

Harm Prevention for People Who Inject Drugs (PWID)

Christian Lowrie, DO and Paul Bruner, DO

Notable Cases

- 62 y/o WM at Urgent Care, recovered heroin addict with low back strain. Uh oh, here we go. . .
- “I know you obviously can’t give me narcotic, but. . .”
- My defenses went down, legitimate case, treated with NSAID.
- Affable patient, so I asked, “What is it that made heroin so addictive to you?”
- His most excellent answer

Another Notable Case

- 23 y/o WM (I had treated since he was 17) heroin addict in my office for an ER follow-up for I and D of forearm abscess at his usual injection site. Site was healing reasonably well.
- I acted adequately to address the infection, re-dressed the wound, assured that he would finish the Bactrim DS
- I did well. . . Right?

However. . .

- I remember feeling very uncomfortable due to the many aspects of the “800 pound gorilla” in the room that day.
- I addressed how he shouldn’t use, the pain he was putting his parents through, the many run-ins with the law (now in prison at age 30).
- I didn’t address the safety aspects of his use, didn’t delve into why he was addicted, and didn’t exhibit compassion.
- He obviously felt the same discomfort, and never returned to see me, although his family still does.



A New Approach Needed?

- “Since you use. . .”
- Gain knowledge of the culture and process of drug use
- Empathize for the power of the addiction, and why they are seeking to use. Show compassion.
- Overcome personal biases
- Advocate for their safety

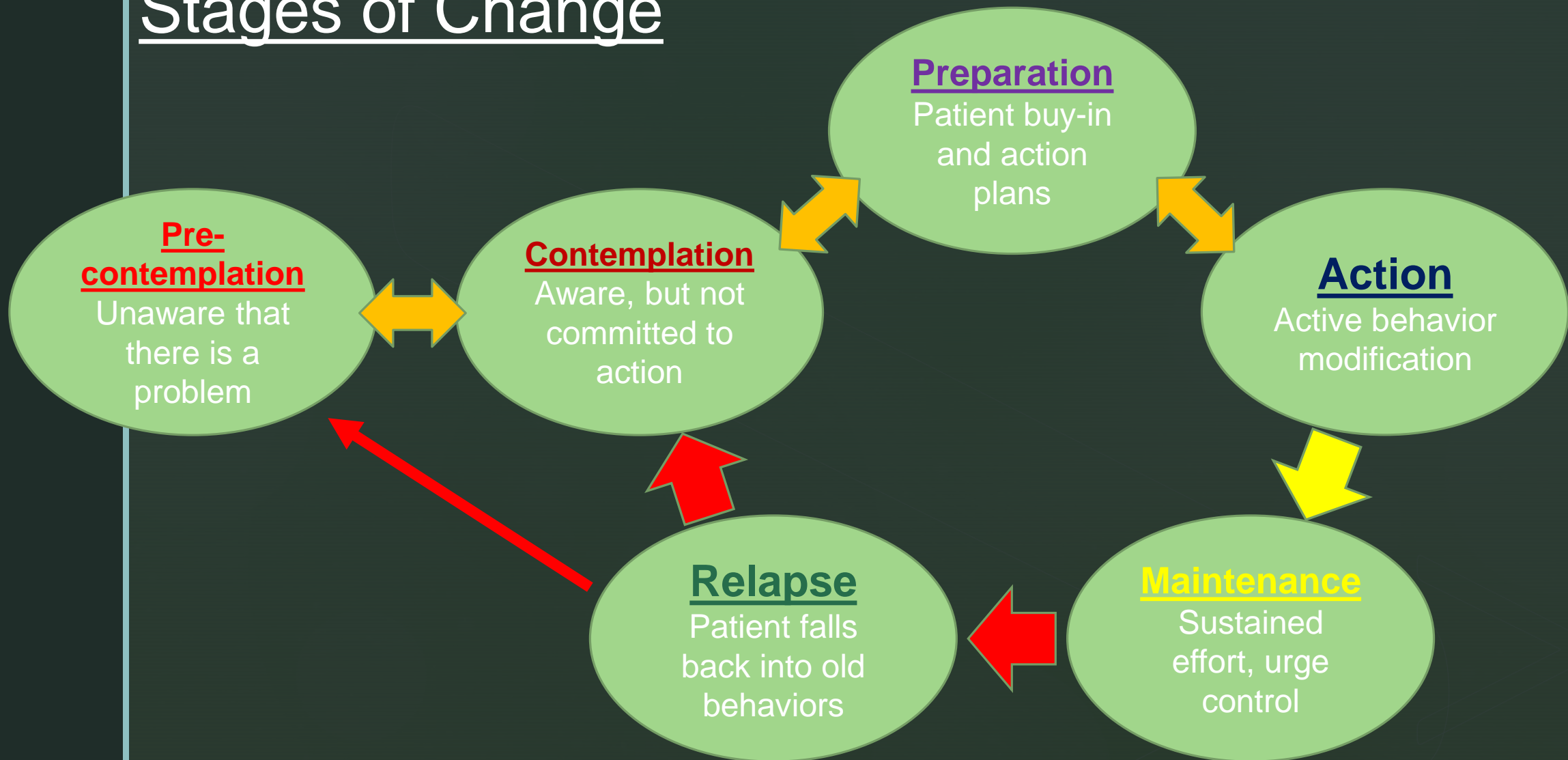
Thoughts None of Us Have Had

- They are probably just going to ask for controlled substances
- They did it to themselves
- It isn't worth the time
- They have other medical issues
- They might get annoyed or upset
- I would rather just not deal with it right now
- They are all difficult patients

IDEOLOGY OF HARM PREVENTION

- If a patient is not ready to change, how can we minimize the damage that they can do to themselves?
- How can we enable them to use drugs as safely as possible?
- Can we buy them time, and keep them out of the hospital, until they are ready to change.

Stages of Change¹

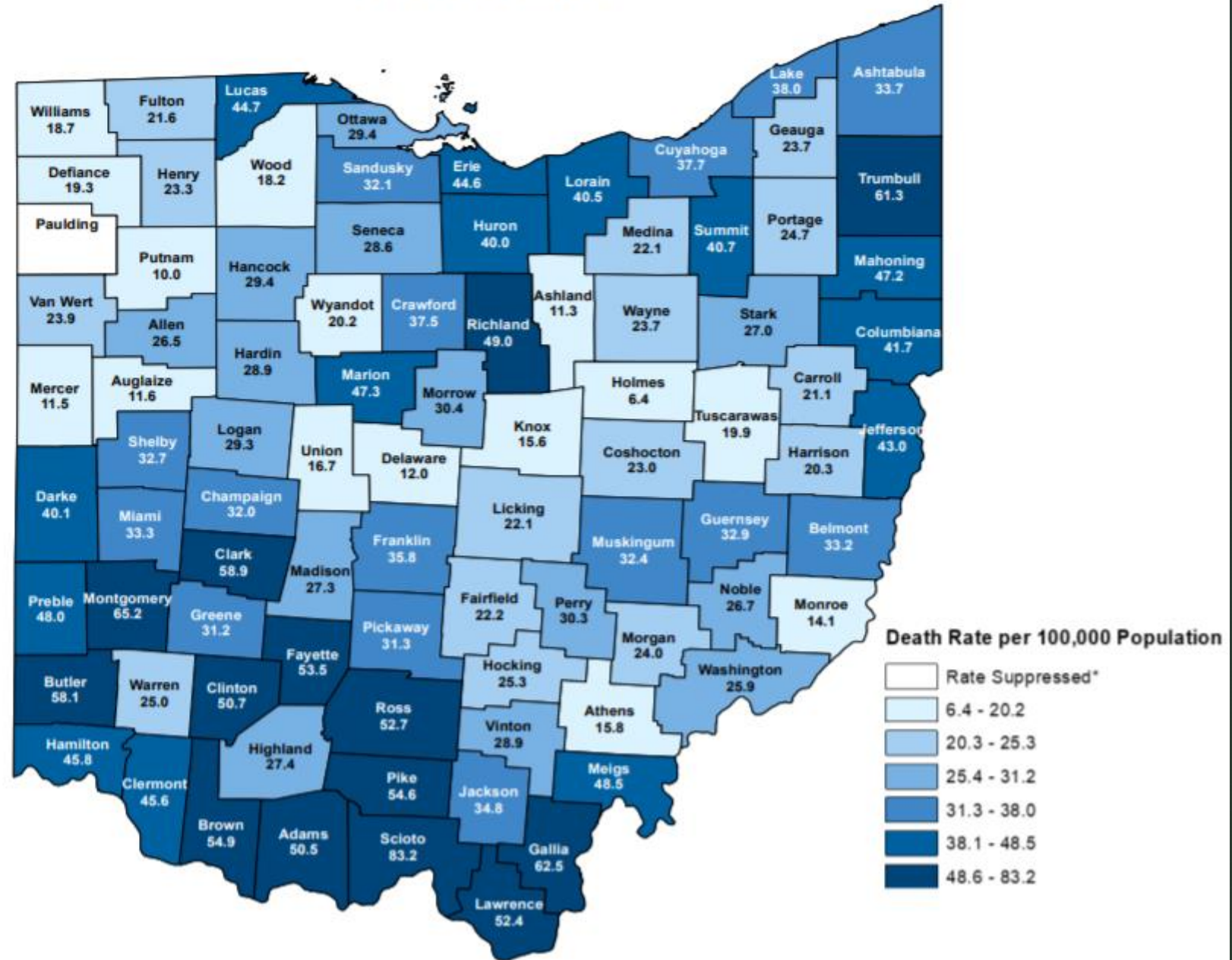




OBJECTIVES

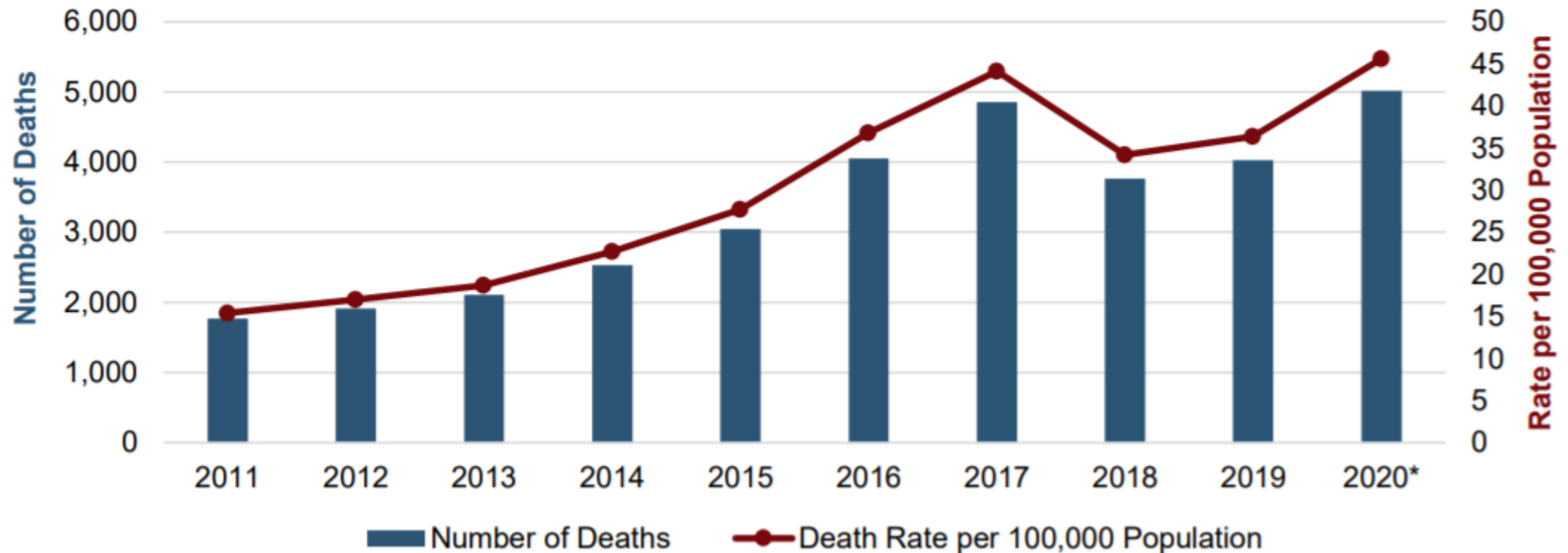
- OVERDOSES IN OHIO AND THE US
 - RISE OF FENTANYL
- ADDICTION AS A HEALTHCARE PROBLEM
- HARM PREVENTION
 - KNOW YOUR ROLE
 - KNOW YOUR PATIENT
 - PROMOTE HEALTHCARE UTILIZATION
- SAFER IV DRUG USE

Figure 8. Average Age-Adjusted Rate of Unintentional Drug Overdose Deaths by County, Ohio, 2015-2020*²



Annual Trends

Figure 7. Number and Age-Adjusted Rate of Unintentional Drug Overdose Deaths by Year, Ohio, 2011-2020*²



- In 2020, 5,018 Ohioans died from unintentional drug overdoses, which was a 25% increase over the number of overdose deaths in 2019.
- From 2019 to 2020, the overdose death rate also increased by 25% to a rate of 45.6 deaths per 100,000 population.

DAVE CHAPELLE ON THE OPIOID CRISIS IN OHIO



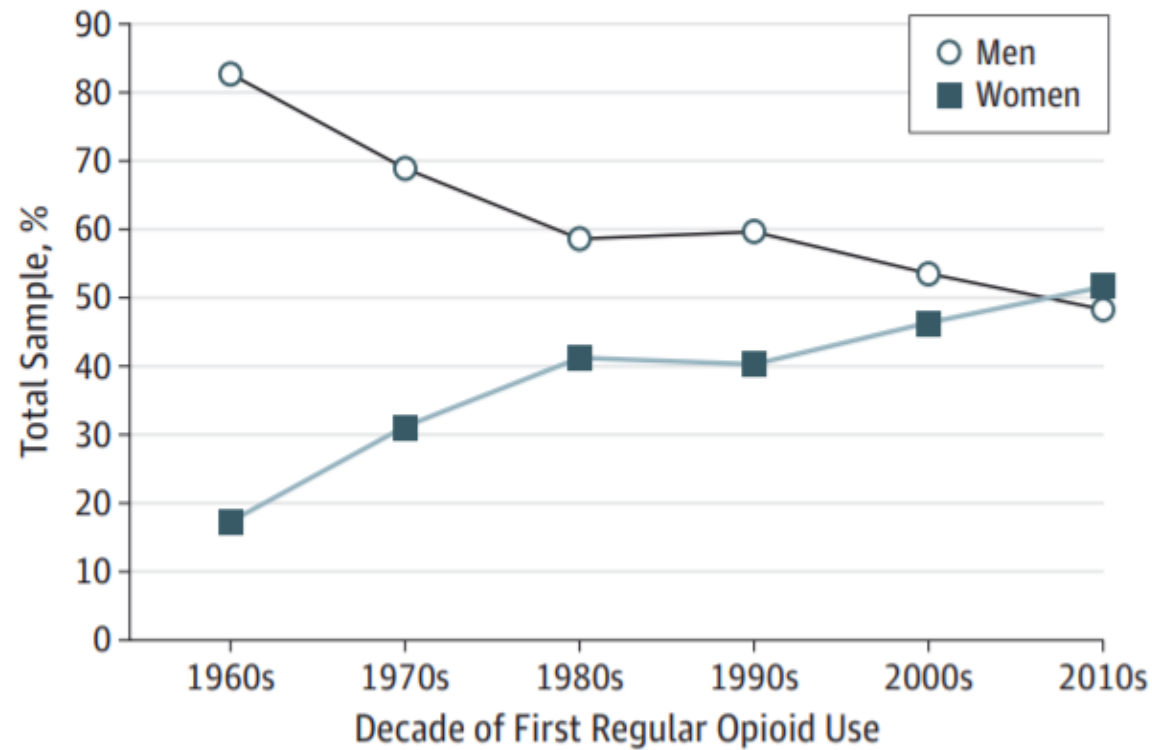
The Changing Face of Heroin Use in the United States

A Retrospective Analysis of the Past 50 Years

Theodore J. Cicero, PhD; Matthew S. Ellis, MPE; Hilary L. Surratt, PhD; Steven P. Kurtz, PhD

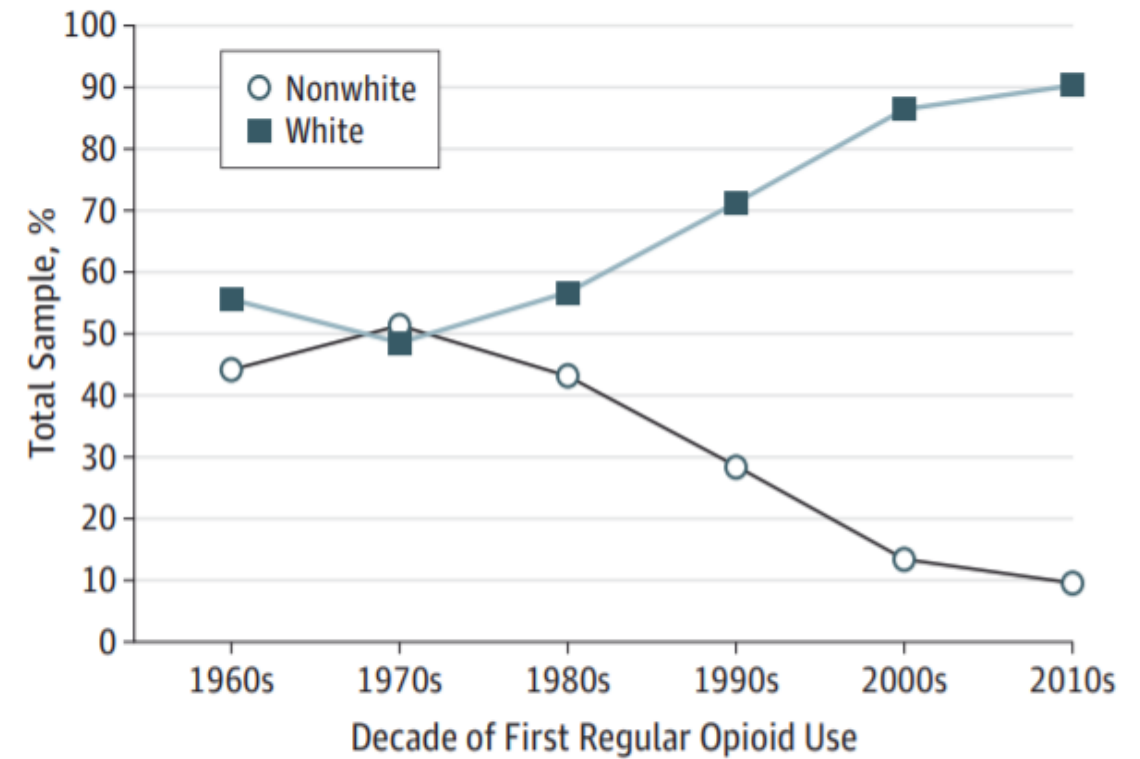
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Figure 2. Sex Distribution of Respondents Expressed as Percentage of the Total Sample



Data are plotted as a function of decade in which respondents initiated their opioid abuse.

Figure 3. Racial Distribution of Respondents Expressed as Percentage of the Total Sample of Heroin Users



Data are plotted as a function of decade in which respondents initiated their opioid abuse.

Figure 11. Number of Unintentional Drug Overdose Deaths by Race/Ethnicity, Ohio, 2015-2020*²

■ 2015 ■ 2016 ■ 2017 ■ 2018 ■ 2019 ■ 2020*

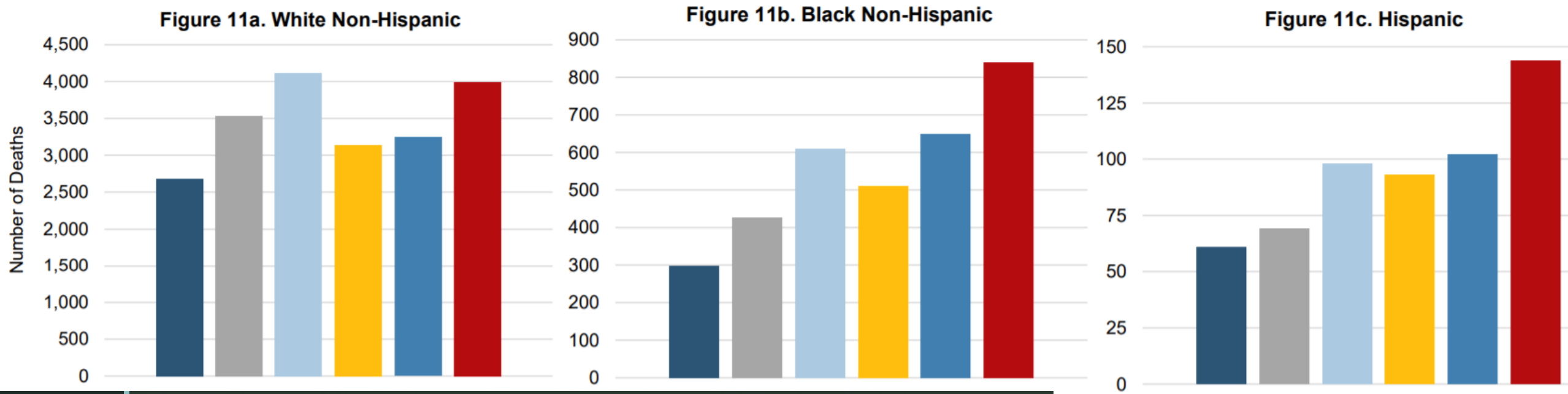
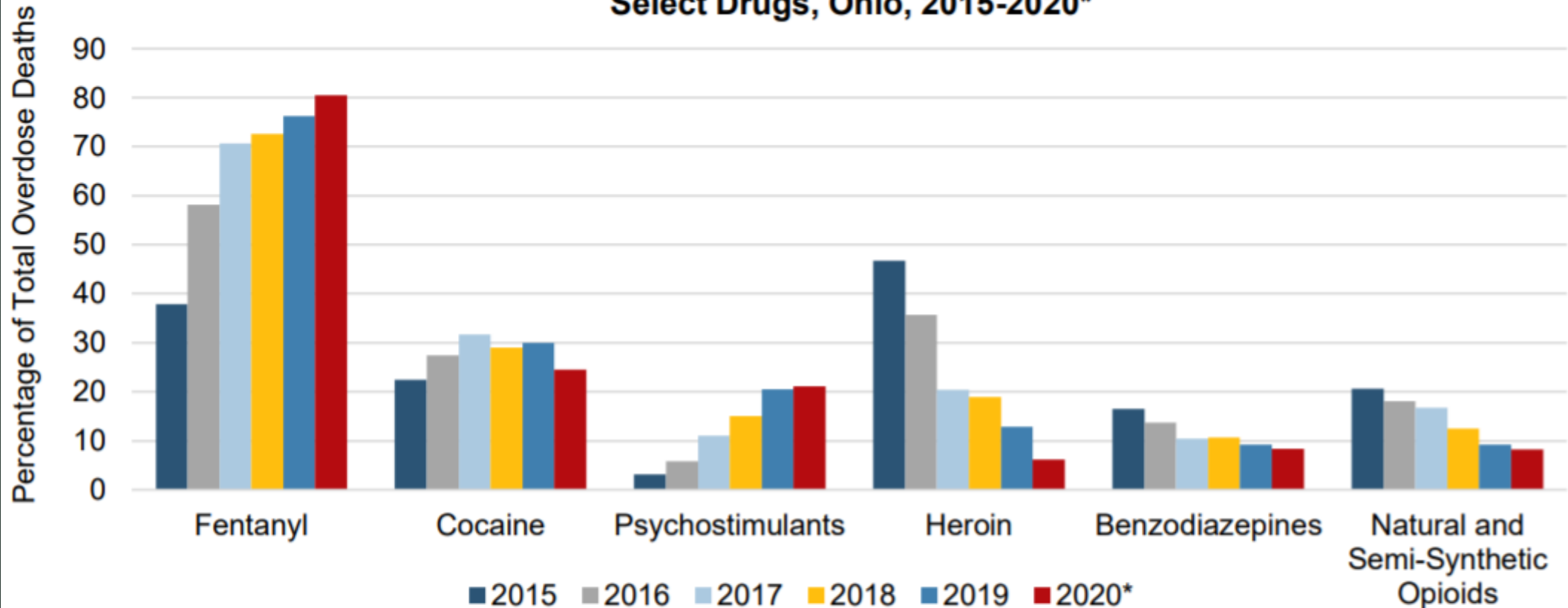
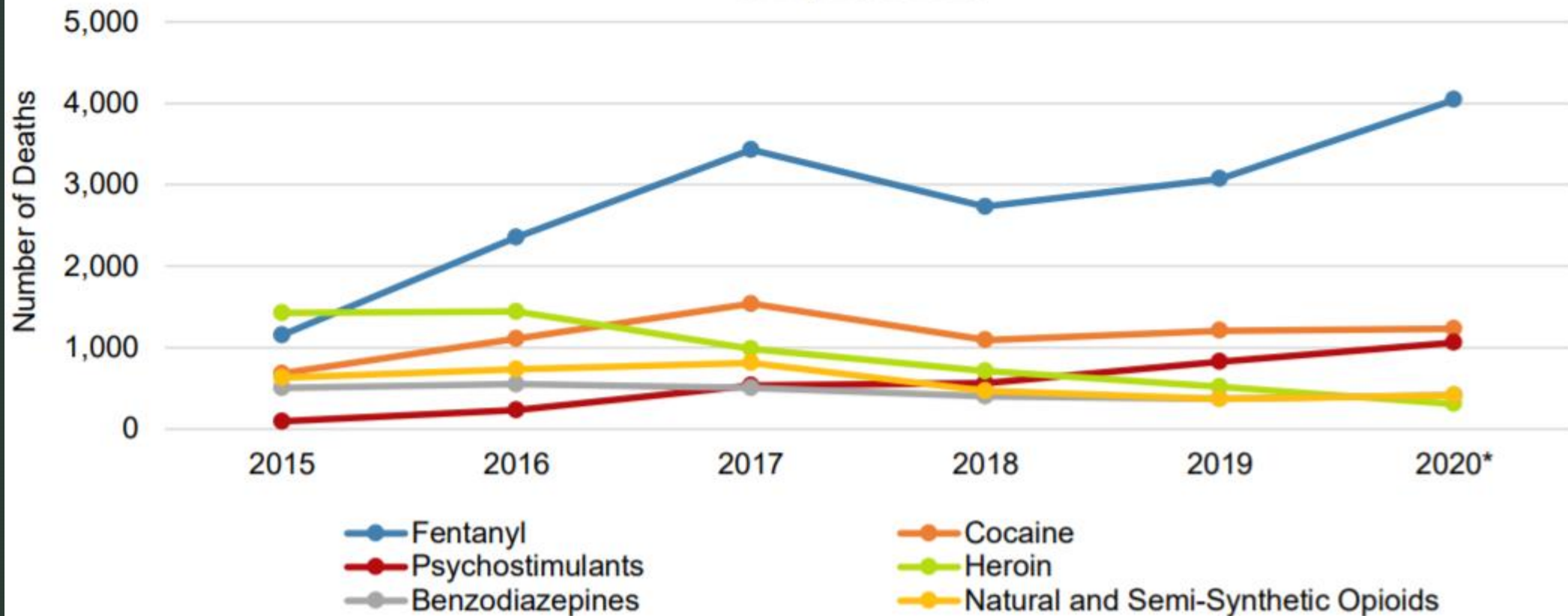


Figure 10. Percentage of Unintentional Drug Overdose Deaths Involving Select Drugs, Ohio, 2015-2020*²



- In 2020, fentanyl was involved in 81% of Ohio unintentional drug overdose deaths.
- In 2020, cocaine was involved in 25% of unintentional drug overdose deaths compared with 30% of deaths in 2019.
- While heroin was involved in nearly 50% of unintentional drug overdose deaths in 2015, only 6% of deaths in 2020 involved heroin.

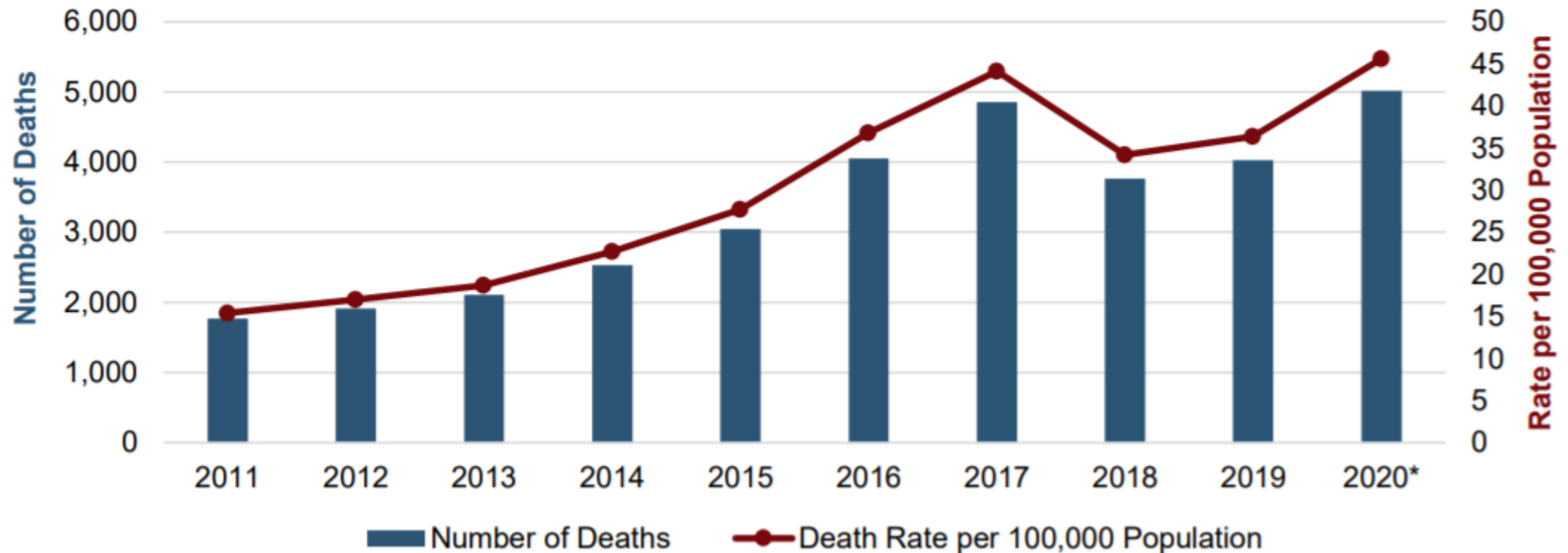
Figure 9. Number of Unintentional Drug Overdose Deaths Involving Select Drugs, Ohio, 2015-2020*²



- In 2020, there were 4,041 deaths related to fentanyl, which was a 32% increase over 2019.
- Deaths related to psychostimulants have increased every year since 2015 and in 2020 had the second largest percentage increase (28%) following deaths related to fentanyl (32%).
- Of the drug categories presented above, heroin was the only drug category with a decrease in the number of related deaths in 2020 (-41%).

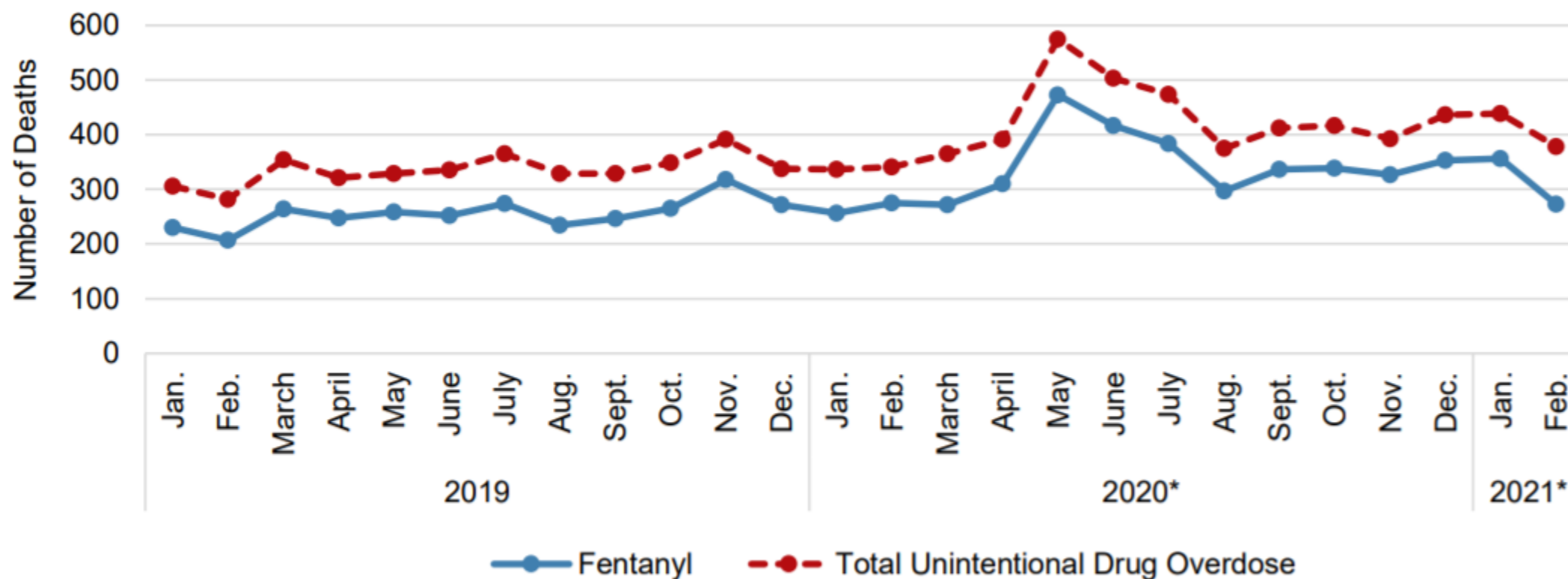
Annual Trends

Figure 7. Number and Age-Adjusted Rate of Unintentional Drug Overdose Deaths by Year, Ohio, 2011-2020*²



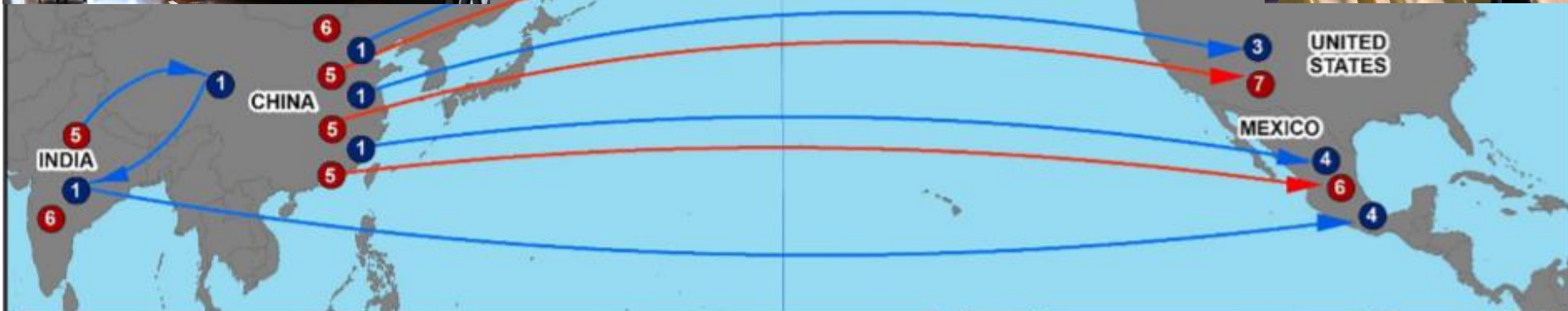
- In 2020, 5,018 Ohioans died from unintentional drug overdoses, which was a 25% increase over the number of overdose deaths in 2019.
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Figure 2. Number of Unintentional Drug Overdose Deaths Involving Fentanyl by Month, Ohio, 2019-2021* ²



- The number of unintentional drug overdose deaths in Ohio continue to be driven by fentanyl, often in combination with other drugs.
- Fentanyl-related deaths follow the same pattern as the overall number of unintentional drug overdose deaths. In 2020, fentanyl-related deaths peaked in May, followed by decreases into August.

(U) FIGURE 1. FENTANYL FLOW TO THE UNITED STATES 2019³



- 1 Fentanyl in powder form as well as unregistered pill presses, stamps, and dies are shipped via mail services
- 2 The powder fentanyl is processed and mixed with heroin, sold as heroin, or pressed into pills and sold in the Canadian drug market
- 2a Some fentanyl products are smuggled from Canada into the United States for sale, on a smaller scale
- 3 The powder fentanyl is processed and mixed with heroin, sold as heroin, or pressed into pills and sold in the United States drug market
- 4 The powder fentanyl is cut and diluted for further smuggling, or pressed into counterfeit prescription pills
- 5 Precursors for manufacturing fentanyl are shipped via mail services
- 6 Precursors are used to clandestinely manufacture fentanyl
- 7 Precursors are likely smuggled across the Southwest border into Mexico to manufacture fentanyl



Source: DEA

FENTANYL IS EVERYWHERE



**DEA lab testing reveals that
2 out of every 5 pills with fentanyl
contain a potentially lethal dose.**




Authentic oxycodone M30 tablets



***Counterfeit oxycodone M30 tablets
containing fentanyl**



**The number of DEA-seized counterfeit pills with
fentanyl has jumped nearly 430% since 2019⁴**



The Atlantic

The Brazen Way a Chinese Company Pumped Fentanyl Ingredients Into the U.S. ⁵

Yuancheng used an army of young, perky salespeople to peddle illegal chemicals to Americans.

By Ben Westhoff

I inquired about the other, still-unscheduled fentanyl precursors Yuancheng salespeople were still trying to sell me, but he denied knowledge of these chemicals....

“We don’t know much about these things,” he said. “We make raw materials. Not finished products. ”



Harm Reduction Psychotherapy

A NEW TREATMENT FOR
DRUG AND ALCOHOL
PROBLEMS

Andrew Tatarsky
Foreword by Alan Marlatt

Featuring Case Examples by:
Geri Taylor
Paul Downing
Vivian Houtchett
Gail Hammer
Edward J. Khantzian
Amrita David Lewis
James Little
Frederick Ruggins
Mark Sell
Barbara Solner

Harm Reduction Psychotherapy: A New Treatment for Drug and Alcohol Problems Paperback – June 10, 2007

by Andrew Tatarsky (Author)

★★★★★ 21 ratings



The Scientific Revolution

The Solution

We need re-humanized narratives of substance use as a health and human rights issue that is meaningful

This paradigm shift supports a social revolution in how we treat people who use and misuse drugs

A harm reduction frame is essential

From Stigma to Culture of Compassionate Pragmatism

Support Don't Punish

Treatment rather than incarceration

Harm reduction-informed continuum of care integrating:

Education, prevention, public health, medical, mental health, addiction and social services

Decriminalization to legalization

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Understanding Harm Reduction A New Paradigm for Treating Risky and Addictive Behavior⁶

STEP 1: KNOW YOUR ROLE

- PROVIDE SAFE SPACE TO DISCUSS DRUG USE
 - UNDERSTAND POWER DYNAMIC
 - ESTABLISH COOPERATIVE RELATIONSHIP
 - EVALUATE STAGES OF CHANGE
- WHAT REGIONAL RESOURCES ARE AVAILABLE
- WHAT MEDICATIONS CAN YOU PROVIDE TO HELP
- HOW CAN YOU HELP MINIMIZE HARM TO PWID, ETC

STEP 2: KNOW YOUR PATIENT

- Who
- What
- When
- Where
- How
- Why



MINDFULNESS

- Urge Surfing – identify body's response to urge⁷
- What is the stimulus that makes you use?
 - Multiple meanings behind use
 - What makes your urges worse?
- How do you manage stress?

STEP 3: PROMOTE UTILIZATION OF HEALTHCARE RESOURCES

- Syringe Services Programs
- Medicine Assisted Therapy (MAT)
- Narcan prescriptions
- Hepatitis B Vaccination
- Hepatitis C and HIV Testing
- Vivitrol Monthly Injections
- Birth Control
- Condoms
- STI Testing
- Routine Medical Care
- Alcohol Wipes
- Fentanyl Testing Strips

➤ [Sex Transm Dis.](#) 2021 Apr 1;48(4):299-304. doi: 10.1097/OLQ.0000000000001366.

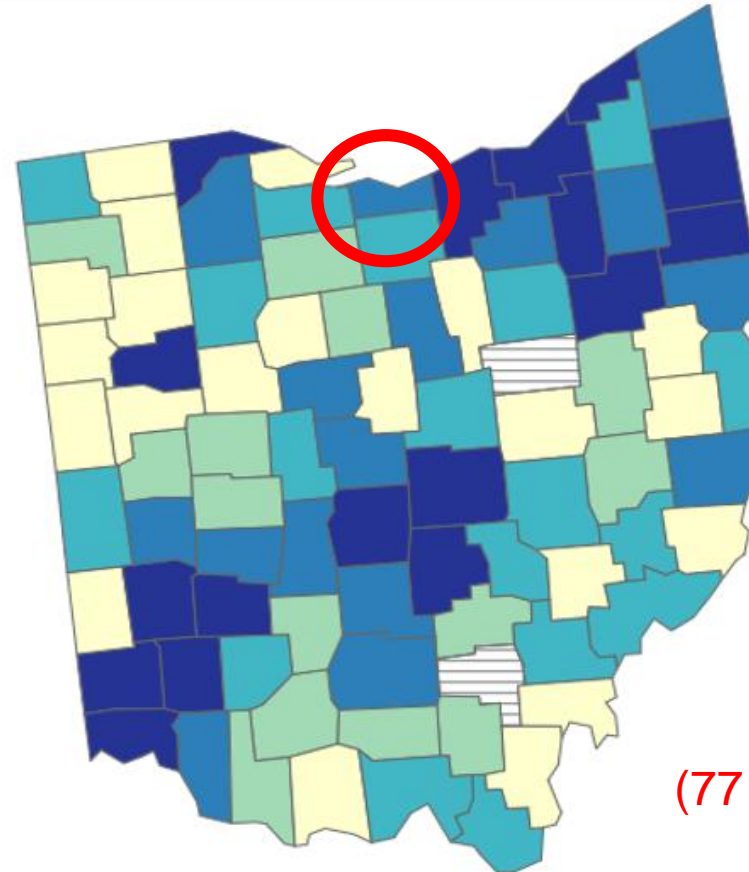
Estimated Lifetime HIV-Related Medical Costs in the United States⁸

[Adrienna Bingham](#)¹, [Ram K Shrestha](#), [Nidhi Khurana](#), [Evin U Jacobson](#), [Paul G Farnham](#)

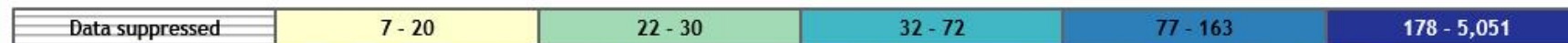
Affiliations + expand

PMID: 33492100 DOI: [10.1097/OLQ.0000000000001366](#)

- “[lifetime] cost estimate was \$490,045 in our most favorable scenario and \$326,411 in our least favorable scenario.”
- If we estimate \$400K to be lifetime cost of a patient with HIV, this means that preventing just three HIV infections can save approximately \$1,200,000.



Cases

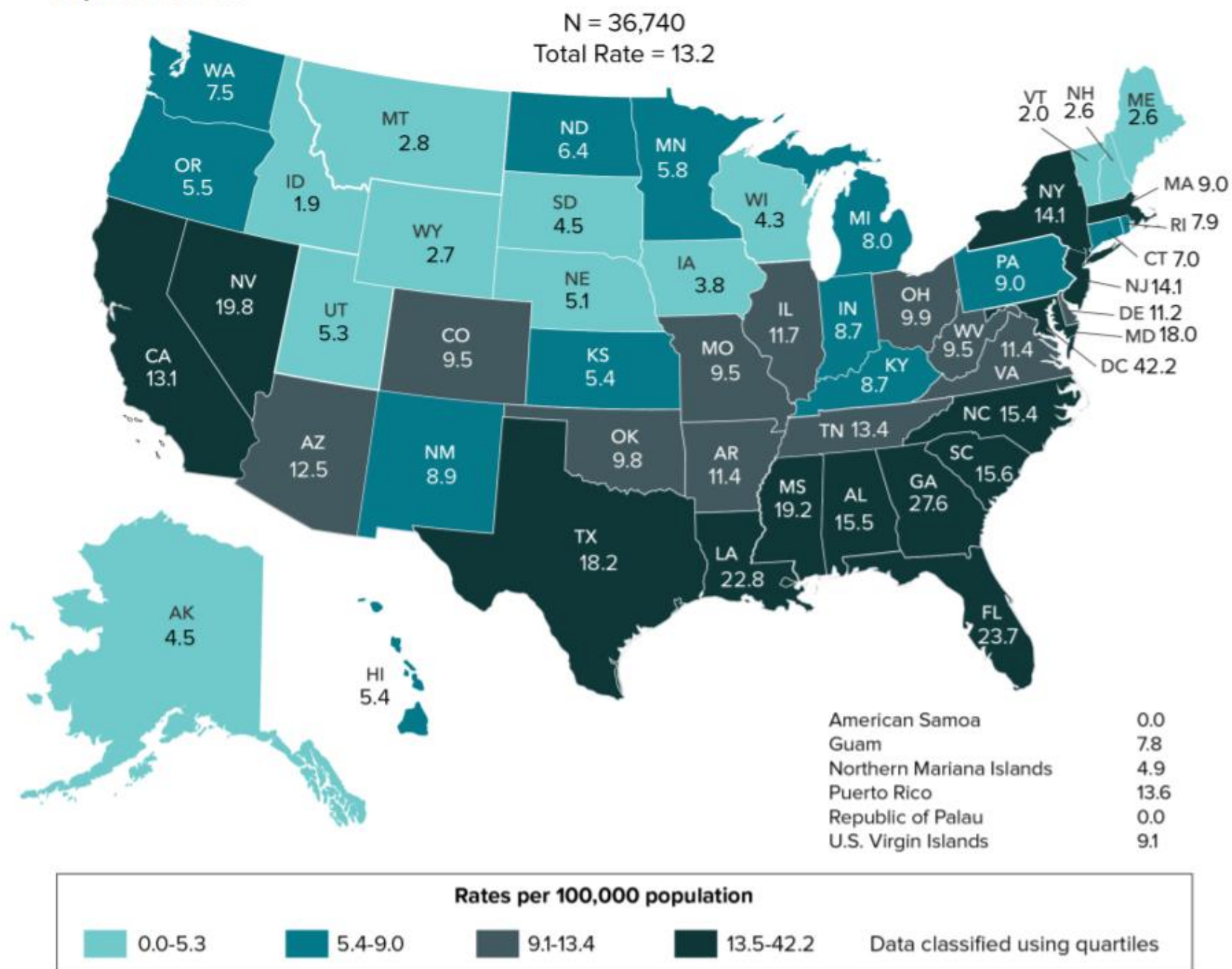


Footnotes: Prevalence data for the year 2019 are preliminary and based on death data received by CDC as of December 2020.

$$(77 + 163) / 2 = 120 \text{ average}$$

$$120 \times \$400,000 = \$48,000,000$$

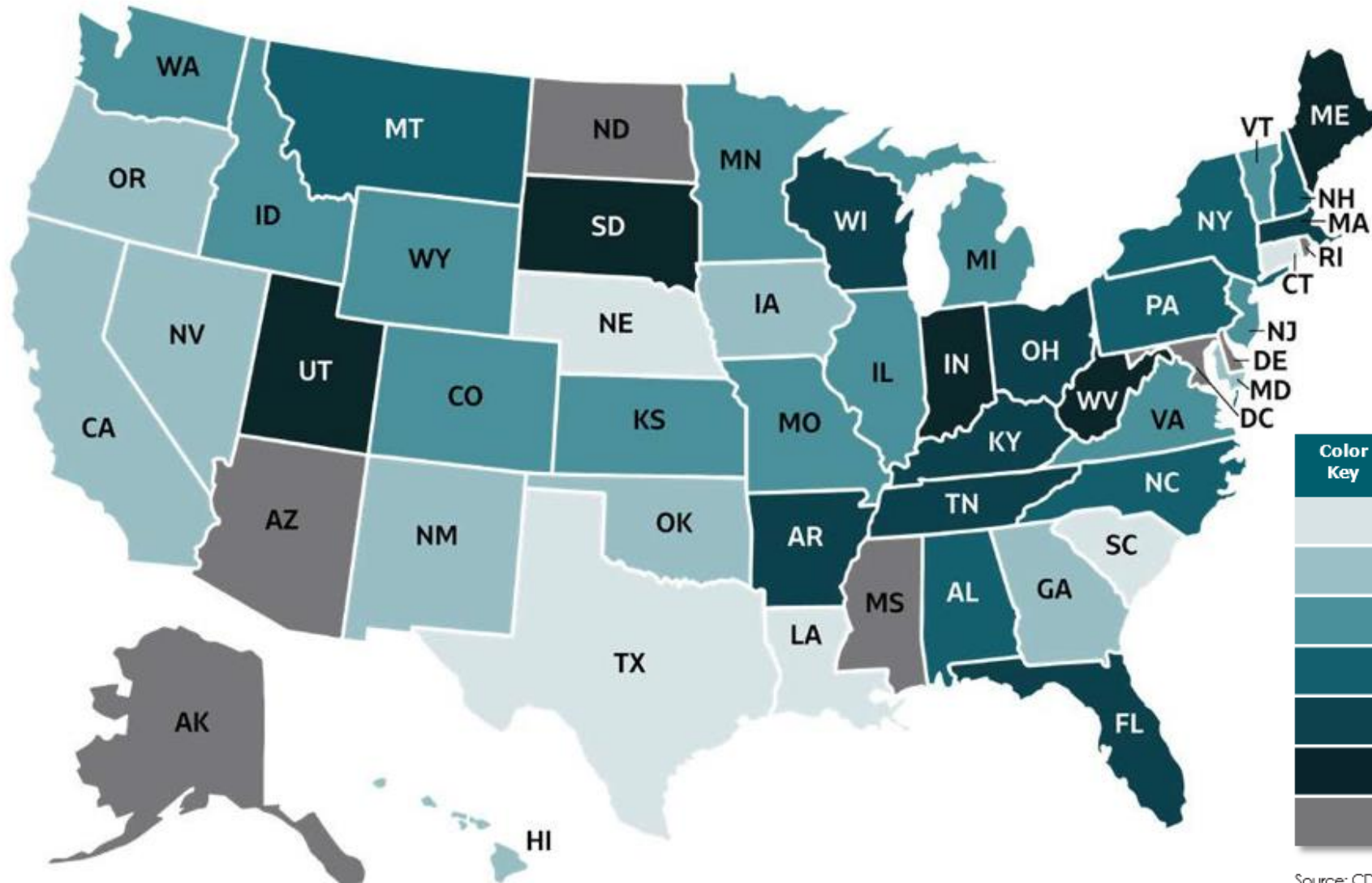
Figure 1. Rates of diagnoses of HIV infection among adults and adolescents, 2019—United States and 6 dependent areas¹⁰



HIV

Ohio is ranked 21st in the USA for most acute HIV infections

Figure 3.3. Rates of reported acute hepatitis C virus infection, by state or jurisdiction — United States, 2019¹⁰



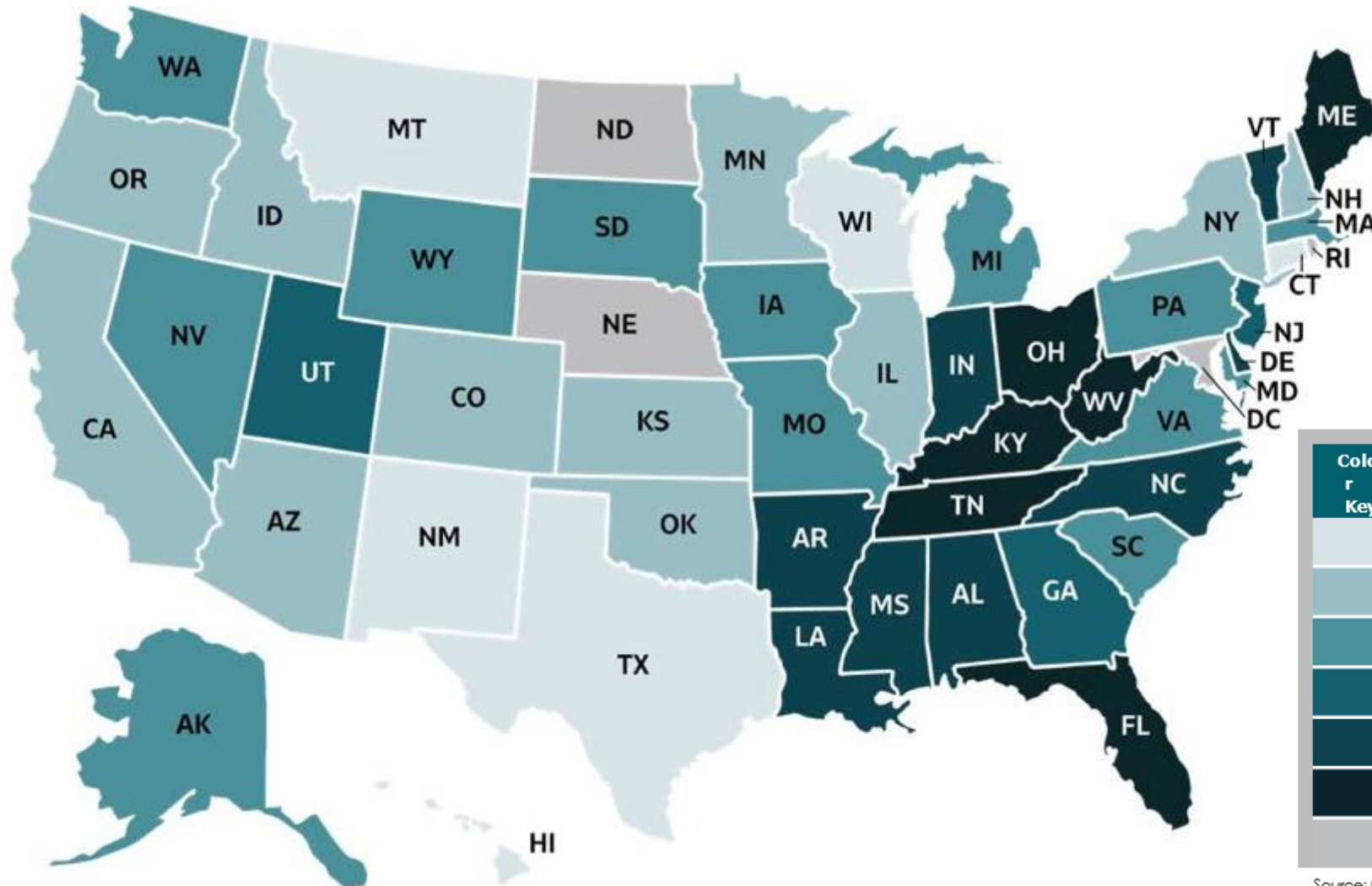
Hepatitis C

Ohio is ranked
9th in the USA
for most acute
Hep C infections

Color Key	Cases/100,000 Population	State or Jurisdiction
	0.0-0.2	CT, LA, NE, SC, TX
	0.3-0.6	CA, GA, HI, IA, MD, NM, NV, OK, OR
	0.7-1.2	CO, ID, IL, KS, MI, MN, MO, NJ, VA, VT, WA, WY
	1.3-1.8	AL, MT, NC, NH, NY, PA
	1.9-3.0	AR, FL, KY, MA, OH, TN, WI
	3.1-4.8	IN, ME, SD, UT, WV
	Data not available	AK, AZ, DC, DE, MS, ND, RI

Source: CDC, National Notifiable Diseases Surveillance System.

Figure 2.3. Rates of reported acute hepatitis B virus infection, by state or jurisdiction — United States, 2019¹⁰



Hepatitis B

Ohio is ranked 6th in the USA for most acute Hep B infections

Color Key	Cases/100,000 Population	State or Jurisdiction
	0.0-0.2	CT, HI, MT, NM, TX, WI
	0.3-0.4	AZ, CA, CO, ID, IL, KS, MN, NH, NY, OK, OR
	0.5-0.8	AK, IA, MA, MD, MI, MO, NV, PA, SC, SD, VA, WA, WY
	0.9-1.1	GA, NJ, UT
	1.2-2.5	AL, AR, DE, IN, LA, MS, NC, VT
	2.6-4.3	FL, KY, ME, OH, TN, WV
	Data not available	DC, ND, NE, RI

Source: CDC, National Notifiable Diseases Surveillance System.

Harm Reduction Issues

SAFER DRUG USE

We recognize that using drugs introduces risk—but there are ways to make it safer. People can reduce their risk of HIV, hepatitis C, overdose, and other drug-related harms by applying evidence-based harm reduction strategies around safer drug use.

We offer basic information about drug use and safer-use tips for people who use drugs and providers to get on the same page.



[Discover the Principles of Harm Reduction](#)



Credit: Unknown

Influence of Peer-Based Needle Exchange Programs on Mental Health Status in People Who Inject Drugs: A Nationwide New Zealand Study¹²

[Bianca Hay](#),¹ [Charles Henderson](#),² [John Maltby](#),³ and [Juan J. Canales](#)^{3,*}

“We hypothesized that access to peer support would be associated with mental health benefits for PWIDs. Remarkably, the results of a multistep regression analysis revealed that *irrespective of sex, age, ethnicity, main drug used, length of drug use, and frequency of visits to the NEP*, the exclusive or preferential use of **PBNEs predicted significantly lower depression and anxiety scores, greater satisfaction with life, and increased health-related information exchange with the service provider.**”



Training Guide

GETTING OFF RIGHT: A SAFETY MANUAL FOR INJECTION DRUG USERS

Table of Contents

Introduction

Getting Ready: Preparing
Yourself & Your Equipment

Getting Off: The Basics of
Safer Injection

Potential Health
Complications of Injection
Drug Use

Overdose & Other Medical

CORRECT NEEDLE INSERTION

BACKLOADING (PIGGYBACKING)



❶ Remove the plungers from two syringes. Using a third syringe, draw up the hit and empty half into each of the syringes.

❷ Carefully replace both plungers.



FIRST CHOICE

- **IF YOU ABSOLUTELY MUST SHARE NEEDLES, SYRINGES, OR OTHER DRUG INJECTION EQUIPMENT, BE SURE TO CLEAN IT THOROUGHLY BEFORE RE-USE.**

If you find yourself in a situation where you must use someone else's injection equipment or they must use yours, follow the cleaning instructions on page ___ of this manual to reduce the likelihood of transmitting a blood-borne illness. Sharing injection equipment even after it has been cleaned is definitely a second-best choice because blood and other matter can remain in a needle or syringe even after cleaning. **Cleaning needles and syringes is a complicated process that, even if done according to the best scientific advice currently available, is not a 100% fool-proof method of avoiding harmful bacteria, viruses, and other blood-borne pathogens.**



MATERIALS COOKING AND SHOOTING INTRAVENOUS DRUGS

- The drug itself (often in powder form)
- Water (to dissolve the powder)
- Vitamin C or citric acid (to aid in dissolving drug)
- Lighter (raise solubility of drug into water)
- Cooker (to hold drug solution)
- Cotton/Filter (prevents injection of undissolved particles)
- Rubber Tie
- Needle and Syringe



SAFER DRUG USE

- Alcohol Wipes (clean injection site prior to injection)
- Soap (wash hands prior to prepping injection)
- Needle Disposal (Coke bottle, Milk carton, etc)
- Bleach or Rubbing Alcohol (clean needles and syringes)
- Narcan (readily accessible in case of overdose)

HOW TO CLEAN NEEDLE AND SYRINGE

- 1. Rinse the needle and syringe with cold water several times (**hot water will cause blood to clot, making it harder to remove**). If you're using a detachable needle and syringe, you might want to take the equipment apart to clean it more thoroughly. Be sure to discard the water you use to rinse the equipment.
- 2. **Flush the needle and syringe with undiluted household bleach**. Be sure to fill the syringe all the way up. **Keep the bleach in the syringe for a full two minutes while shaking it**. Discard the bleach.
- 3. Thoroughly rinse the needle and syringe with clean, cold water to remove any remaining bleach. Discard the water. **If you do not have bleach, you can substitute hydrogen peroxide, a solution of dishwashing liquid and water, or rubbing alcohol. Use high-proof drinking alcohol, such as vodka or rum, if it's all you've got**
- **IMPORTANT:** In order for bleach to kill hepatitis B that might be in the syringe and/or cooker, you must leave the bleach in the syringe and cooker for a full two minutes. It is unclear whether bleach kills hepatitis C and HIV, even after two minutes.

PRINCIPLES OF HARM PREVENTION

- ADDICTION IS A PUBLIC HEALTH ISSUE, NOT A CHARACTER FLAW
- COMPASSIONATE PRAGMATISM
- SAFER DRUG USE
- MEETING PATIENTS WHERE THEY ARE AT
 - Harm Prevention and Abstinence not mutually exclusive
- SUPPORT, NOT PUNISHMENT

Street Names for Medications We Prescribe

- Xanax
 - Chronic, purple haze
 - ice, crank
 - bananas, tires
 - handle bars

Street Names for Medications We Prescribe

- Xanax
 - Chronic, purple haze
 - ice, crank
 - bananas, tires
 - **handle bars, also known as benzo's, Xanibars**

Street Names for Medications We Prescribe

- Vicodin
 - butter, lollipops
 - blow, line, snow
 - fluff
 - Scooby snacks, Happy pill

Street Names for Medications We Prescribe

- Vicodin
 - butter, lollipops
 - blow, line, snow
 - **fluff, also known as Norco's**
 - Scooby snacks, Happy pill

Street Names for Medications We Prescribe

- Adderall
 - ice, crank
 - zing
 - chronic, purple haze
 - green meanies

Street Names for Medications We Prescribe

- Adderall
 - ice, crank
 - **zing, also known as study buddies**
 - chronic, purple haze
 - green meanies

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