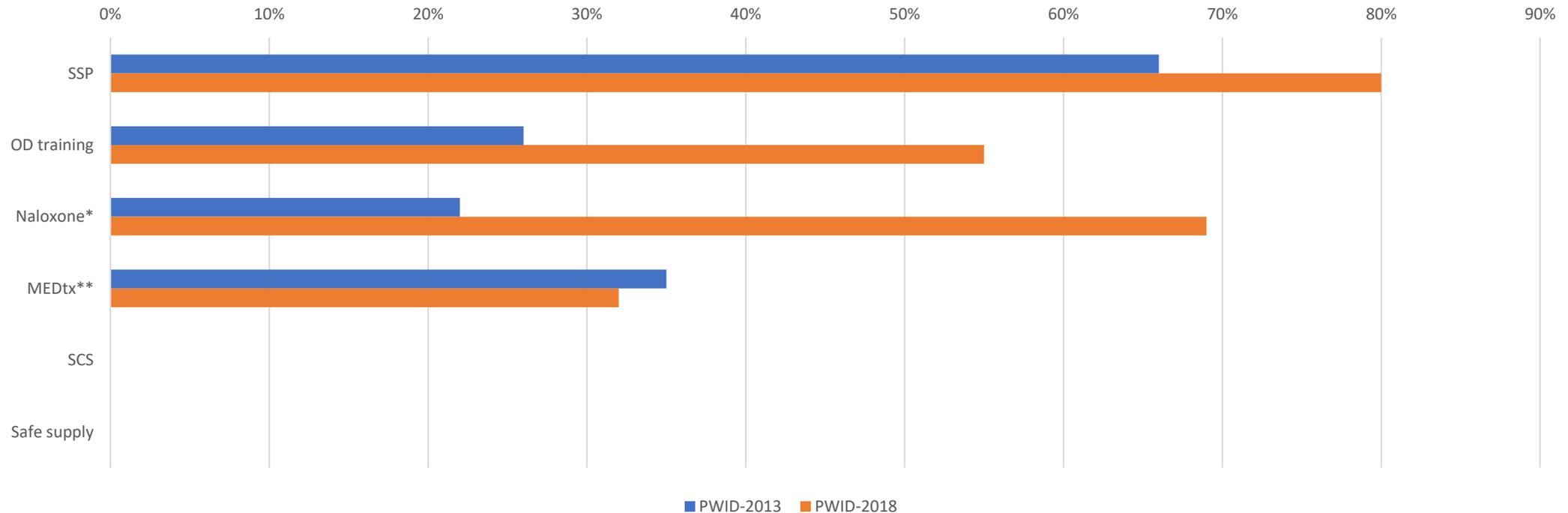
- Data from 395 PWID in SF from 2018/19 (Alex Kral, personal communication)
 - 51% (202/295) had ever used fentanyl test strips
 - 28% (109/395) had used fentanyl test strips in the last 30 days
 - Mean uses in the last 30 days = 10.2 (standard deviation=3)
 - 73% of last test were positive for fentanyl

Safe consumption sites/Safer supply

- SCS are under consideration in several US cities
- COVID-19 pandemic has loosened regulations for medication treatments
- Not aware of any plans to implement heroin-assisted treatment

Implementation gaps are significant

Utilization of OD strategies by PWID in Los Angeles, & San Francisco, 2013 v. 2018



* Ever in 2013 vs. last 6 months in 2018

** Methadone, buprenorphine treatment in the last 30 days in 2013 v. last 6 months in 2018

Conclusion

- People who use drugs are willing to use overdose prevention strategies
- Political, policy, and funding support is needed to continue positive trends of utilization for existing strategies (i.e., OEND, test strips, MEDtx)
- Political, policy and funding support is needed to **adopt novel, evidence-based approaches** (i.e., safe consumption sites & safer supply)

Acknowledgements



NIDA grant numbers R01DA027689 (MPI: Bluthenthal/Kral), R01DA038965 (MPI: Bluthenthal/Kral), R21DA046703 (PI: Lambdin)



Study participants



Community collaborators



Investigators: Alex H. Kral, Ph.D., Barrot Lambdin, Ph.D.



Staff and student volunteers