

Harm Reduction in the COVID Era: Helping Patients Who Use Drugs Stay Safer During the Pandemic

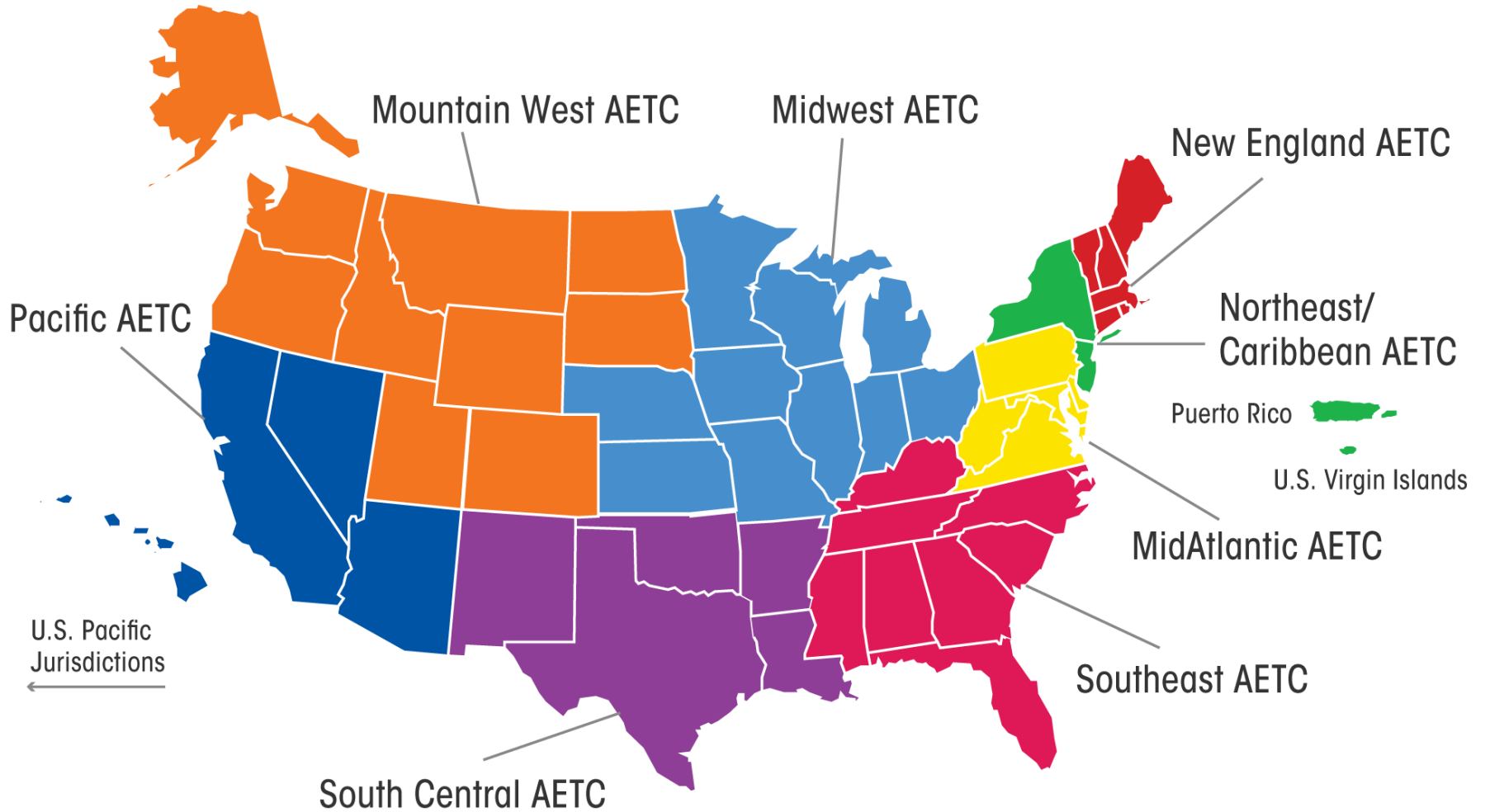
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Disclosures

No conflicts of interest or relationships to disclose

OUTLINE

- Harm reduction: Definitions and rationale
- Risk of Harm to people who use drugs (PWUD) in the COVID era
- Harm Reduction Treatment (General Approach)
 - Lower barriers to MOUD treatment
 - Naloxone Distribution/Prescribing
 - Safer use Counseling
 - Syringe exchange and Drug supply testing
 - PrEP?

Harm reduction: Definitions and Rationale

Definition of Harm reduction

- “Harm reduction is a grass-roots and “user-driven” set of compassionate and pragmatic approaches to reducing substance-related harm and improving quality of life without requiring abstinence or use reduction.”
 - Susan Collins, UW Harm Reduction Research and Treatment Center
- “More of an attitude than a fixed set of rules or approaches”
 - Davie Purchase, Director of the North America Syringe Exchange Network.
- Can be applied to various behaviors at various levels – public health initiatives, legal advocacy, and at the level of individual patient care.

Principles of Harm Reduction

Accepts, for better or worse, that licit and illicit drug use is part of our world and chooses to work to minimize its harmful effects rather than simply ignore or condemn them

Understands drug use as a complex, multi-faceted phenomenon that encompasses a continuum of behaviors from severe use to total abstinence, and acknowledges that some ways of using drugs are clearly safer than others

Establishes quality of individual and community life and well-being – not necessarily cessation of all drug use – as the criteria for successful interventions and policies

Calls for the non-judgmental, non-coercive provision of services and resources to people who use drugs and the communities in which they live in order to assist them in reducing attendant harm



History of Harm reduction

1920: Rolleston Report in UK set up means for physicians to prescribe and dispense cocaine and opium derivatives to registered patients with addiction.



In the Netherlands in the 1980s, thanks in part to the advocacy of the *Rotterdam Junkiebond*, an activist group of drug users, the Dutch government enacted a series of harm reductionist policy measures, including establishment of the first government-backed needle exchange program in 1984.

In the US, inspired by the Dutch example and spurred on by the AIDS crisis, activists began needle exchanges individually or part of nascent organizations (e.g. North American Syringe Exchange Network in Tacoma WA in 1988). These harm reduction services were illegal in many affected communities at the height of the HIV crisis.

Rationale of Harm Reduction

- Traditional treatment approaches for SUDs which focus on abstinence do not work for many and do not engage most.
- Abstinence and use reduction can be a way to reduce harm, but are not the ONLY way.
- Increased risk of serious harm to PWUDs due to direct and indirect consequence of the COVID-19 pandemic and societal response underscores the need to focus on drug-related harms.

Risk of harm to PWUD in COVID Era

Early concerns about the collision of public health crises

Annals of Internal Medicine®

An Epidemic in the Midst of a Pandemic: Opioid Use Disorder and COVID-19

G. Caleb Alexander, MD, MS; Kenneth B. Stoller, MD; Rebecca L. Haffajee, JD, PhD, MPH; and Brendan Saloner, PhD

Collision of the COVID-19 and Addiction Epidemics

Nora D. Volkow, MD

When Epidemics Collide: Coronavirus Disease 2019 (COVID-19) and the Opioid Crisis

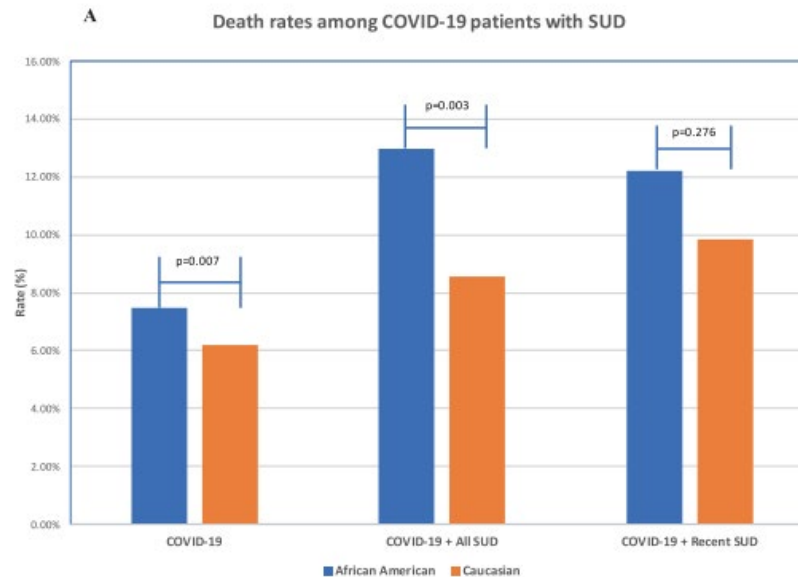
William C. Becker, MD, and David A. Fiellin, MD

SUD as a risk factor for severe COVID-19?

- People with substance use disorder may be
 - More likely to be infected by SARS-CoV 2
 - Over-representation in congregant living settings like homeless shelters, supportive housing, jails and prisons.
 - Intensive face-to-face demands of certain OUD treatment modalities (residential treatment facilities and opioid treatment programs)
 - More likely to get SEVERE disease
 - Higher rates of chronic disease which predispose to severe illness (chronic lung disease, chronic liver disease, cardiovascular disease).
 - Often socially marginalized with poor access to comprehensive medical care.
 - Substance use can impair immune response

SUD as a risk factor for severe COVID-19?

- Retrospective case-control study of EHR data: >73 million patients, of whom 12,030 had COVID-19
- People with SUD were at >8x increased risk for COVID
- Those with COVID + SUD more likely to be hospitalized (41.0% vs 30.1%) and to die (9.6% vs 6.6%)
- African Americans with COVID + SUD more likely to die than Caucasians (13% vs 8.6%)



Other sources of harm for PWUD

Disrupted Support and Care Systems:

- Loss of in-person social supports
- Reduced access to MOUD, psychosocial addiction treatment, mental health care.

Changes in Use Patterns

- More likely to use alone, a risk factor for overdose
- Disrupted drug supply-> impure drugs, more injection use, loss of tolerance

Socioeconomic Instability

- Higher rates of food, housing, economic insecurity, incarceration
- Increased unemployment associated with increased overdose death rate

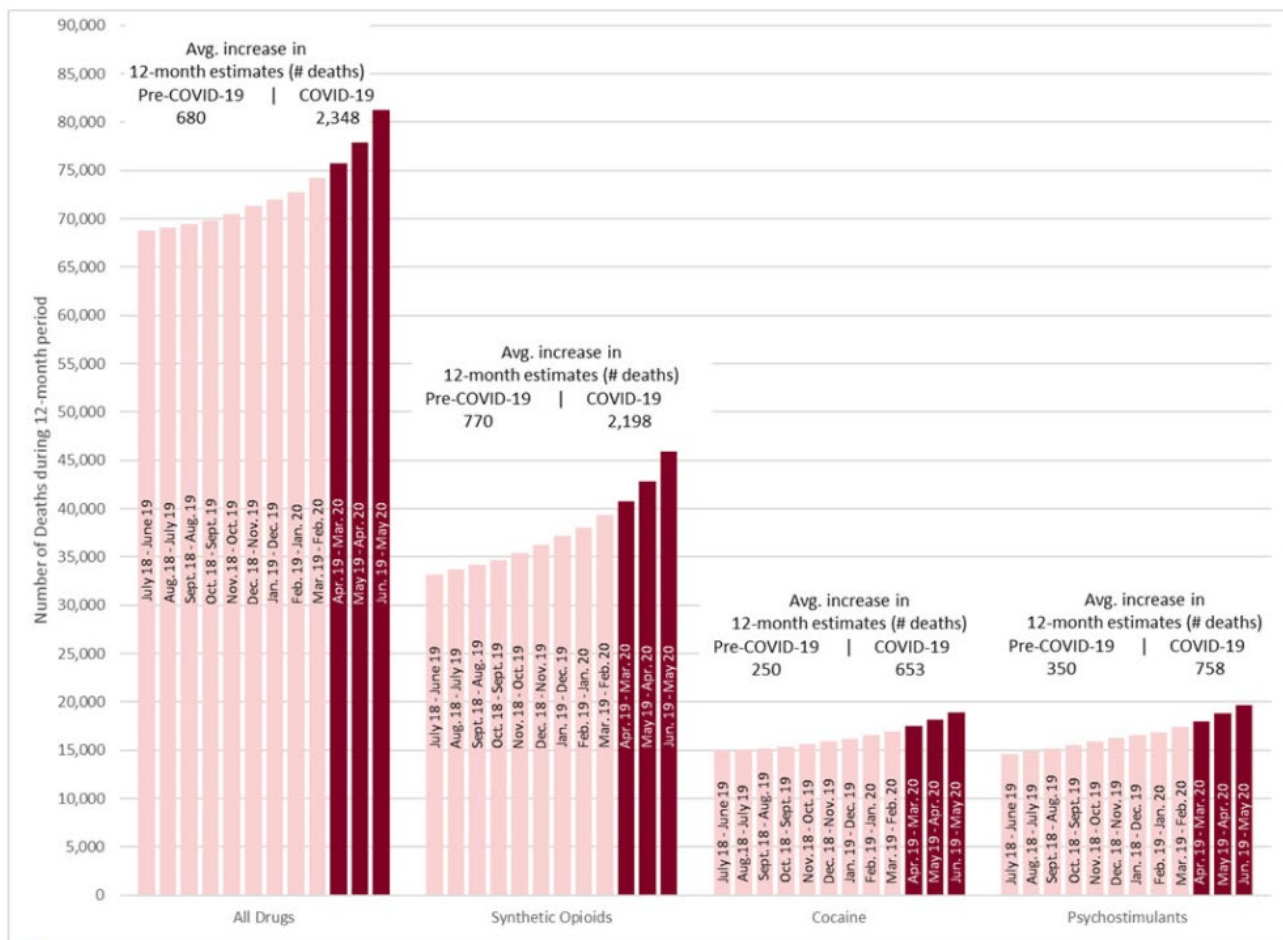
Increased Vulnerability to Stress

- SUD itself associated with increased vulnerability to stress
- Stress predicts recurrence of substance use in people with SUD; those with recurrent use often use multiple substances simultaneously
- High rates concurrent mental illness
- Increased suicidal or para-suicidal risk taking?
- Fragile or absent social support
- Stigma and discrimination

Slide Courtesy of Joceyln James

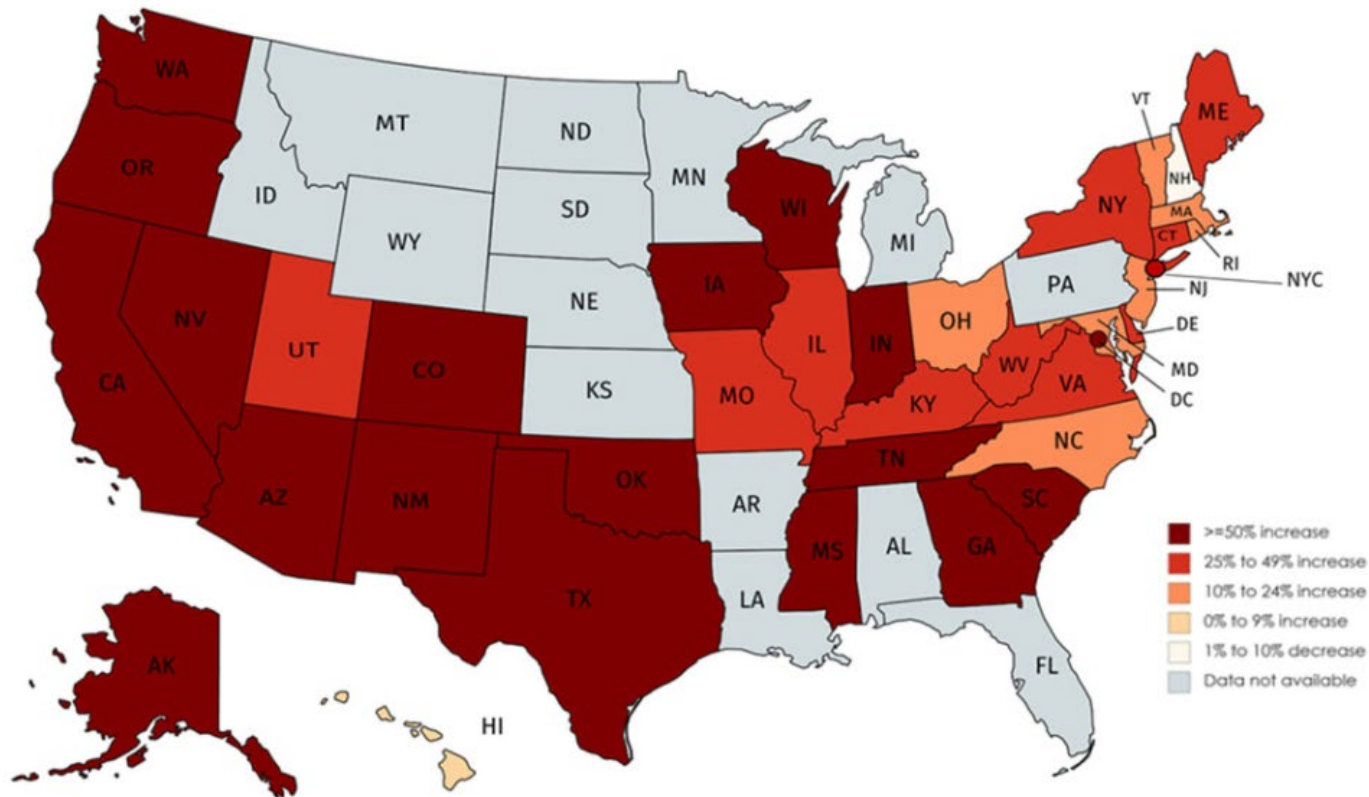
Increases in Fatal Overdose

Figure 1: Twelve-month provisional^a drug overdose death counts for all drugs^b, synthetic opioids^c, cocaine^d, and psychostimulants^e, for 50 states, the District of Columbia, and New York City: 12-months ending in June 2019 to 12-months ending in May 2020^f



Increase in Fentanyl fatal overdoses

Figure 3: Percentage change in 12-months ending provisional^a count of fatal overdoses involving synthetic opioids^b, 36 states, the District of Columbia, and New York City: Deaths from 12-months ending in June 2019 to 12-months ending in May 2020^d



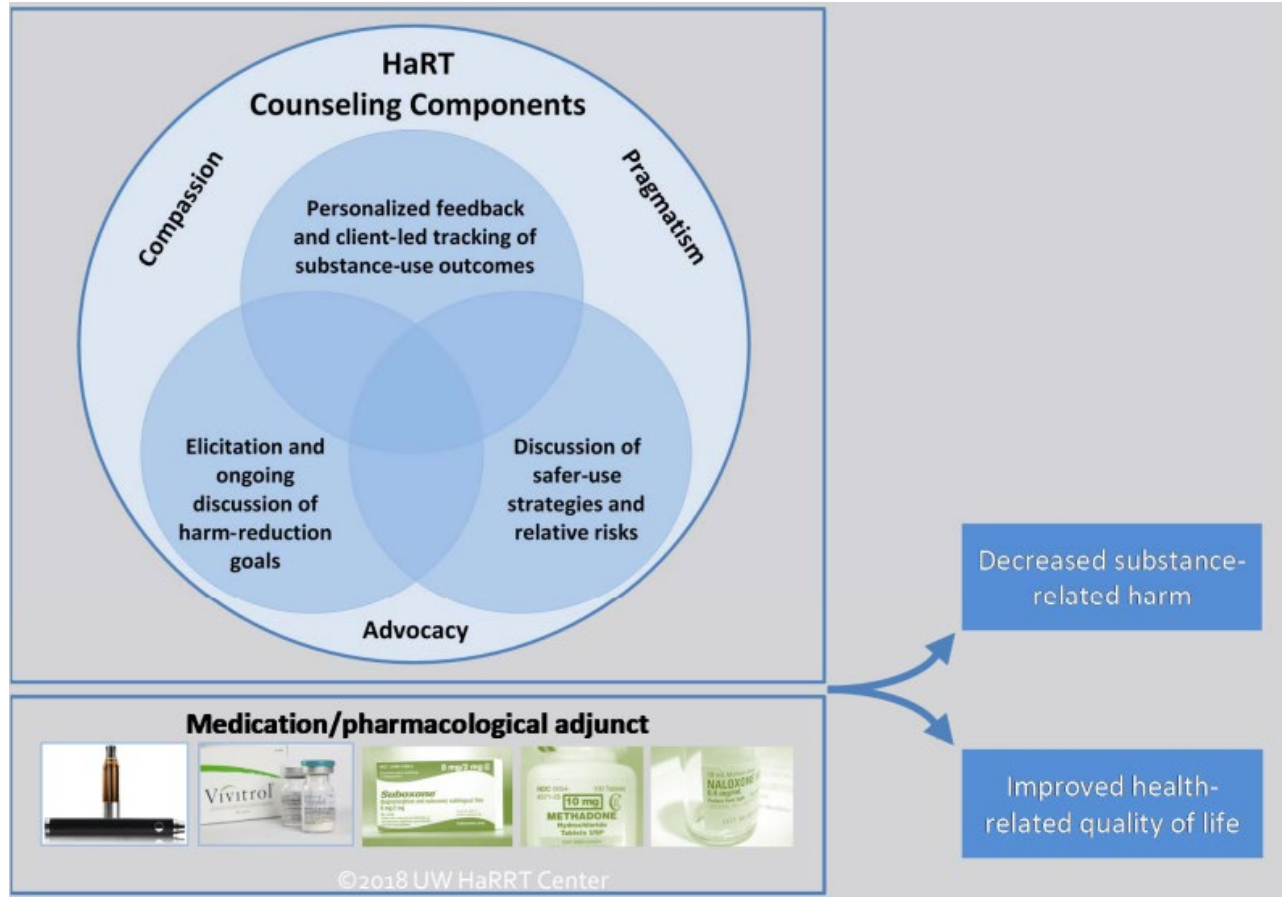
Overdose data

- Biggest increase in OD deaths occurred from March-May 2020, suggesting contribution from the pandemic and the societal response.
- Psychostimulants (methamphetamine) playing a larger role
- Fentanyl has moved West

Harm reduction treatment General Approach

Harm Reduction Treatment (HaRT)

Principles of Harm Reduction applied to the patient encounter.



Lower barriers to MOUD treatment

Rationale

- Opioid agonist medications reduce fatal overdose by over 50%.
- Many people, often those with most severe illness, want to reduce their use of illicit opioids or want additional supports but cannot or will not access care with inflexible program requirements.

“Low barrier” treatment for Opioid Use Disorder

- “Low barrier” or “medication first” programs prioritize the reduction of drug-related harms over abstinence as the primary treatment goal.
- Short time to medication start (same day if possible).
- Polysubstance use allowed initially and ongoing.
- Flexible scheduling
- Counseling offered, not mandated.
- Urine drug screens are used to inform clinical care, not primarily as a basis for discharge.
- Duration varies: Time-limited or on-going care.
- Settings vary: Services delivered in the community at trusted locations e.g. syringe service program; Addiction treatment program; Primary care clinic; Behavioral health agency.

Patient selection

While patient preference is paramount, SAMHSA and ASAM discuss particular benefits of buprenorphine during COVID pandemic including more rapid access, more rapid up-titration to therapeutic dose, and less in-person demands of treatment.

With increased demand and decreased services providers, “higher levels of care” such as residential treatment, may not be available or COVID exposure risk may be unacceptable.

Treatment with buprenorphine in a low-barrier model can be efficacious for patients who are unhoused and polysubstance users.

Counseling

- “A patient’s decision to decline psychosocial treatment or the absence of available psychosocial treatment should not preclude or delay pharmacotherapy, with appropriate medication management.”
- This guidance is even more applicable right now when patients may need to be under self-quarantine or have other risk factors that lead them to want to minimize external interactions.
- While some patients are likely to benefit from psychosocial counseling, four randomized trials found that enhanced psychosocial counseling provided no additional benefit than typical medical management that occurs during routine office-based visits for many patients.

Ongoing substance use

- Buprenorphine does not treat SUDs other than OUD.
- Benzodiazepines: In 2017 the FDA recommends not withholding MOUD for people using prescribed or illicit benzodiazepines.
- Stimulants: There may be reduced retention in OBOT programs among people also using stimulants. Stimulant use may decline over time or in response to targeted treatments.

A word on diversion

- Buprenorphine is a highly diverted medication
- Overdoses involving buprenorphine are very rare, generally involving multiple concurrent CNS depressants (like high dose IV benzos).
- Numerous studies demonstrate that illicit use of buprenorphine is primarily for therapeutic purposes (treatment of withdrawal symptoms, reduction in use of other opioids), often in the setting of poor access to treatment.¹
- Studies suggest prior exposure to illicit buprenorphine correlates with retention in office based opioid treatment.²
- Retrospective structured interview study suggests use of illicit buprenorphine reduces non-fatal overdoses (with dose-response relationship).³

Leverage Telehealth

Regulatory environment now allows for new and existing buprenorphine visits to be conducted via telehealth (or telephone) during the public health emergency (Public Health Emergency exemption to the Ryan Haight Act).

Reimbursement not more favorable to this modality as well.

Can improve access for patients with transportation or mobility issues.

Can help patients avoid in-person contact with healthcare settings

Risk/Benefit decision of in-person vs remote treatment must consider risks of COVID acquisition and the risks of unmonitored treatment.

Naloxone

Overdose Prevention and Naloxone Distribution

- Naloxone distribution started as a fringe harm reduction effort of the Chicago Recovery Alliance in the 1990s.
- Former Surgeon General, Jerome Adams: “If we want to make a dent in this overdose epidemic, we need everyone to consider themselves a first responder. We need to look at it the same as we look at CPR, we need everyone carrying naloxone.”



Research shows naloxone works

Feasibility

- Piper et al. *Subst Use Misuse* 2008; 43: 858-70.
- Doe-Simkins et al. *Am J Public Health* 2009; 99: 788-791.
- Enteen et al. *J Urban Health* 2010;87: 931-41.
- Bennett et al. *J Urban Health*. 2011; 88; 1020-30.
- Walley et al. *JSAT* 2013; 44:241-7. (Methadone and detox programs)

Increased knowledge and skills

- Green et al. *Addiction* 2008; 103:979-89.
- Tobin et al. *Int J Drug Policy* 2009; 20; 131-6.
- Wagner et al. *Int J Drug Policy* 2010; 21: 186-93.

No increase in use, increase in drug treatment

- Seal et al. *J Urban Health* 2005;82:303-11.
- Doe-Simkins et al. *BMC Public Health* 2014 14:297.
- Jones et al. *Addictive Behaviors* 2017;71:104-6

Reduction in overdose in communities

- Maxwell et al. *J Addict Dis* 2006;25; 89-96.
- Evans et al. *Am J Epidemiol* 2012; 174: 302-8.
- Walley et al. *BMJ* 2013; 346: f174.
- Bird et al. *Addiction* 2015; Dec 1.
- Coffin et al. *Ann Intern Med* 2016; 1-8.

Cost-effective

\$438 (best)
\$14,000 (worst) per quality-adjusted life year gained

Coffin and Sullivan. *Ann Intern Med*. 2013 Jan 1;158(1):1-9.

Slide courtesy of PCSS (Walley, A)

HHS Naloxone guidance for PWUD

Prescribe naloxone and provide education about its use to:

Patients at high risk for experiencing or responding to an opioid overdose, including individuals:

- Using heroin, illicit synthetic opioids or misusing prescription opioids.
- Using other illicit drugs such as stimulants, including methamphetamine and cocaine, which could potentially be contaminated with illicit synthetic opioids like fentanyl.
- Receiving treatment for opioid use disorder, including medication-assisted treatment with methadone, buprenorphine, or naltrexone.
- With a history of opioid misuse that were recently released from incarceration or other controlled settings where tolerance to opioids has been lost



Naloxone Access Developments



PDAPS

Prescription Drug
Abuse Policy System

In most states:

- Naloxone may be distributed without a prescription via standing orders, collaborative practice agreements or pharmacist prescribing authority
- People not at risk themselves for overdose may receive naloxone via 3rd party distribution
- Mandated insurance coverage
- Prescriber/Pharmacist/Responder immunity from liability for furnishing or using naloxone

PDAPS.org: has info on state overdose and naloxone law.

Naloxone and COVID



Shout and Sternal Rub

- **Check for signs and symptoms:** Blue lips and fingernails on a lighter-skinned person, white or ashy lips and fingernails on a darker-skinned person; slow, struggled, gurgling or no breathing.
- If these signs are present, **shout** to check for responsiveness.
- If no response, **rub knuckles** (wearing disposable gloves, if available) firmly up and down on the person's sternum (breast bone) for 10 seconds.
- If no response, **call 9-1-1** for medical backup. Remember, Washington's Good Samaritan Law protects you in some instances from minor drug possession when you

Give Naloxone

- Put on disposable gloves (if available) if you haven't already.
- **Give 1 dose of naloxone** (injection or nasal).
- If no response in 2-3 minutes, give another dose.

Support

- If the person is not breathing, perform **rescue breathing (mouth-to-mouth)***. If available, use a face shield. There is still a risk of COVID-19 transmission when using a face shield, but it may reduce the risk. Gently tilt back their head. Pinch their nose, give 2 short breaths. If their chest rises, continue with 1 full breath every 5 seconds.
***If you do not feel comfortable doing rescue breathing due to fear of COVID-19, be sure you have called 9-1-1 so that medical backup is on the way.**
- If there is no response after 2-3 minutes, administer another dose of naloxone and continue rescue breathing. Continue this process every 2-3 minutes until they respond.
- Place person in the **recovery position (on their side)** if you need to leave them for any reason, including if you need to meet emergency personnel or seek other help.
- Once the person wakes up, **explain what happened** and stay with them! They might fall back into an overdose!



Naloxone and Fentanyl

- Fentanyl overdose often comes on much faster and stronger than a typical opioid overdose.
- In some cases, a person's chest may become very stiff (called "chest wall rigidity" or "wooden chest"). This can make it harder for the victim to breathe and for a responder to do chest compressions.
- Naloxone **can** reverse a fentanyl overdose, although in some cases it may take more doses because fentanyl is so potent. Wait 2-3 minutes in between doses, and perform rescue breathing if at all possible. Give single doses each time, no need to give two at a time.

Ensure access

- Discuss naloxone with all patients at increased risk of having or witnessing an overdose. Including patients who's goals include abstinence.
- Ensure patients are well stocked (multiple doses, multiple refills).
- Home delivery or pharmacy curbside pickup are possible
- Mobile delivery by harm reduction organizations may be possible. If local resources not available, this national harm reduction organization <https://www.naloxoneforall.org/> may be able to send by mail.

Safer Use Counseling

Discuss increased risks

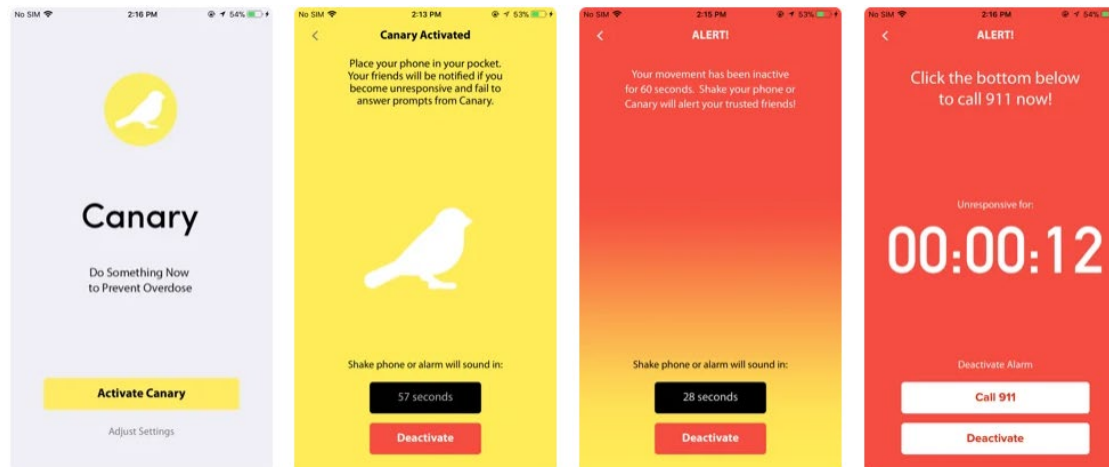
- Ask permission to discuss with patients the factors which might put them at greater risk of overdose or other opioid-related harms during this time.
 - Some folks may have stocked up on drug supply due to concerns about losing access, and having more ready access might mean using more than normal
 - Disruptions in drug supply followed by resumption after a period of abstinence
 - Extended take-home doses of methadone
 - Fentanyl in the illicit pill and heroin market.
 - Social distancing mandates might make using alone more common.

Overdose prevention counseling

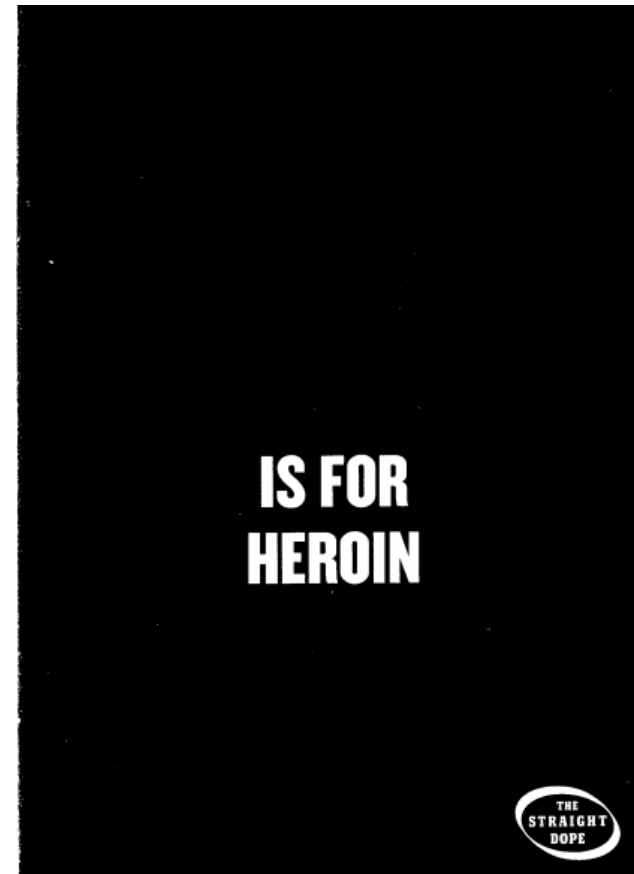
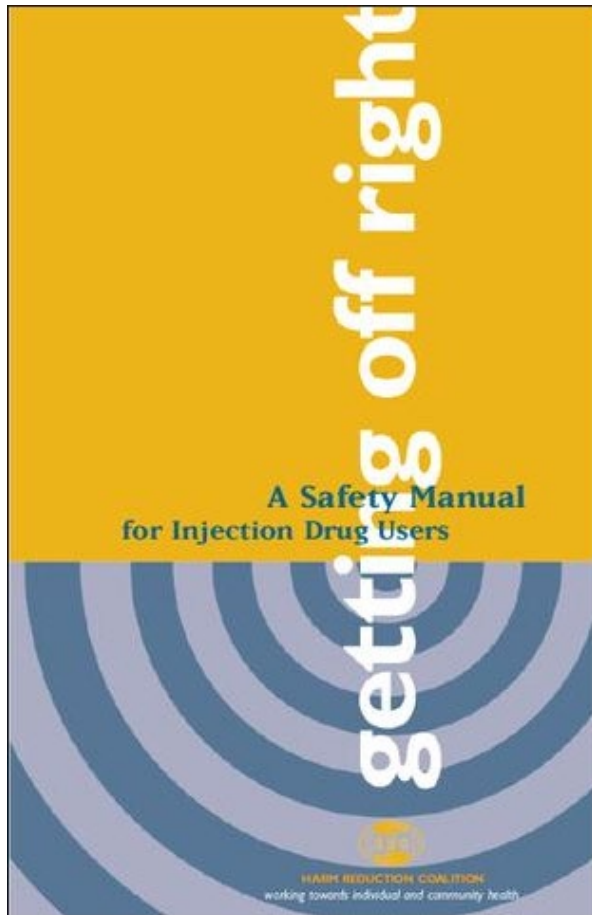
- Help patients explore ways to reduce their risks of overdose and disease transmission. (“How do you protect yourself from overdose?”)
- Start low and go slow, use a small amount slowly to gauge potency.
- If using with others.
 - Prepare your own drugs, if possible
 - Attend to mask wearing, distancing, and hygiene
 - Take turns to prevent simultaneous overdose
 - Have naloxone ready and an immediate way to call for help

Overdose prevention counseling.

- If using alone:
 - Connect with someone by phone or video to monitor while and immediately after using
 - Neverusealone.com, 1 800 484 3131
 - Canary mobile app



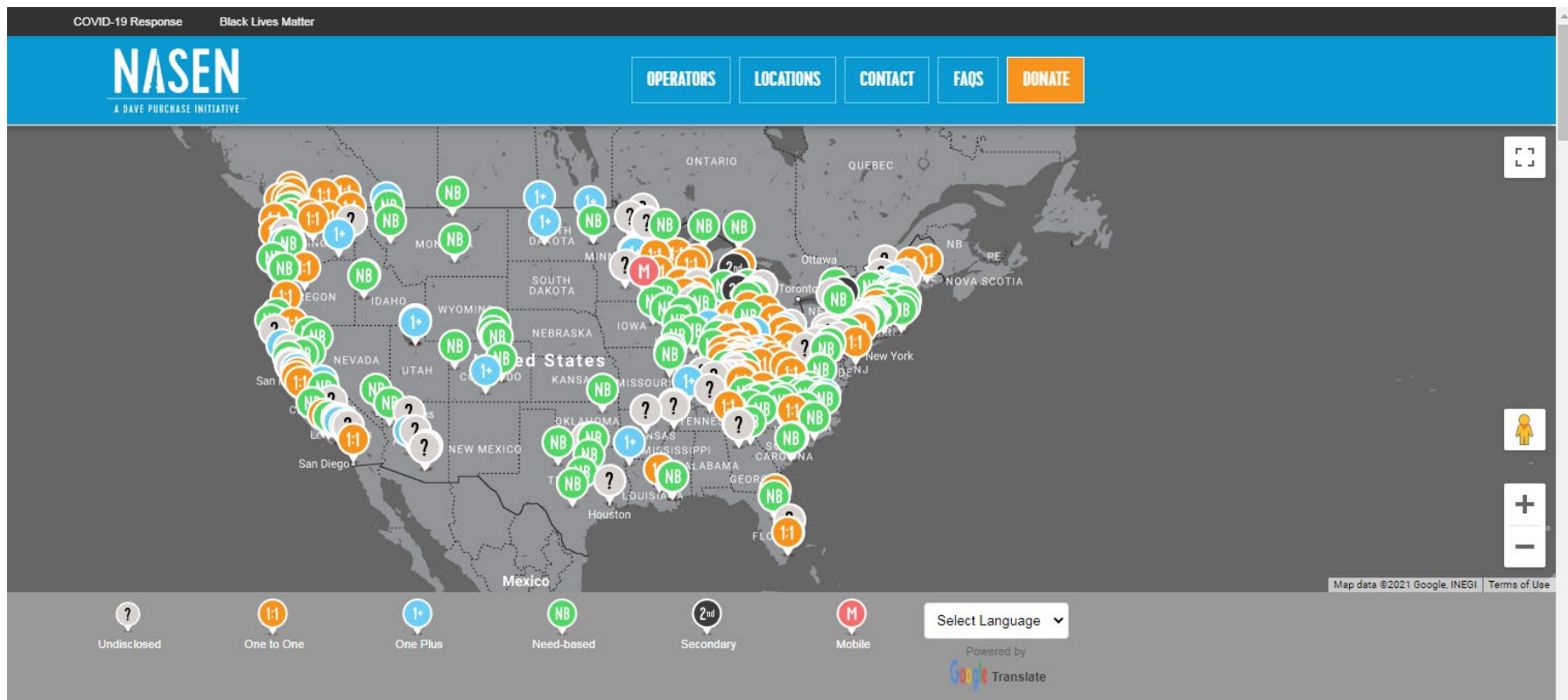
Safer injection practices



Syringe Services and Fentanyl Testing

Syringe Service Programs

Refer to syringe service programs for PWID



SSP services

- Distribution of disease prevention materials (e.g., alcohol swabs, condoms) in addition to sterile needles, syringes, and other injection equipment
- Referral to substance use disorder detox or treatment, including medication-assisted treatment
- Access or referral to medical services (HIV, tuberculosis, and/or hepatitis B and C), mental health services, legal or social services
- Information and education on substance use reduction and related harms, prevention of HIV and other sexually-transmitted diseases, overdose prevention and Naloxone training, and safer injection practices
- Safe drug injection equipment disposal

Syringe Service Programs Evidence

- SSPs are associated with an approximately 50% reduction in HIV and HCV incidence.¹
- When combined with medications that treat opioid dependence (also known as medication-assisted treatment) HIV and HCV transmission is reduced by more than two-thirds.²
- People who inject drugs who regularly use an SSP are more than five times as likely to enter treatment for a substance use disorder and nearly three times as likely to report reducing or discontinuing injection as those who have never used an SSP.³

Syringe Service Programs and COVID

Survey of 173 SSPs:

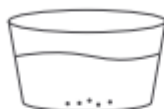
- 43% reported a decrease in availability of services
 - MOUD services
 - HIV, HCV, STI screening
- 25% reported that one or more sites had closed
- 53% are prepacking supplies
- 20% are providing delivery services or only delivery services.
- 6% are providing mail-based services
- Programs are increasing the amount of supplies provided to clients

Fentanyl Testing

Basics of fentanyl test strips

Step 1:

Dissolve a few grains of the drug in a clean container (such as a cooker or cup)



Step 2:

Dip the strip to the blue line for 15 seconds, lay the strip flat to dry for 5 minutes



Step 3:

Read the strip - one line means the test detected fentanyl, two lines means the test did not detect fentanyl



Fentanyl Positive



Fentanyl Negative

Remember, this doesn't mean that the drugs are safe. Even if the result is negative, the test is not 100% accurate. If you test a pill, rock, or powder, you might test a portion that does not contain fentanyl. Or the drugs could contain another toxic contaminant.



Actual Representation

Fentanyl Testing

Characteristic	N (%)
Participants who used at least one test strip	62 (76.5)
Of the participants who used at least one FTS (<i>n</i> = 62), participants reported ^a :	
Regular heroin use	23 (37.1)
Regular cocaine use	24 (38.7)
Non-medical prescription pill use	13 (21.0)
Lifetime injection drug use	29 (46.7)
Of the participants who used at least one FTS (<i>n</i> = 62), the number (proportion) who received at least one positive FTS	31 (50.0)
Of the who received at least one positive FTS (<i>n</i> = 31), participants reported altering the way they used drugs ^a :	
Used less	14 (45.2)
Used with someone else around	12 (38.7)
Went slower	13 (41.9)
Did a tester	11 (35.5)
Threw them out	3 (9.7)
Sold them	3 (9.7)
Gave them away	2 (6.5)

Goldman, J.E., Waye, K.M., Periera, K.A. *et al.* Perspectives on rapid fentanyl test strips as a harm reduction practice among young adults who use drugs: a qualitative study. *Harm Reduct J* **16**, 3 (2019). <https://doi.org/10.1186/s12954-018-0276-0>



Take Home Points

PWUD are at increased risk of overdose and other harms due to the convergence of the overdose epidemic and COVID-19.

An individualized, pragmatic, and compassionate approach which focuses on reducing the risks of substance use (with or without reducing the frequency of use) can help keep patients safer and healthier.

Specifically consider low-barrier MOUD treatment, naloxone distribution, and safer use education which focuses on the risks of unstable drug supply and using alone.

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Resources

- Harm reduction Coalition, COVID-19 page
- North America Syringe Exchange Network
- ASAM COVID Taskforce Recommendations
- Harm Reduction Research and Treatment Center (HaRRT)

Questions...



Coming Up Next Month...

Pain Management in Individuals with Histories of Substance Use Disorders

Tuesday, March 2nd

12:00 PM PT

Acknowledgment

This Mountain West AIDS Education and Training (MWAETC) program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$2,911,844 and as part of another award totaling \$400,000 with 0% financed with non-governmental sources.

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PrEP?

OF THE 38,739 HIV DIAGNOSES IN THE UNITED STATES (US) AND DEPENDENT AREAS IN 2017:

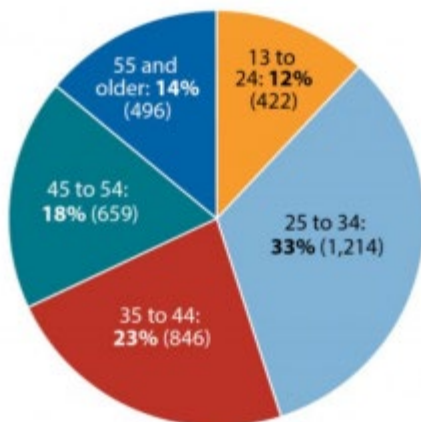
1 IN 10 (3,641) WERE AMONG PWID*

2,625 WERE AMONG MEN WHO INJECT DRUGS*

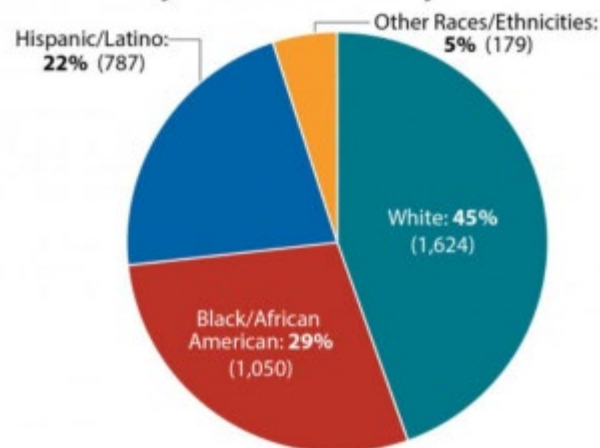
1,016 WERE AMONG WOMEN WHO INJECT DRUGS

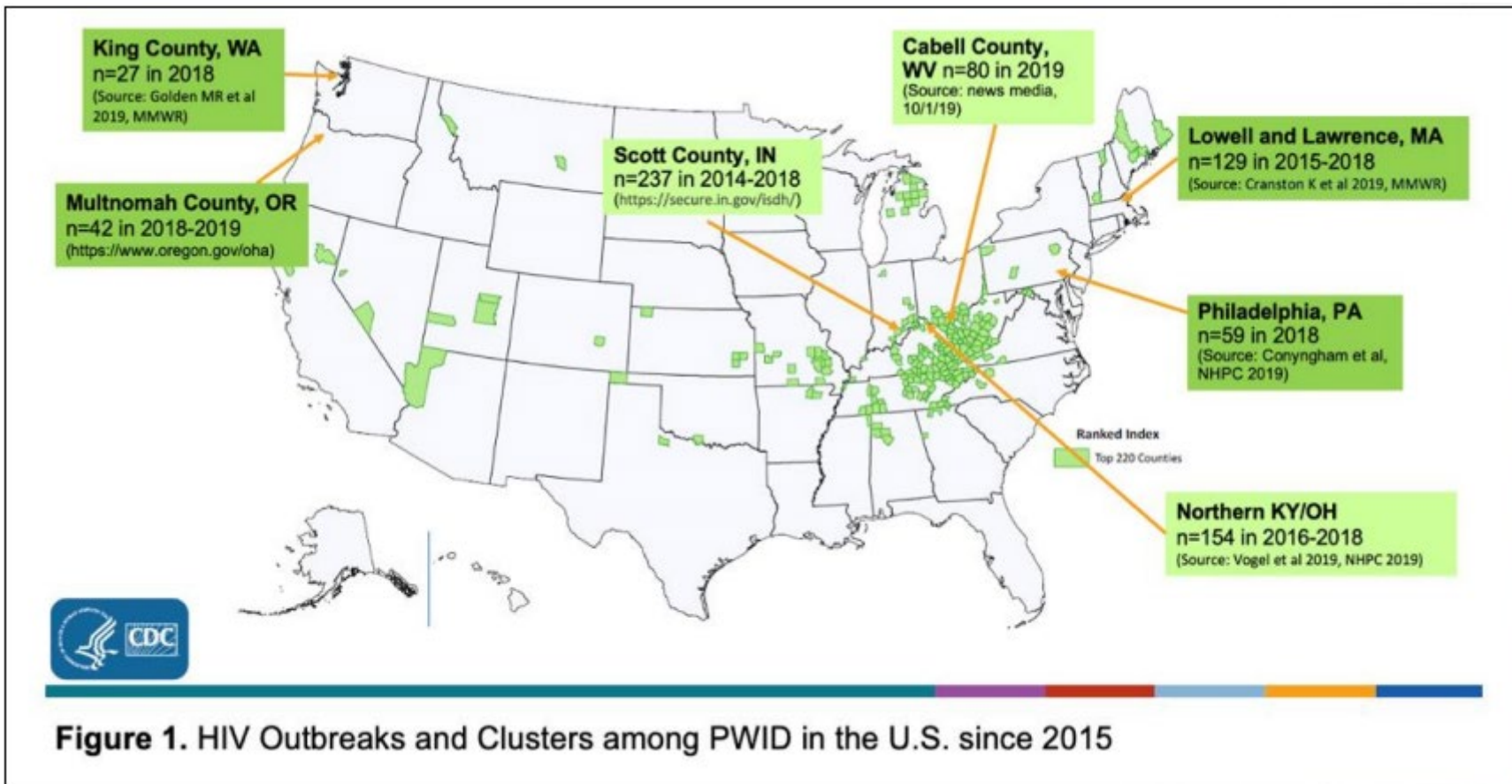
* Includes infections attributed to male-to-male sexual contact *and* injection drug use (men who reported both risk factors).

By Age



By Race/Ethnicity





Double-blind RCT of TDF vs. placebo in 2,413 PWID in Thailand. Ages 20 – 60 years Injected drugs in past year.

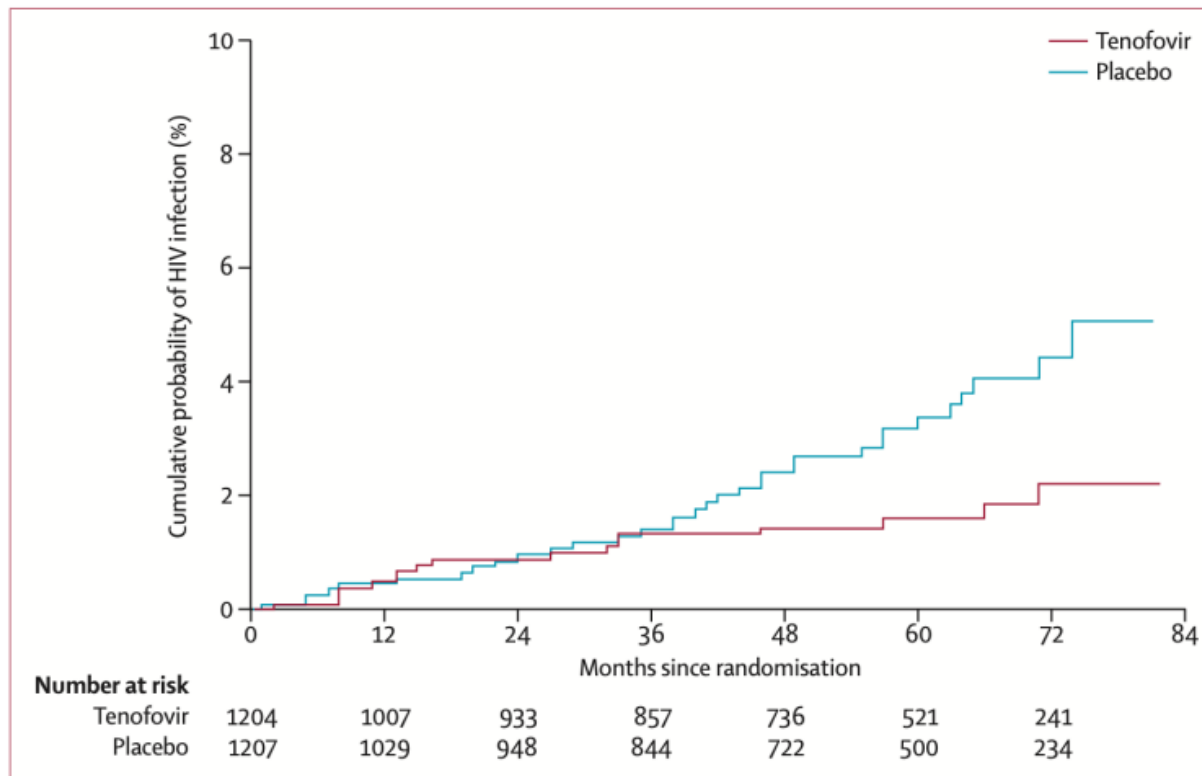


Figure 2: Kaplan-Meier estimates of time to HIV infection in the modified intention-to-treat population

BOX B3: RECOMMENDED INDICATIONS FOR PREP USE BY PERSONS WHO INJECT DRUGS

- Adult person
- Without acute or established HIV infection
- Any injection of drugs not prescribed by a clinician in past 6 months

AND at least one of the following

- Any sharing of injection or drug preparation equipment in past 6 months
- Risk of sexual acquisition (also evaluate by criteria in Box B1 or B2)

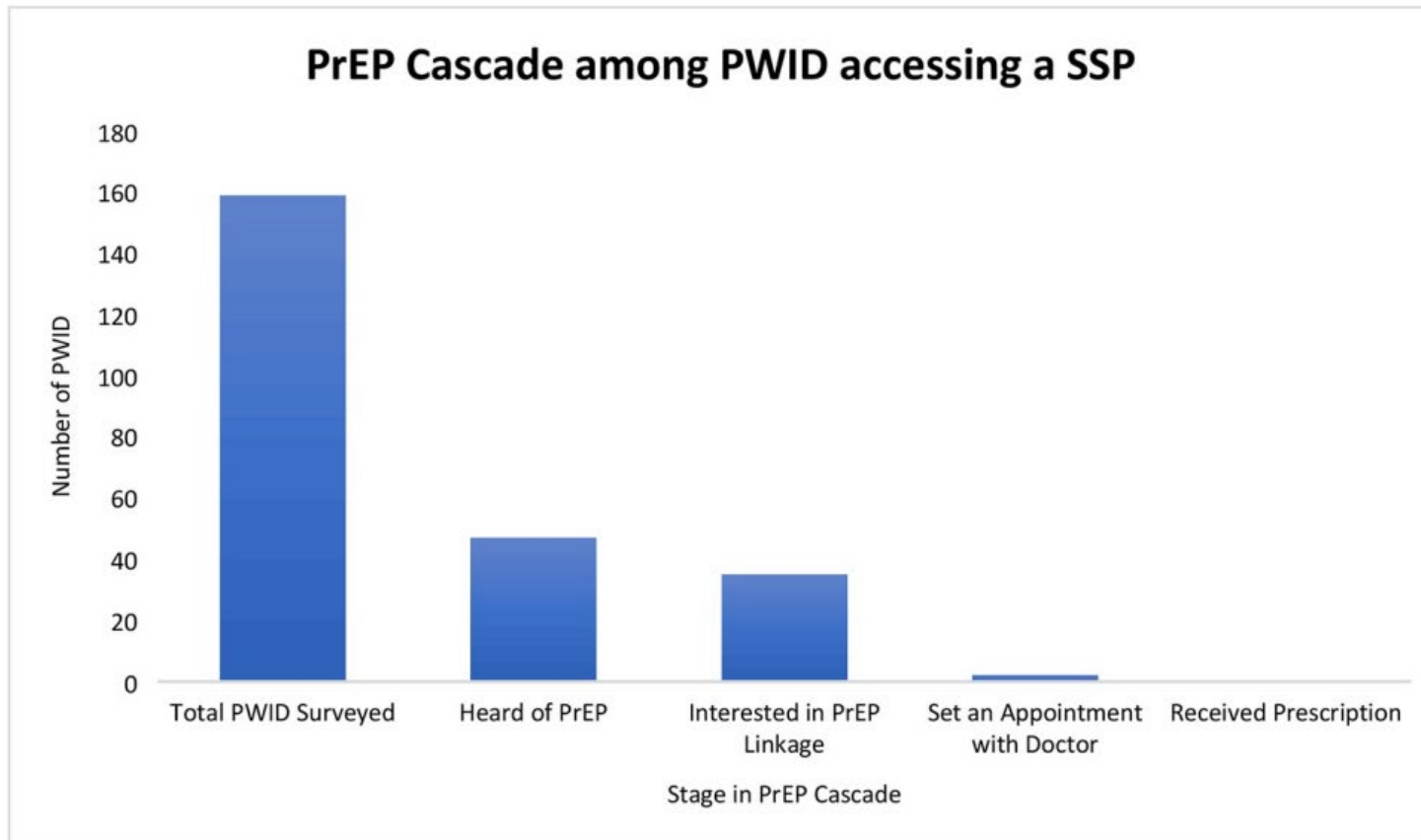


Fig 1. PrEP Cascade among PWID accessing SSP in Miami, FL.

Jo Y, Bartholomew TS, Doblecki-Lewis S, Rodriguez A, Forrest DW, Tomita-Barber J, OvesJ, TookesHE. Interest in linkage to PrEP among people who inject drugs accessing syringe services; Miami, Florida. PLoSOne. 2020 Apr 16;15(4):e0231424.



- Very low uptake of PrEP in this population.
- We need to determine what subgroup is most likely to benefit. What is the prevalence of disease transmission where this intervention is indicated?
- Concerns about feasibility, opportunity cost, implementation.