



CIAO Time Presents:

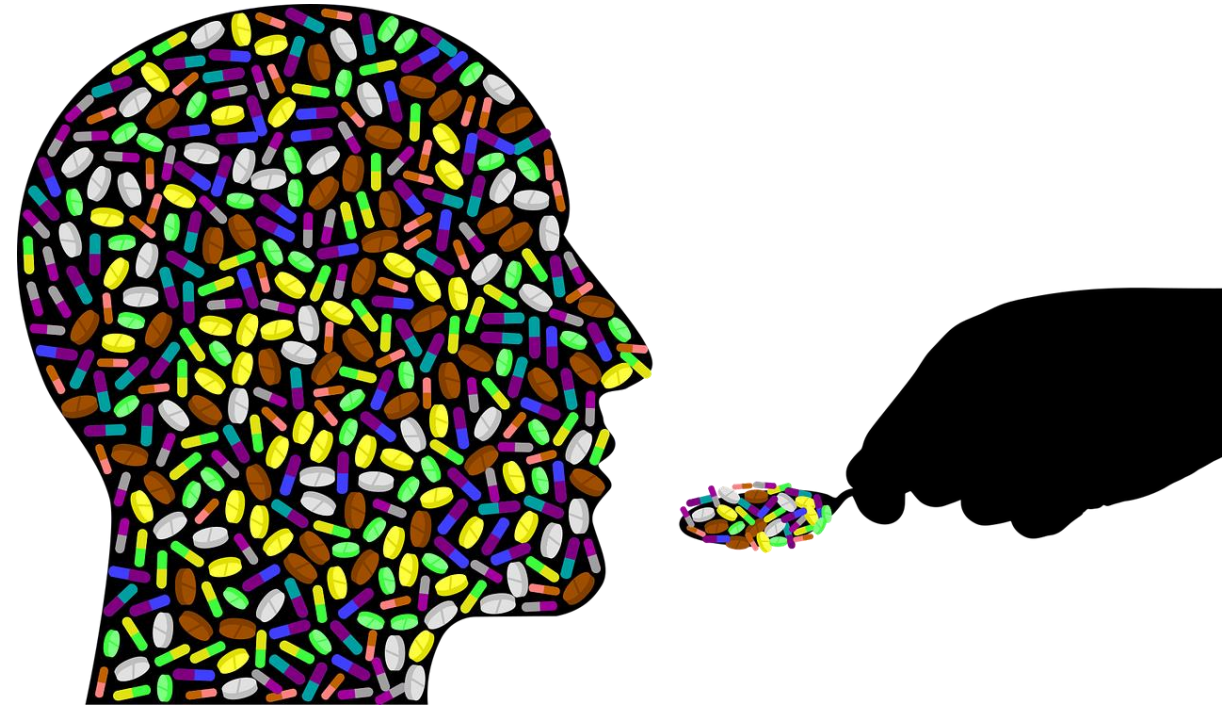
Fentanyl

The Center for Innovation in Academic Detailing on Opioids
San Francisco Department of Public Health

Agenda

1. Introduction to CIAO
2. Review of Fentanyl and Impact of Interventions
3. Academic Detailing Demonstration

* *Please post questions in the **Chat Box***



Our Team



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The Center for Innovation in Academic Detailing on Opioids



Our vision: We aim to decrease opioid-related morbidity and mortality by promoting balanced approaches to opioid management.

Our mission: We collaborate with healthcare providers to improve opioid and chronic pain-related care through innovative training and technical assistance services.



CENTER FOR INNOVATION
IN ACADEMIC DETAILING
ON OPIOIDS

HOME

ABOUT

SERVICES

RESOURCES

CONTACT US

Q SEARCH...

Our materials



Opioids and Chronic Pain: A guide for primary care providers (book)

[California edition](#)
[National Edition](#)



Managing Chronic Non-Cancer Pain (poster)

[California edition](#)
[National Edition](#)



[CIAO's Academic Detailing and Technical Assistance Services \(PDF\)](#)



[California Pharmacists and Furnishing Naloxone: What you need to know \(PDF\)](#)

NATIONAL EDITION

Opioids and Chronic Pain

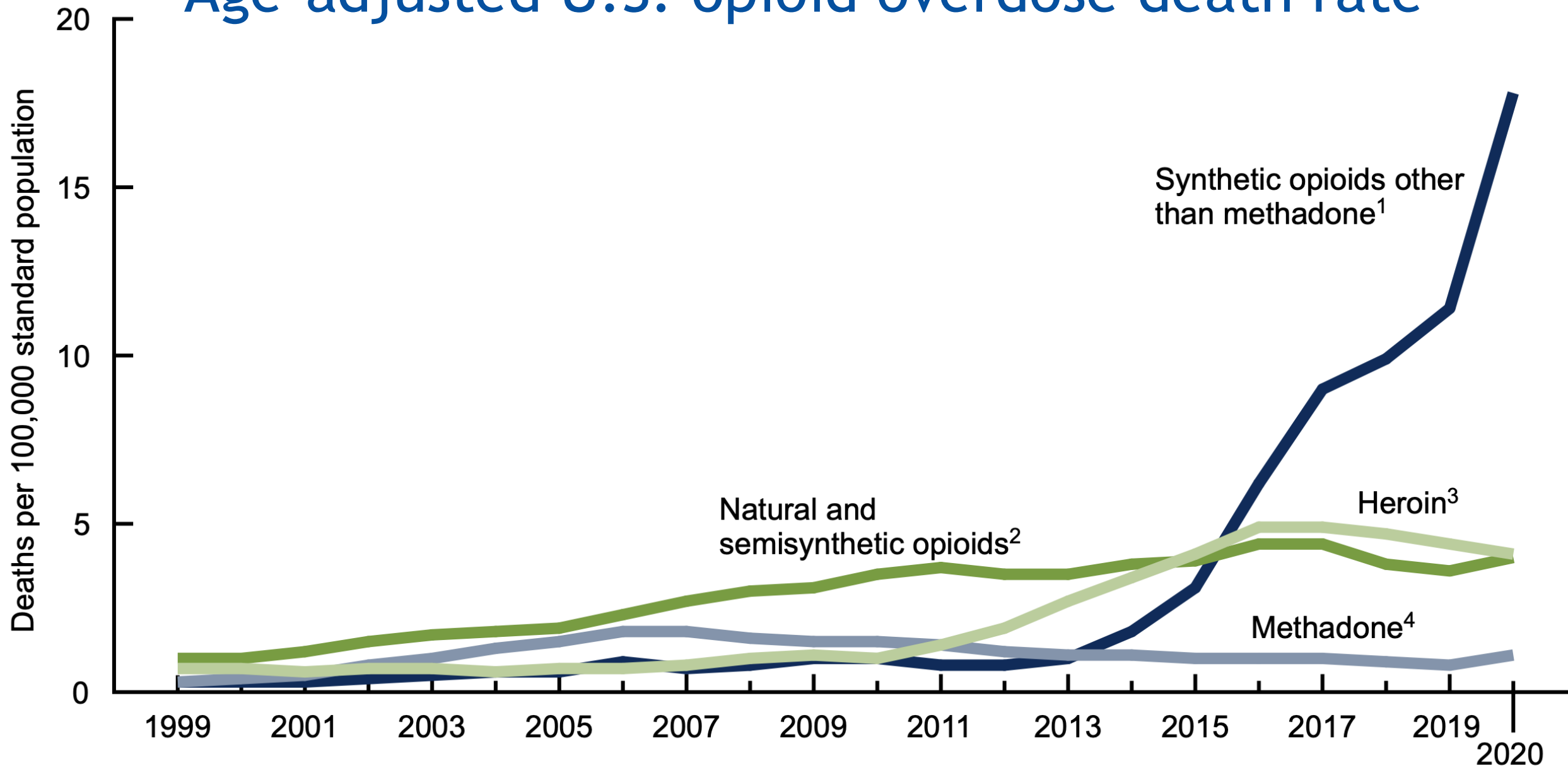
A GUIDE FOR PRIMARY CARE PROVIDERS



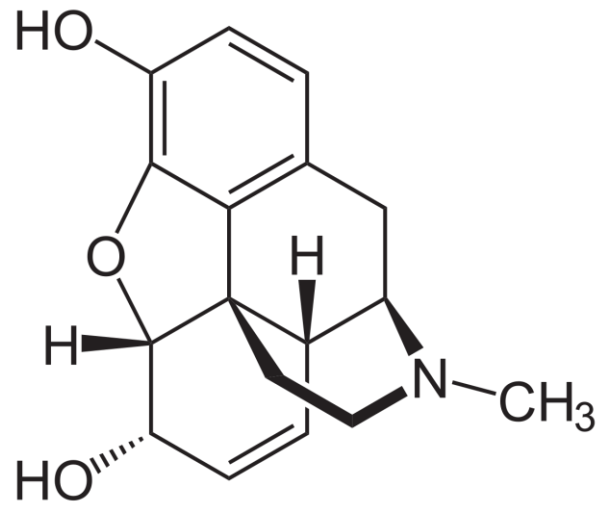
View more of our academic detailing materials at
www.ciaosf.org/our-materials

First Poll

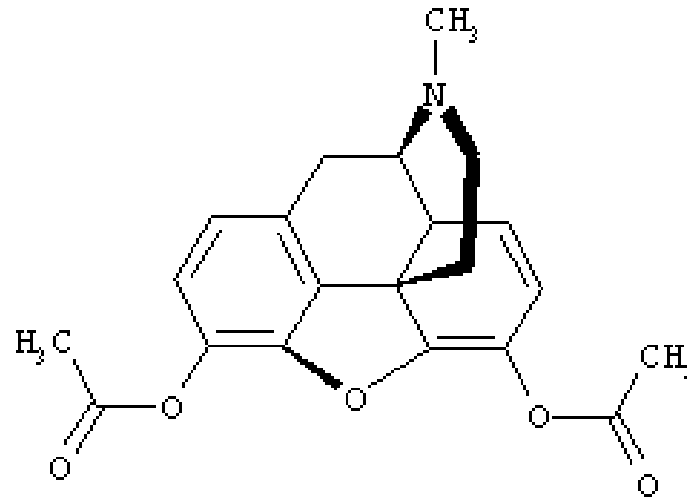
Age-adjusted U.S. opioid overdose death rate



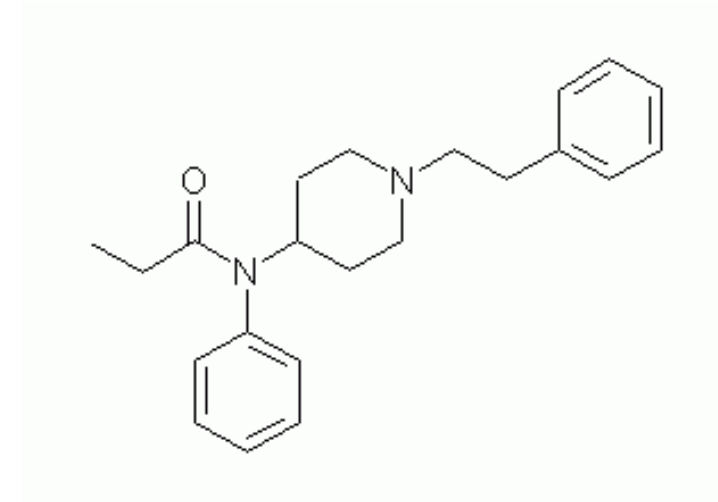
Morphine



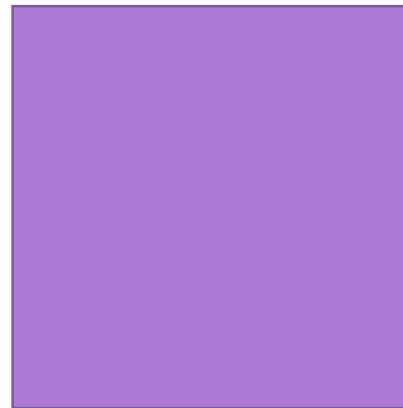
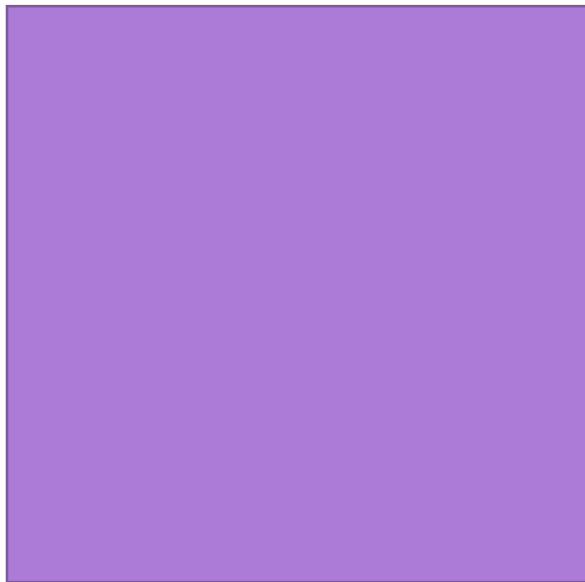
Heroin



Fentanyl



Amount
needed
for similar
effect

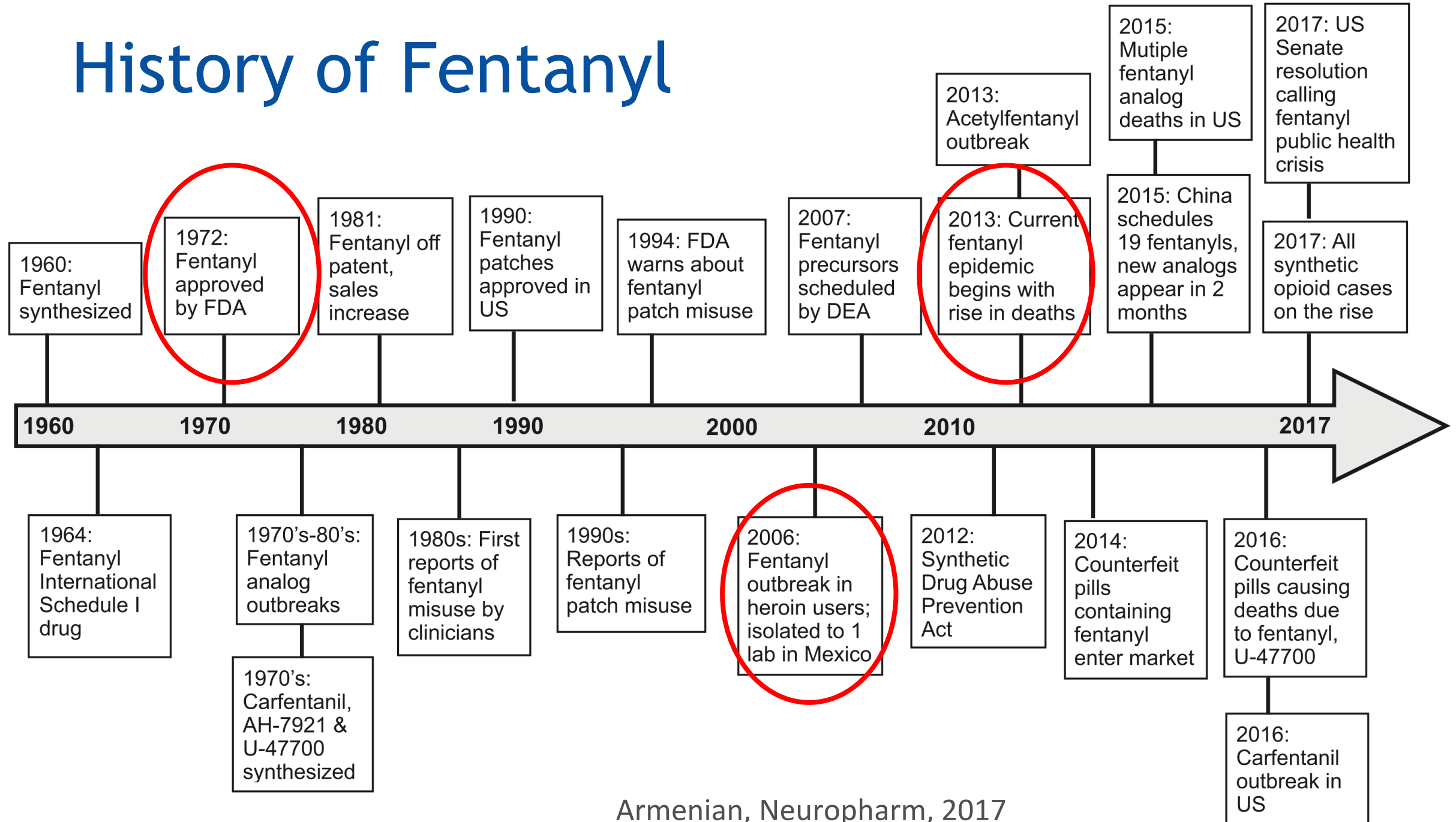


Analogues

- ~ 5x more potent than heroin
 - Acetylfentanyl
 - Lasts longer (4-5h)
 - Common
 - Butyrfentanyl
- ~50x more potent than fentanyl
 - Carfentanil
 - Veterinary anesthetic
 - Rare (results in short-lived spike in deaths)

Second Poll

History of Fentanyl



Appearance of Fentanyl

Eastern US:

- Usually mixed with heroin
- Ranging from white to brown powder
- Sometimes stamped as pills

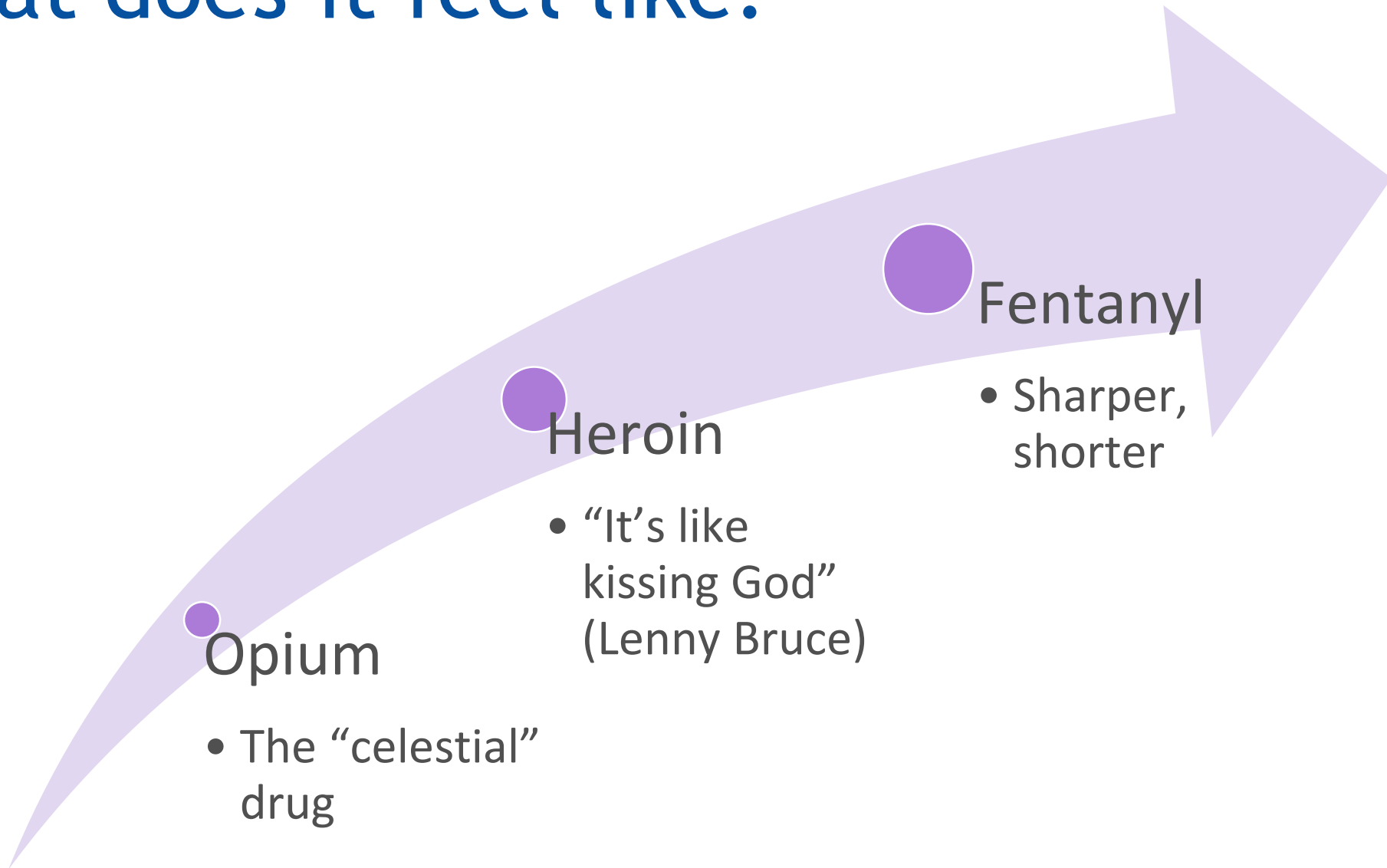


Western US:

- Heroin is “black tar” and rarely mixed with fentanyl
- Off-white powder, crystals, etc
- Sometimes stamped as pills



What does it feel like?



How is it used?

- Medicinal: dissolve patch
- Injection: most common nationally
- Smoking/chasing
 - Common in San Francisco
 - Fewer injection-related consequences
 - May not reduce overdose risk



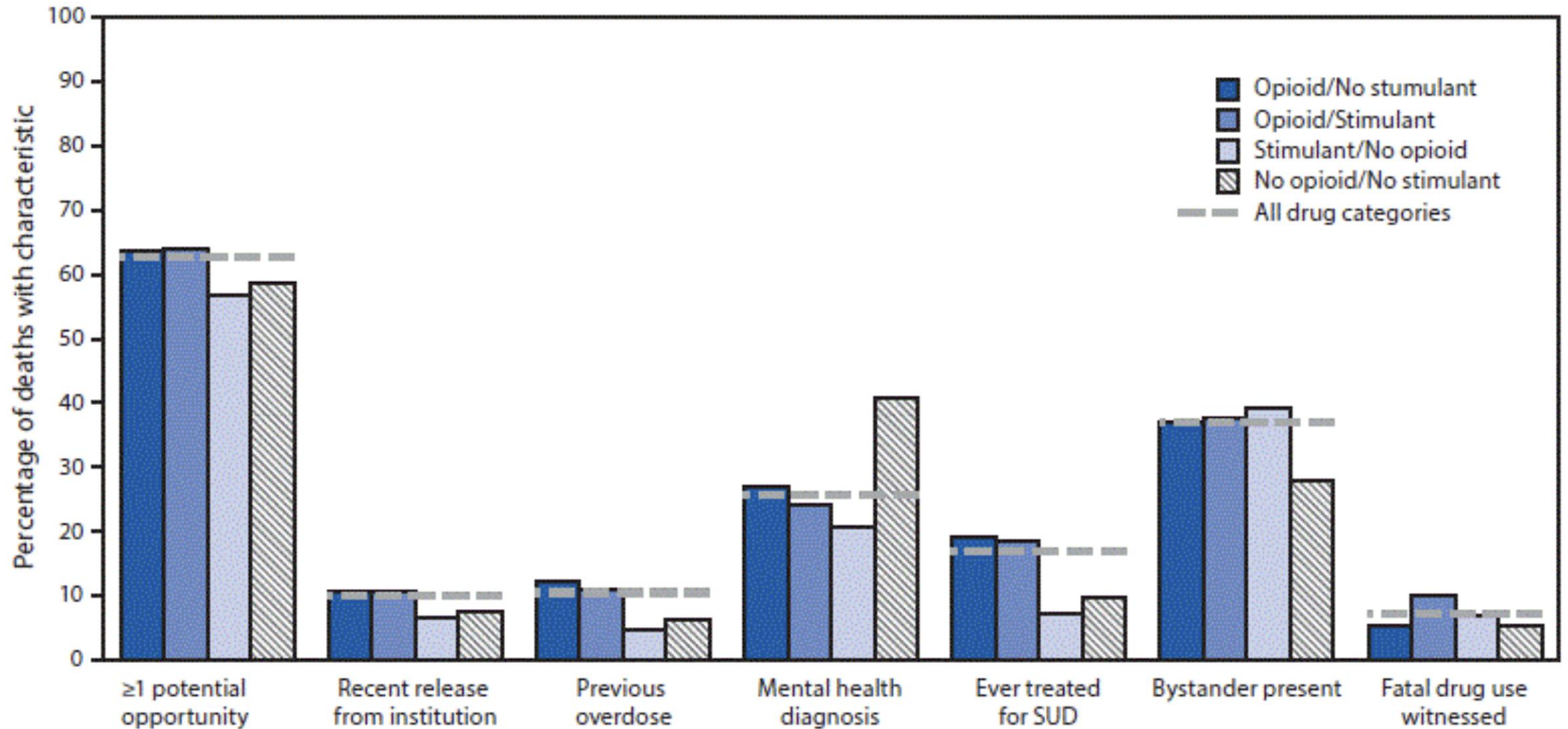
Third Poll

Can someone overdose from touching fentanyl?

- Simple answer: **No**
- More complex answer:
 - With **massive** exposure (~ ½ kilogram), some forms of fentanyl might slowly (e.g., over 10 hours of continuous exposure) penetrate the dermis
 - But isn't there a transdermal fentanyl patch??
 - This is specially formulated to penetrate dermis and takes many hours to do so
 - Even carfentanil exposure cannot result in rapid, significant toxicity
- Most law enforcement believe any contact can be deadly, resulting in worsened stigma



Potential Opportunities for Intervention, Jan-Jun 2019



Rx Opioids → Heroin → Fentanyl

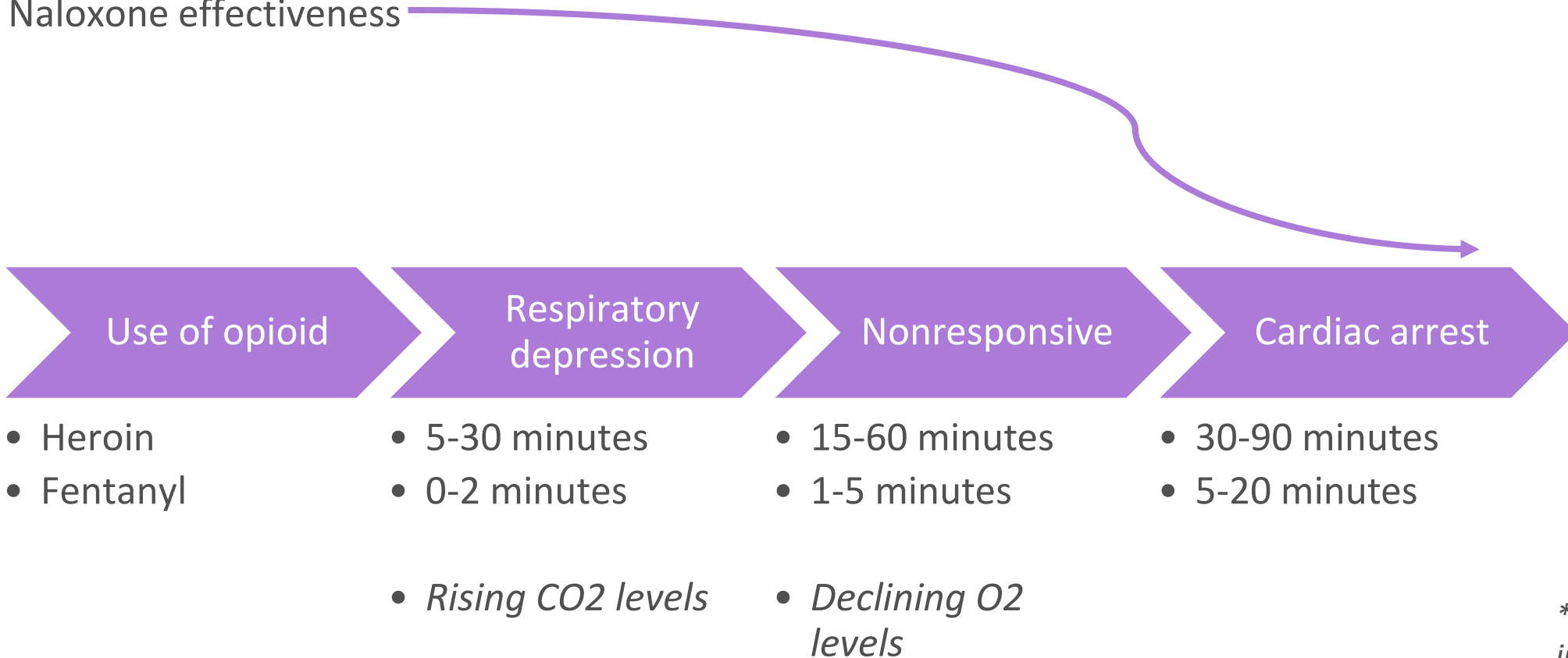
	Rx Opioids	Heroin	Fentanyl
Relative risk of overdose event	1	4	9.2
Relative risk of severe respiratory depression after overdose	1	1	2

High risk of overdose

High risk of death when overdose occurs

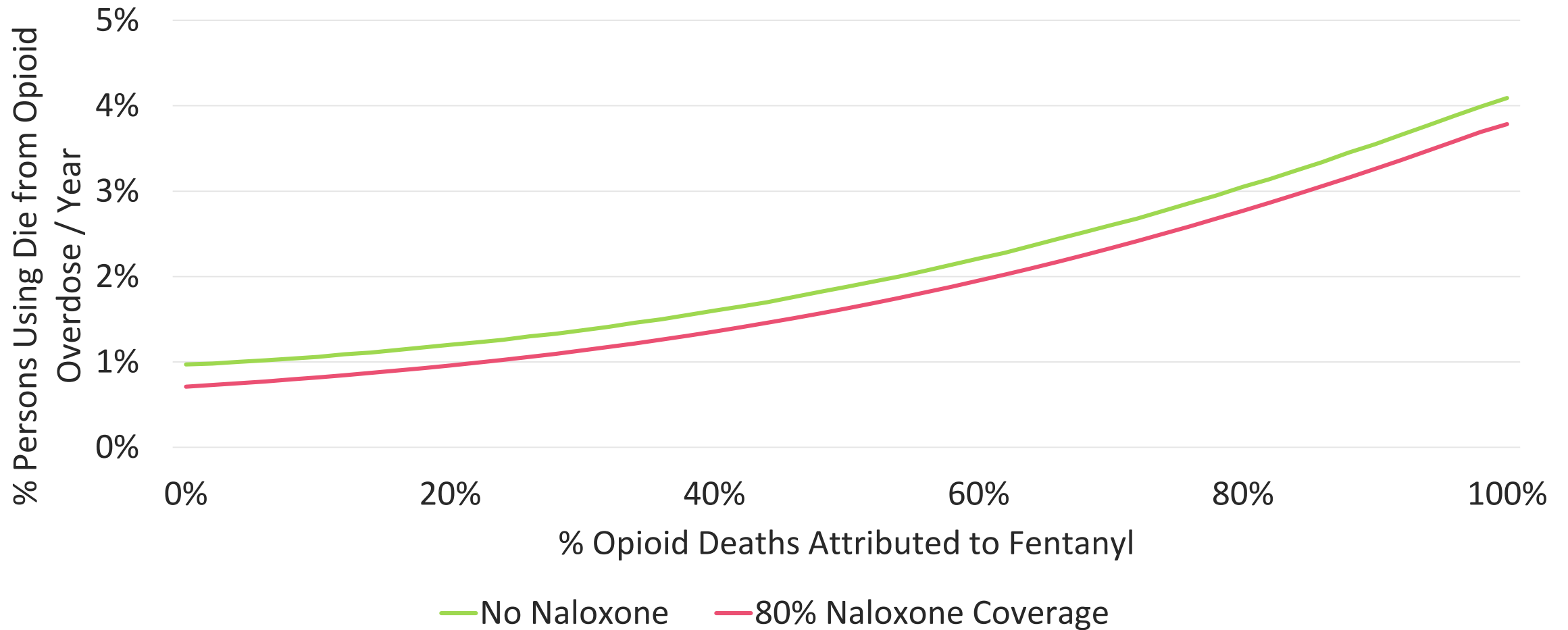
Window for Bystander Response

Naloxone effectiveness



**Times are estimates intended to illustrate magnitude of difference*

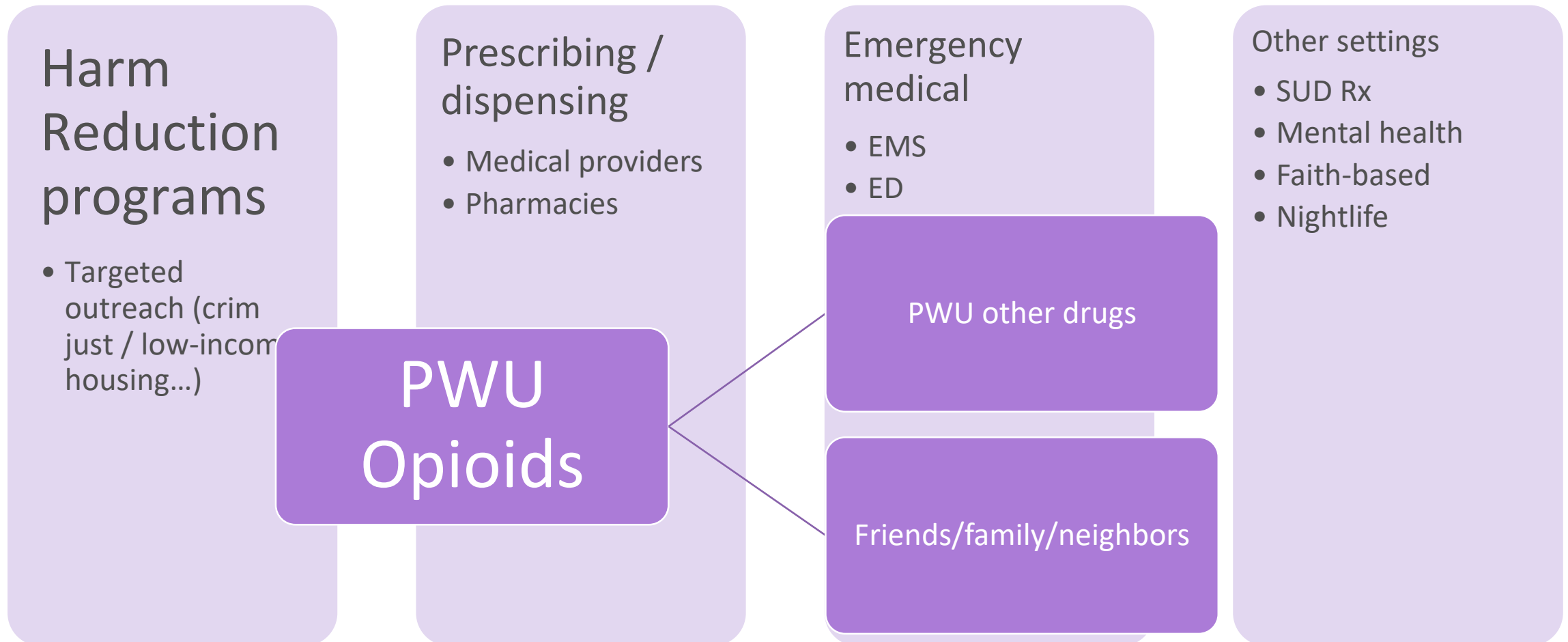
Predicted Opioid Overdose Death Rate by Presence of Fentanyl and Naloxone Access



Strategies

- Naloxone coverage
- MOUD access
- Behavioral interventions
- Safe spaces
- Safe supply
- Drug checking
- Structural/social determinants (longer term)

Naloxone Coverage



MOUD Access

- Increase availability
- Low-threshold services
- Novel initiation approaches

MOUD Access

- Increase availability
- Low-threshold services
- Novel initiation approaches
 - Higher dose methadone
 - Overlap initiation for buprenorphine
 - Macro-dosing (inpatient)
 - Micro-dosing (outpatient)

Rapid micro- dosing protocol

Day 1

- 0.5mg SL Bup q6h
- Total dose 2mg
- Continue full agonist



Day 2

- 1mg SL Bup q6h
- Total dose 4mg
- Continue full agonist



Day 3

- 2mg SL Bup q6h
- Total dose 8mg
- Option to reduce full agonist



Day 4

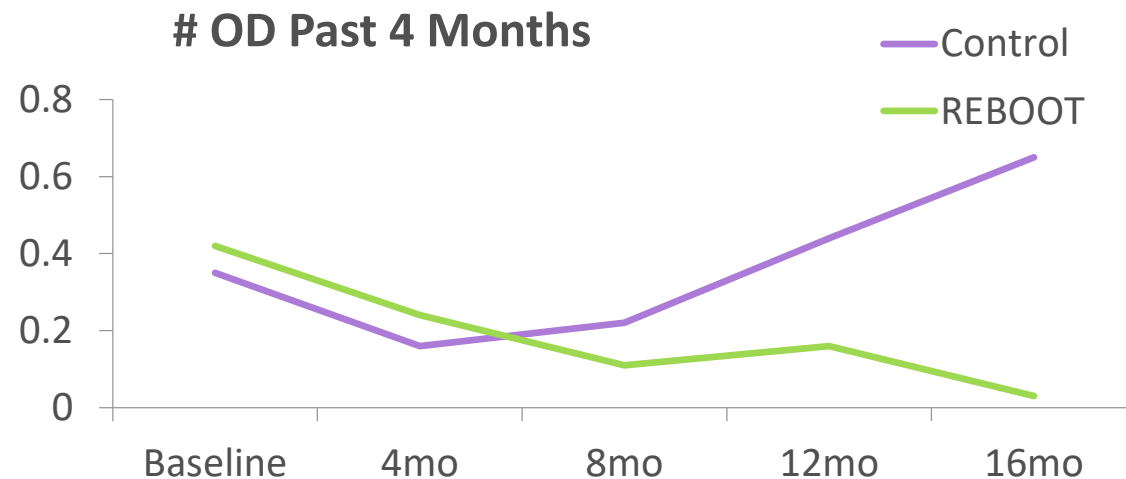
- 12mg SL Bup qAM
- F/U with provider
- Might reduce/stop full agonist

Drop-In Programs

- Spaces for people to be
 - Traditional drop-in programs
- Sobering spaces
 - Boston's "The Spot"
- Consumption spaces
 - Vancouver's Insite

Behavioral interventions

- Public messaging / education
- Contingency management
- Non-injection routes of administration?
- Counseling

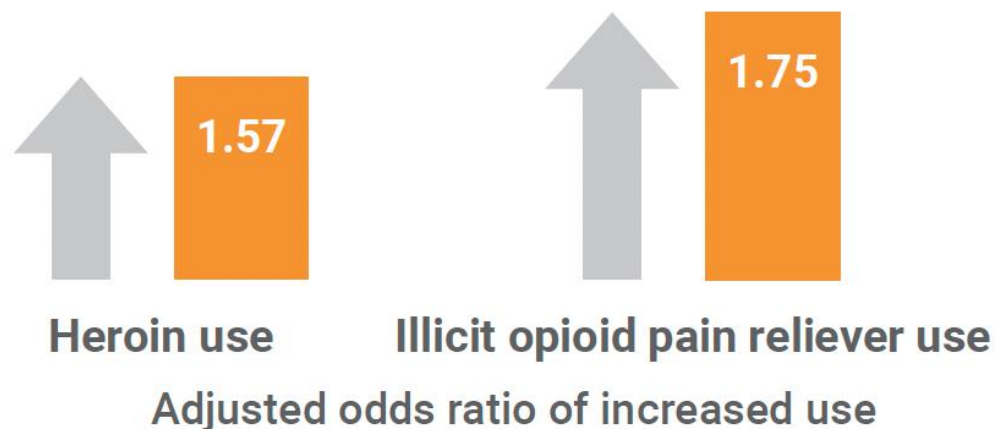


Safe Supply

- Providing safe opioids
 - Agonist treatment
 - Innovative agonist treatments (e.g. morphine, hydromorphone, heroin)
 - Easier access to the supply (e.g. vending machines)
- Adjusting prescribing reforms



i. Increased illicit opioid use²

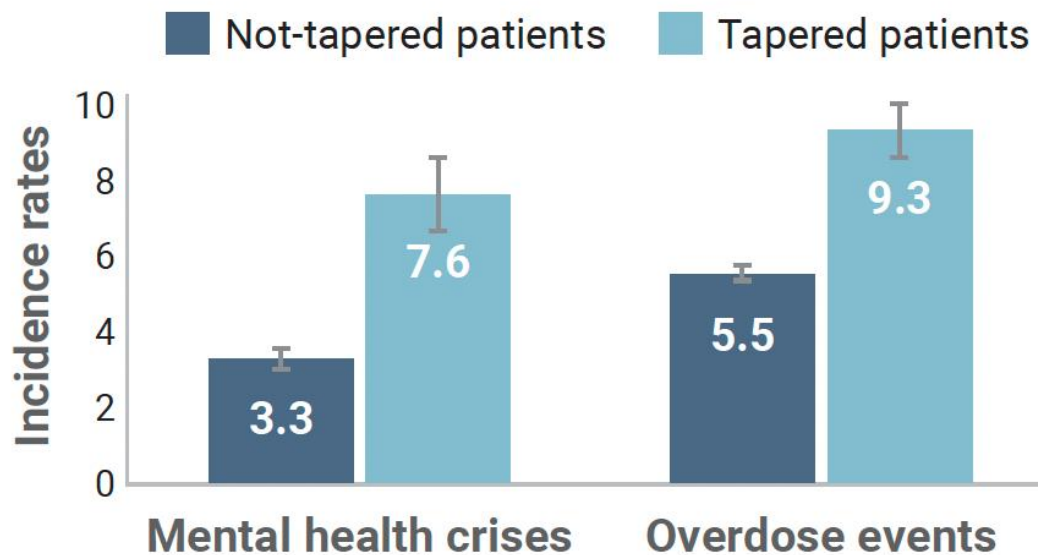


ii. Increased emergency department visits and hospitalizations for opioid-related reasons³

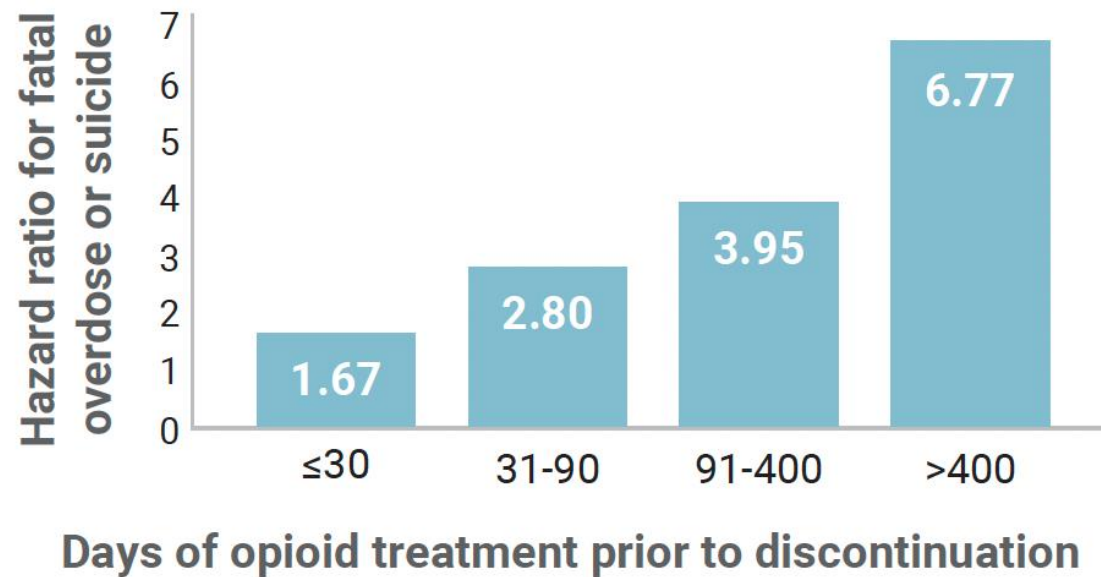


Each additional day of taper was associated with a 1% reduction in the likelihood of an opioid-related event.

iii. Increased mental health crises and overdose events.⁴



iv. Increased death from suicide or overdose.⁵



Drug Checking

- Fentanyl test strips
 - False positives with methamphetamine, MDMA, and diphenhydramine
 - Need better technology!
- Mass spectroscopy or Fourier-transformed infrared spectroscopy
 - Europe
 - Canada
 - Chicago
- Affects behavioral intent; uncertain impact on behavior

Structural / Social Determinants

- “Deaths of despair”
 - Poverty, income inequality, unemployment
 - Lack of access to social capital
 - Social isolation
- Structural racism

Dasgupta, et al., Addressing long overdue social and structural determinants of the opioid epidemic. *Drug and Alc Dep.* 2021. Volume 222.

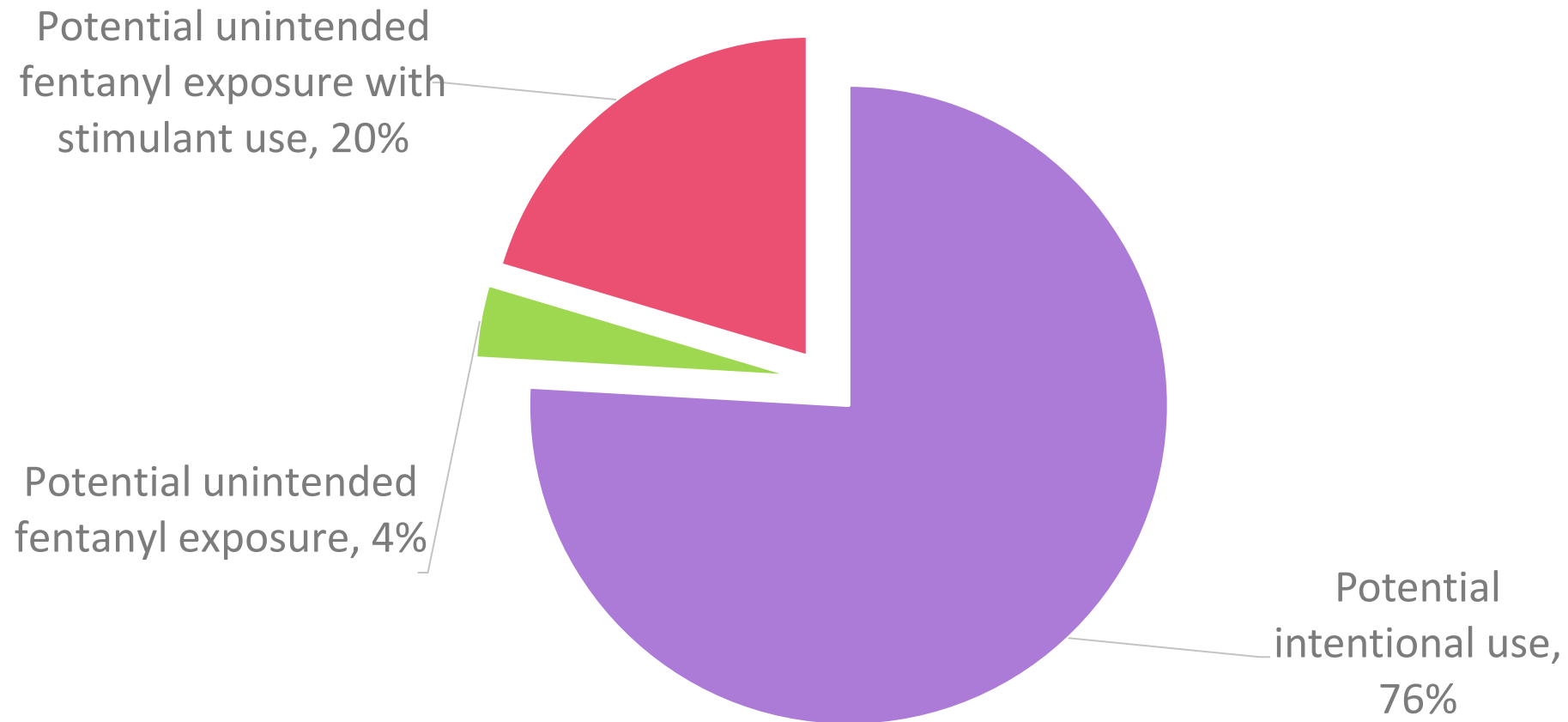
Why are most fentanyl deaths attributed to both stimulants and fentanyl?

- Are these really “fentanyl” deaths?
- How often is the fentanyl exposure unintentional?

Arguments for Intentional Exposure	Arguments for Unintentional Exposure
Co-use of stimulants and opioids is longstanding and common	Multiple case reports of people intending to use stimulants who died from fentanyl overdose
Stimulant-opioid decedents prior to fentanyl appeared demographically similar to opioid decedents	Fentanyl rarely mixed with heroin in western US, so unintentional exposure may be more common among people who use non-opioid drugs
People using fentanyl may use more stimulants due to potent sedating effects of fentanyl	Fentanyl appears similar to various forms of methamphetamine and cocaine
<i>Fentanyl was present in 5.9% of samples thought to be methamphetamine in Vancouver</i>	

Is Fentanyl Use Intentional in Overdose Deaths?

Preliminary data from San Francisco



Takeaways

- Fentanyl is much more potent than other opioids
- Fentanyl is here to stay
- Our interventions still work, but we still see up to a 4-fold increase in mortality
- OUD treatment is more difficult due to higher tolerance
- We must be bold





Academic Detailing Mock Session

What to watch for...

Steps of a Visit

Introduction



Needs Assessment



Key Messages/Benefits



Handling Objections



Summary/Close Visit

Thank you!

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SAN FRANCISCO DEPARTMENT
OF PUBLIC HEALTH



CENTER FOR INNOVATION
IN ACADEMIC DETAILING
ON OPIOIDS



**Centers for Disease
Control and Prevention**
OD2A / P2P