

# SUBSTANCE USE DISORDER AND HIV

Justin Alves RN,ACRN, CARN

Boston Medical Center-OBAT TTA





We have no financial disclosures

BMC OBAT TTA is supported by grant funding



# AGENDA

Develop a basic understanding of:

- The linkage between SUD and HIV.
- Describe the effects of MOUD on HIV transmission.
- The importance of integrated SUD and HIV care.

# DRUG and ALCOHOL USE— A SIGNIFICANT RISK FACTOR FOR HIV

A third of the 1.2 million Americans with HIV currently use drugs or binge on alcohol. Many people are unaware that the increased risk of HIV infection among substance users can result from **BOTH** the sharing of contaminated injection equipment as well as impaired judgment that can lead to risky sexual behavior and HIV transmission. This is why substance abuse treatment can play an important role in preventing the spread of HIV.

**1.2 MILLION PEOPLE**  
IN THE U.S. ARE LIVING WITH HIV<sup>1</sup>

FROM 2005 TO 2009, **1 IN 3** PERSONS  
WITH HIV WAS A CURRENT DRUG USER  
OR BINGED ON ALCOHOL.<sup>2</sup>



DRUG AND ALCOHOL  
USE ARE ASSOCIATED  
WITH LESS FREQUENT  
CONDOM USE.<sup>3</sup>

HIV INCIDENCE BY  
TRANSMISSION, 2010<sup>1</sup>

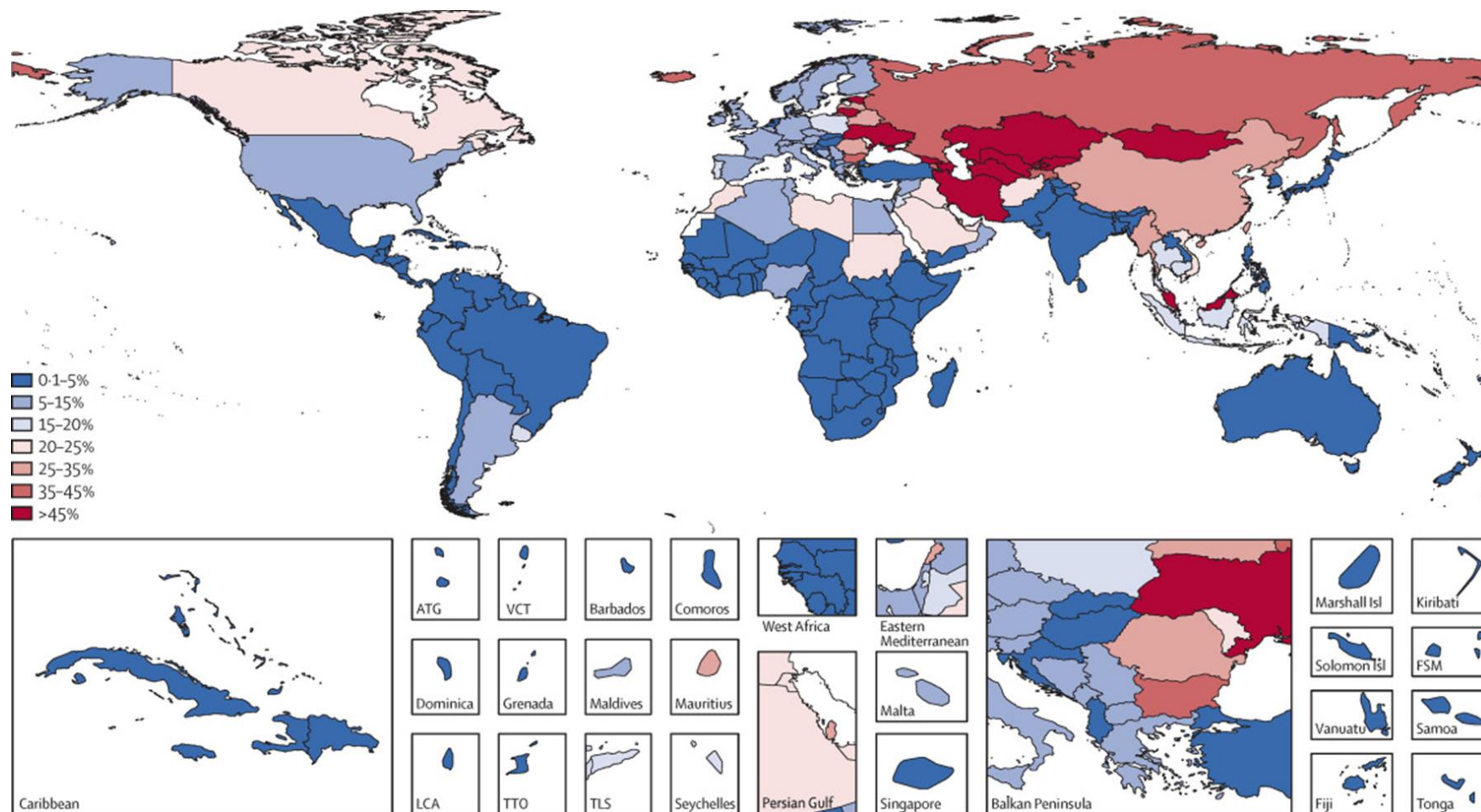


**24%**  
OF ALL PERSONS WITH HIV ARE IN  
NEED OF SUBSTANCE ABUSE  
TREATMENT<sup>2</sup>

Substance use disorders are significantly associated with the acquisition of HIV.

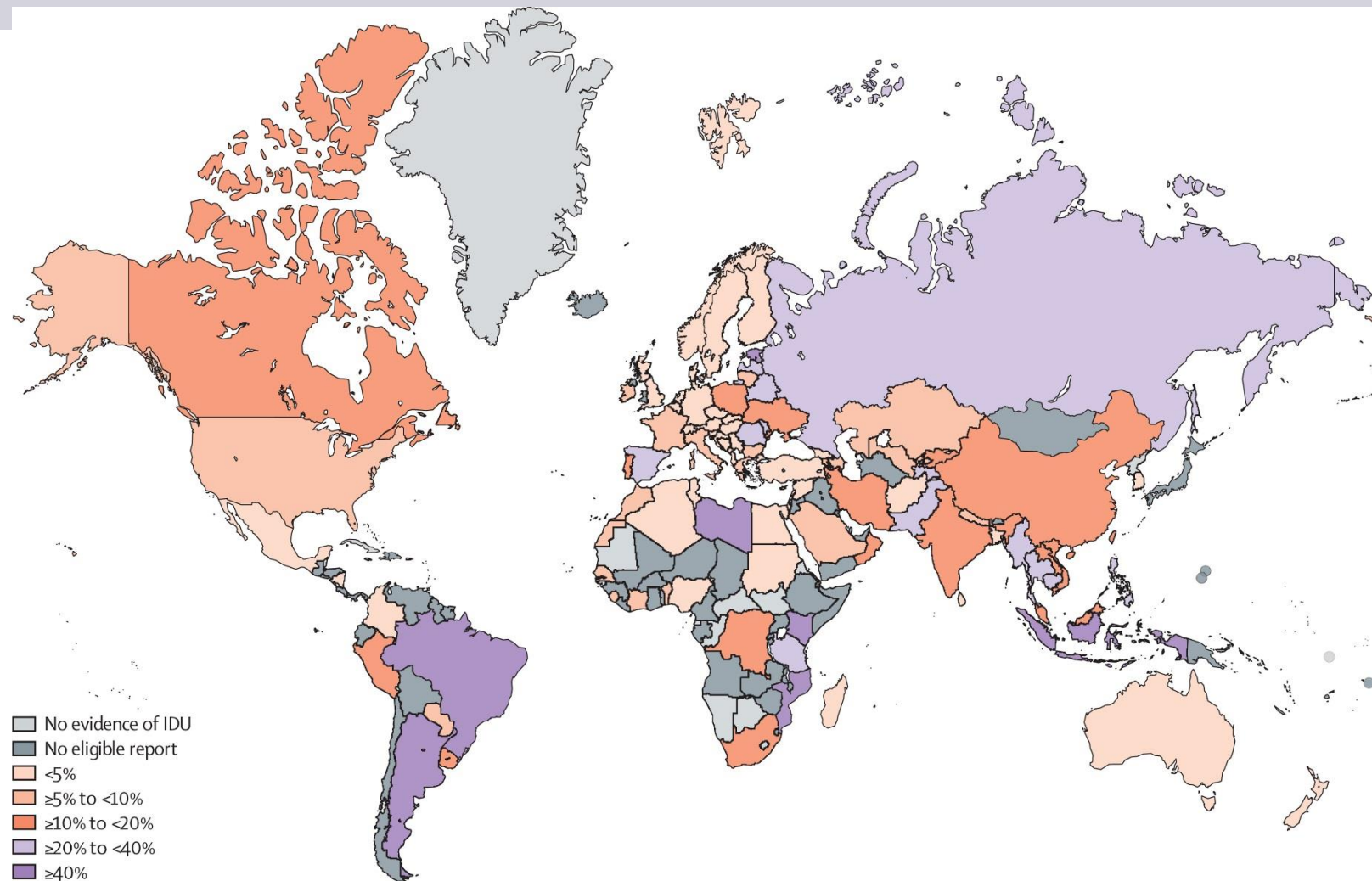
While many consider injection drug use to be one of the few ways that substance use disorders can affect the HIV care cascade, alcohol can also play a significant role.

# GLOBAL BURDEN OF HIV RELATED TO INJECTION DRUG USE

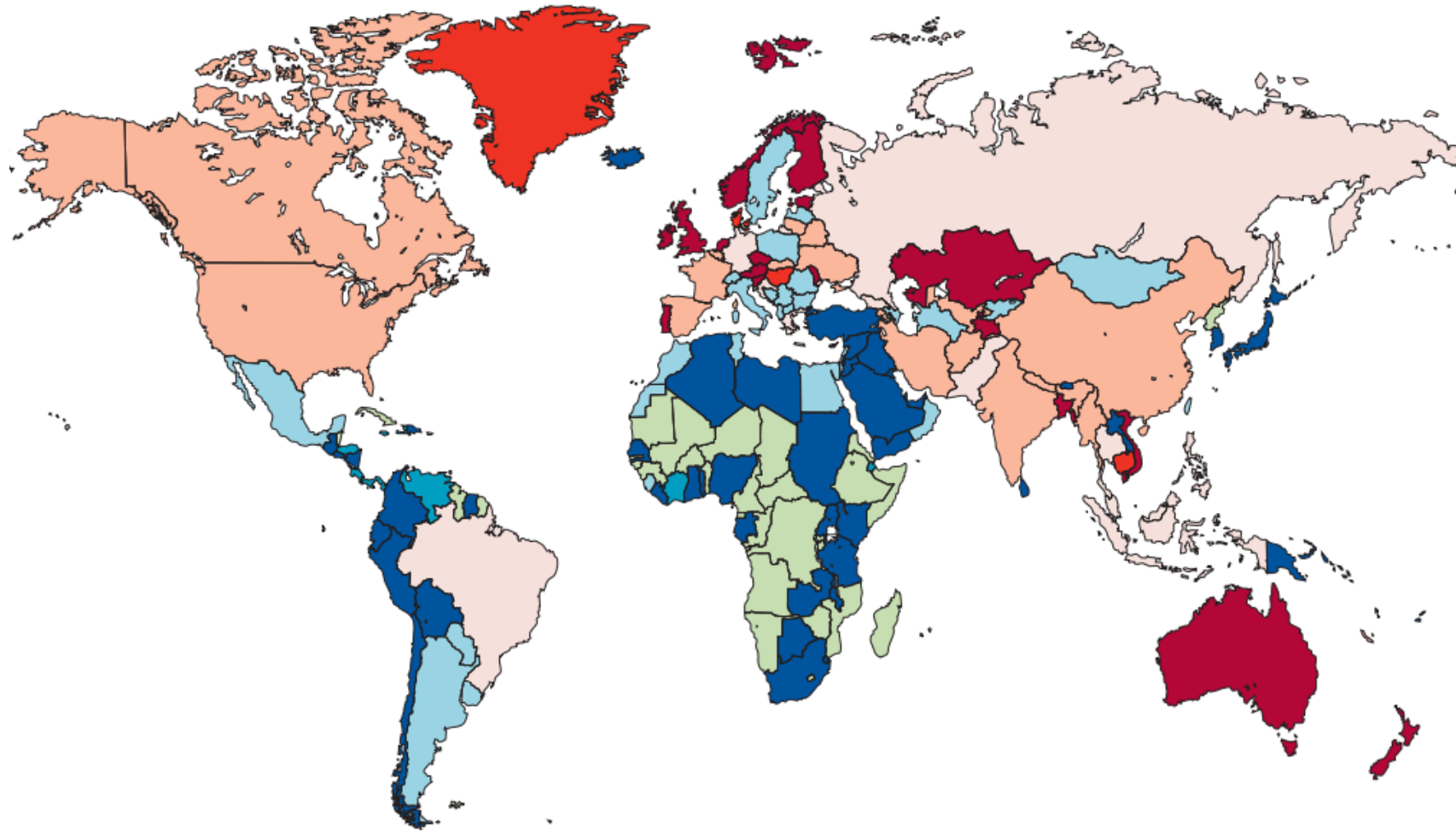




# PREVALENCE OF HIV AMONG PWIDS, GLOBALLY



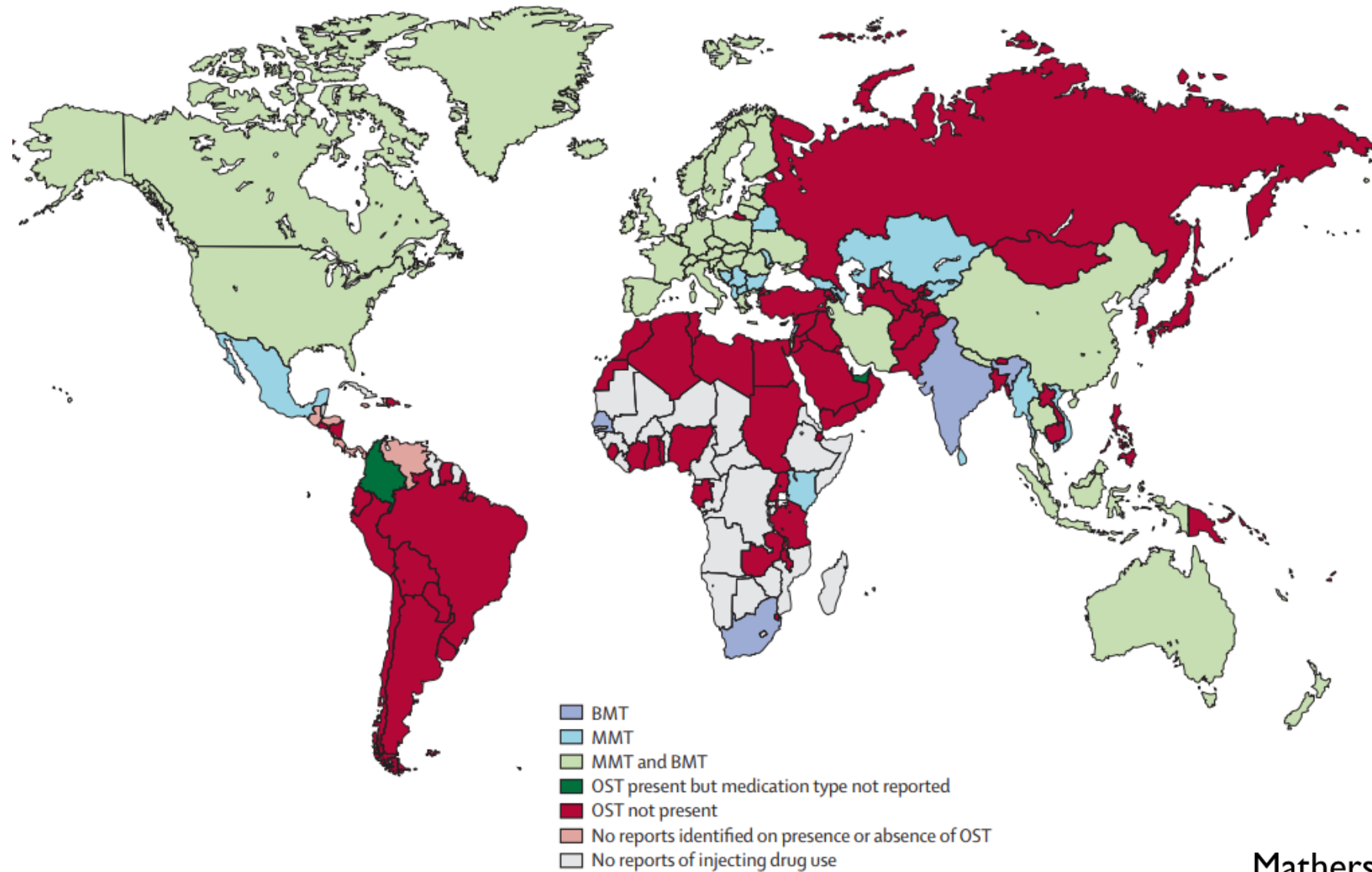
# ACCESS TO SYRINGE EXCHANGE PROGRAMS



□ >0 to 20 needle-syringes distributed per IDU per year  
□ >20 to 50 needle-syringes distributed per IDU per year  
□ >50 to 100 needle-syringes distributed per IDU per year  
□ >100 needle-syringes distributed per IDU per year

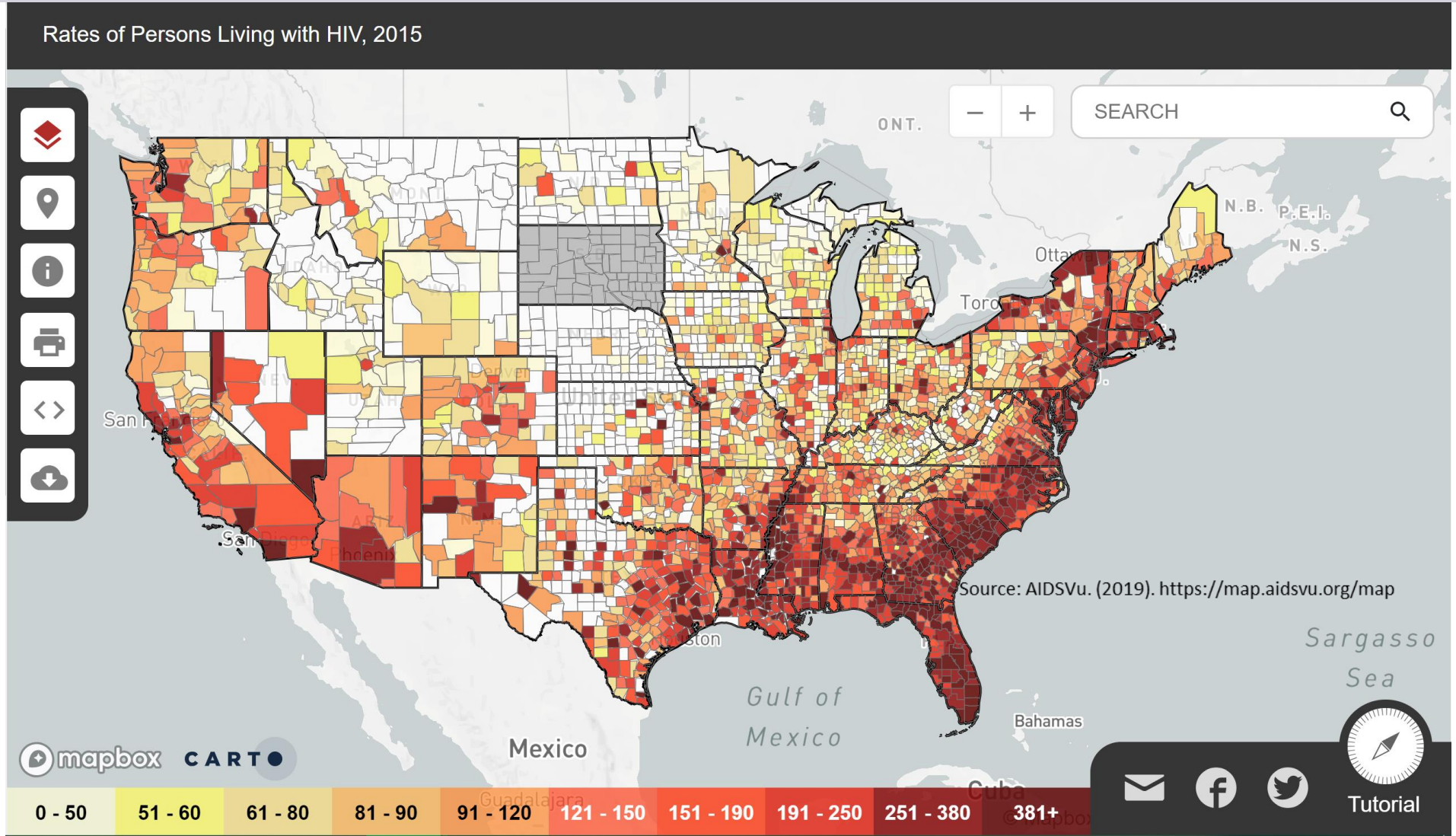
□ No reports of injecting drug use  
□ NSPs present but no data for number of needle-syringes distributed  
□ No reports on presence or absence of NSP identified  
□ NSPs not present

# ACCESS TO MOUD-GLOBAL DISPARITIES

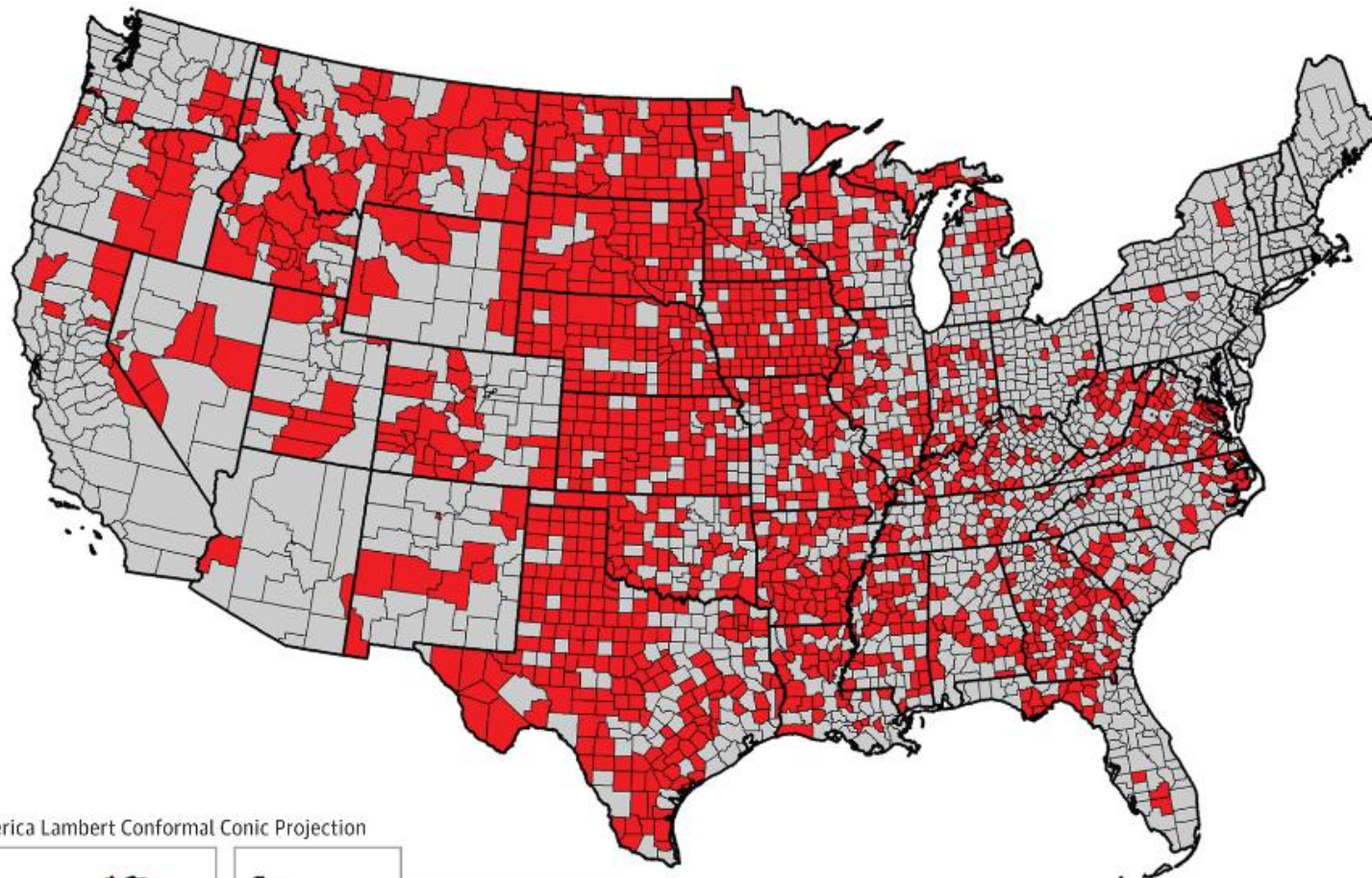




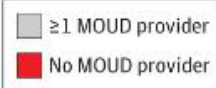
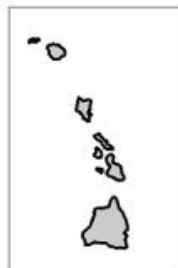
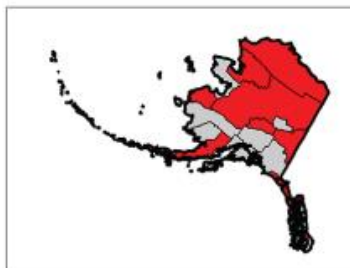
# CURRENT STATE OF THE HIV EPIDEMIC IN THE US



# DISPARITIES IN ACCESS TO MOUD

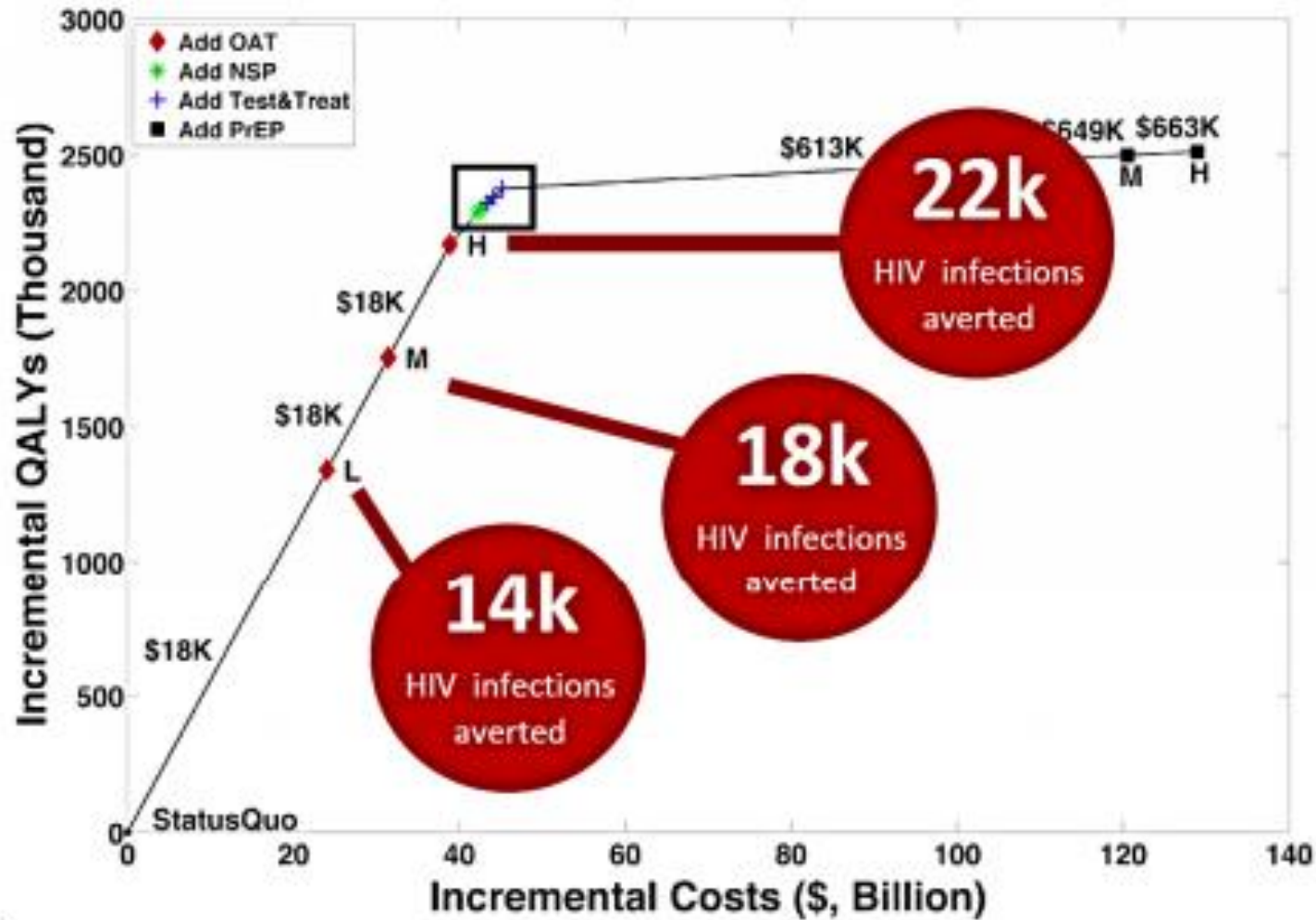


North America Lambert Conformal Conic Projection



JAMA, 2019





MOUD is one of the single most cost effective ways to decrease new HIV infections among PWUDs.

# A Formula for Disaster

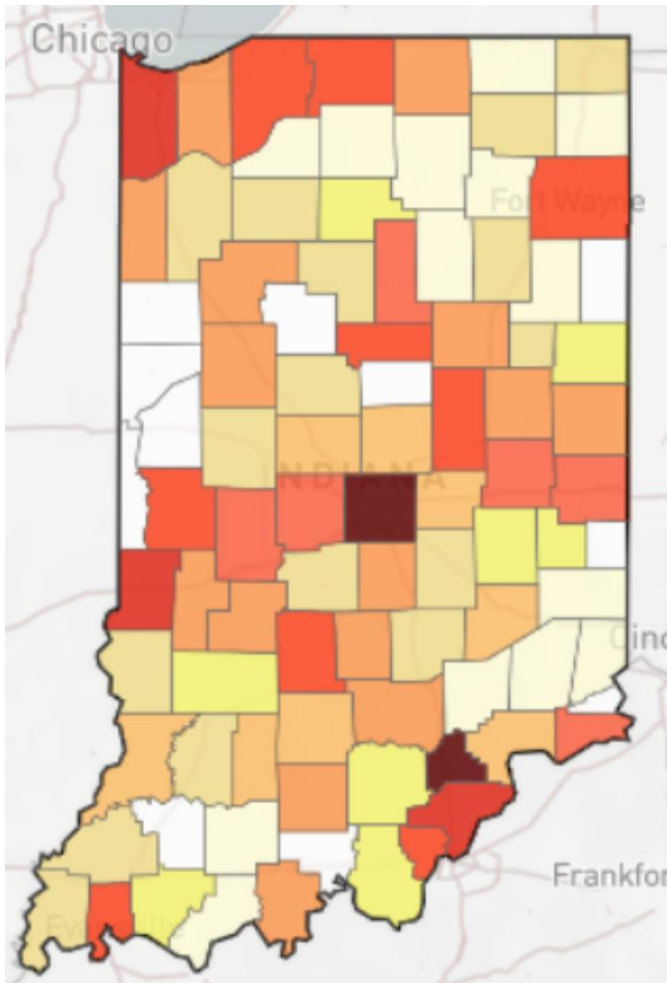
*Rural Indiana Struggles to Contend With H.I.V. Outbreak*



**HIV is surging in Lawrence and Lowell. The CDC wants to know why**



# The Indiana Outbreak



135 new HIV cases in a county of ~4,200 people

This approximately a 3.2% seroprevalence rate of HIV; similar to that of Rwanda.

Hepatitis C coinfection was found in approximately 114 of the patients.





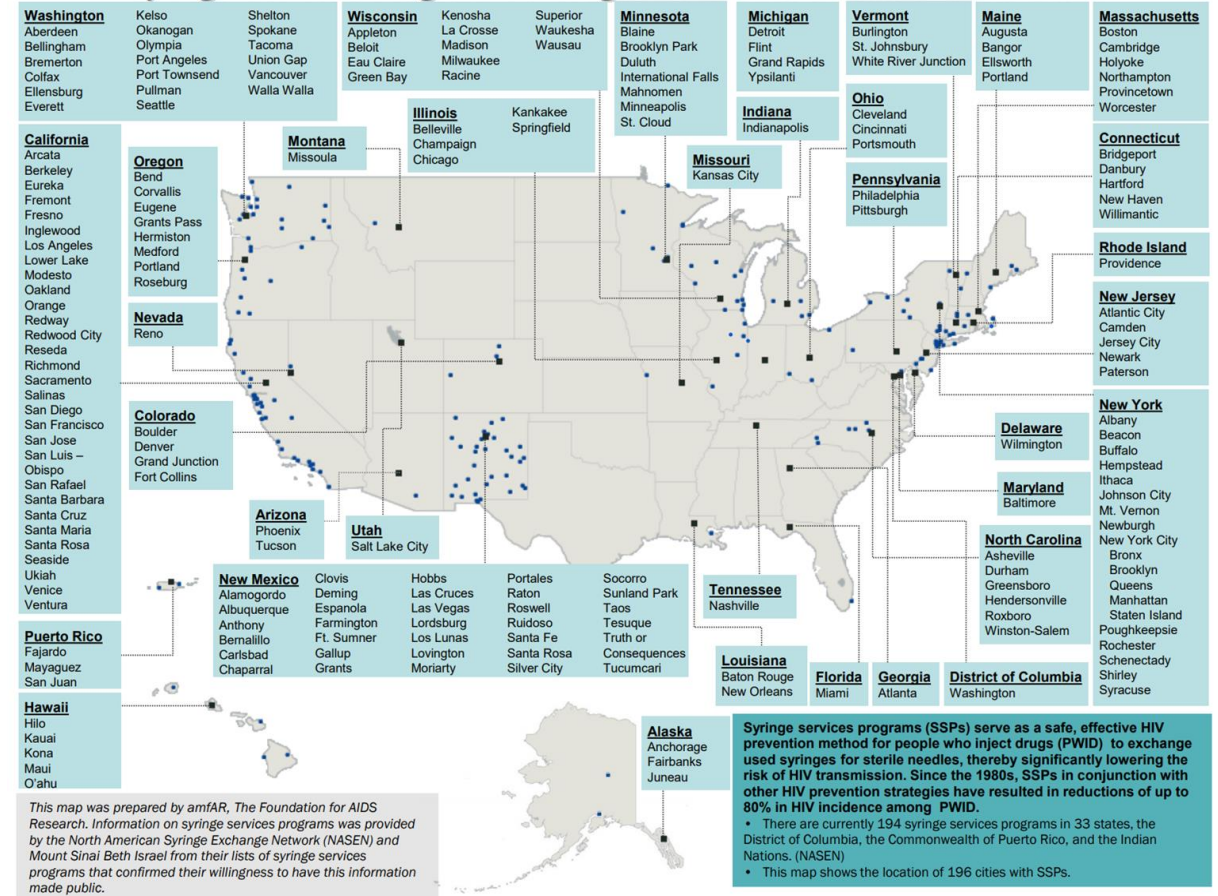
# Harm Reduction

Investment of \$10 million dollars in safer injection sites would result in:

194 new HIV infections averted in 1 year.

Lifetime treatment cost saving of \$75.8 million dollars.

Syringe Services Program Coverage in the United States – June 2014



# THE PORTUGAL EXPERIENCE

In 2001 Portugal decriminalized all drug use and invested in prevention, housing, and drug treatment (Ferreira, 2017).

Mixed results have accompanied the change in Portugal's laws, there have been significantly less crimes associated with drug use, a decrease in HIV transmission, a decrease in HCV transmission, but slow reforms regarding access to medications have stagnated progress (Ferreira, 2017).



# THE PORTUGAL EXPERIENCE-2018 DATA

Portugal continues to see a decrease in HIV transmission thanks to many of their forward thinking policies.

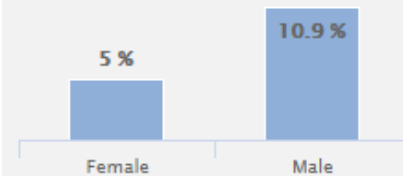
## THE DRUG PROBLEM IN PORTUGAL

### Drug use

in young adults (15-34 years) in the last year

### Cannabis

8.0 %



### Other drugs

|              |       |
|--------------|-------|
| MDMA         | 0.2 % |
| Amphetamines | 0 %   |
| Cocaine      | 0.3 % |

### High-risk opioid users

33 290

(24 070 - 48 565)

## New HIV diagnoses attributed to injecting



Source: ECDC

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acted on: 18/03/2019

## PLWHA WHO INJECT DRUGS:

Are less likely to be diagnosed with HIV.

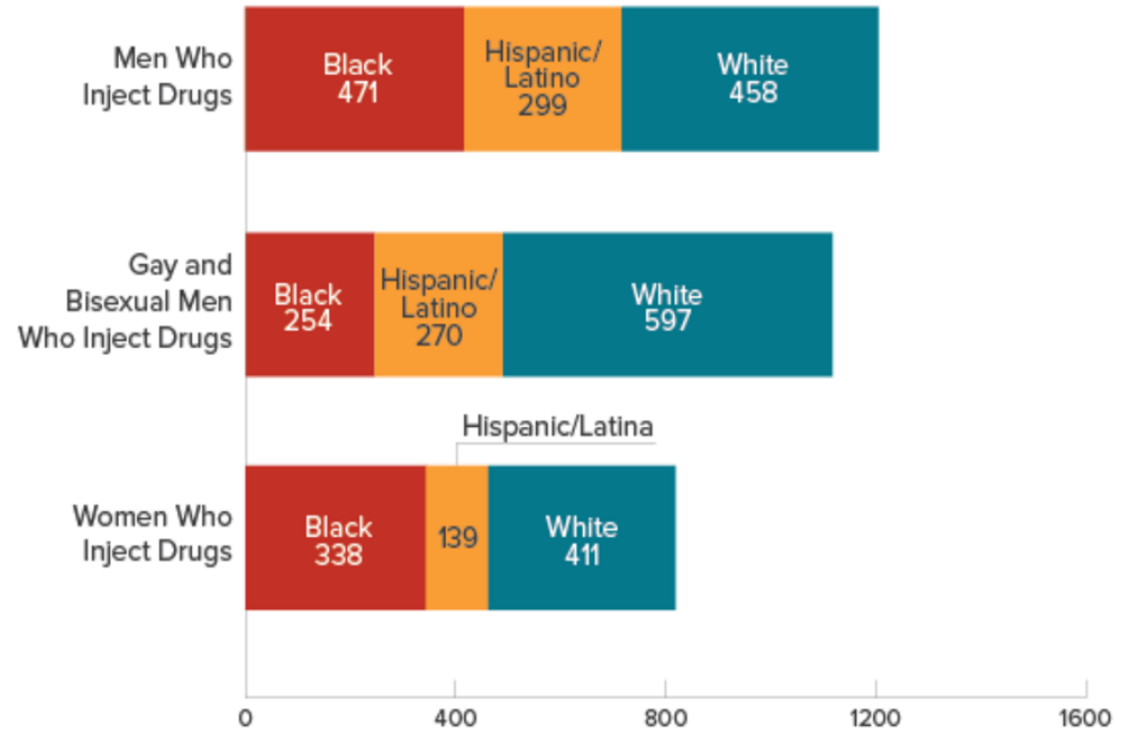
Present to care later than those infected via sexual transmission with a CD4 nadir of 69 on presentation.

Less likely to be successfully managed or virally suppressed than non-injecting counterparts.



HIV Diagnoses Among People Who Inject Drugs, by Transmission Category, Race/Ethnicity, and Sex, 2016—United States

Overall there was a 32% reduction in HIV infections among PWID from 2010-2014.



Over 196,000 PWID were living with HIV in 2014 and about 7% of them did not know they were infected.



# Treatment as Prevention

- ▶ Early access and medication adherence soon after diagnosis.
- ▶ Undetectable = Untransmissible (U=U)

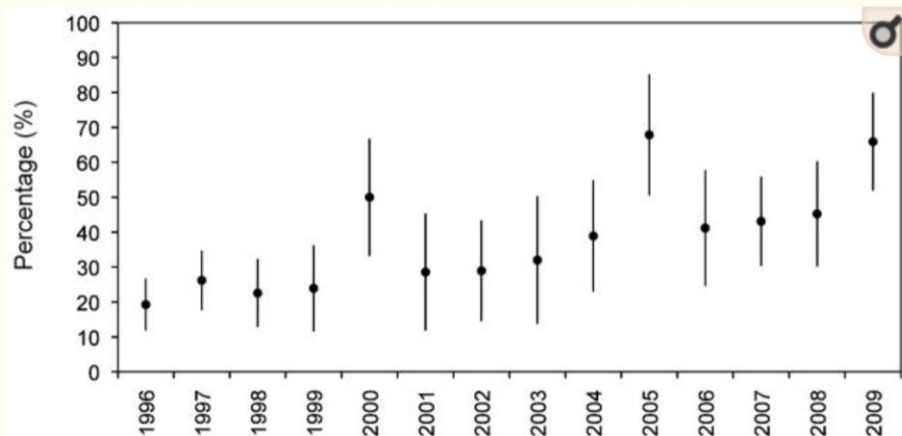


Figure 1

Proportion of injection drug users with  $\geq 95\%$  antiretroviral adherence\* from 1996 to 2009

\*Adherence defined based on prescription refill compliance.

**U=U**

**UNDETECTABLE = UNTRANSMITTABLE**

A PERSON LIVING WITH HIV WHO HAS AN UNDETECTABLE VIRAL LOAD DOES NOT TRANSMIT THE VIRUS TO THEIR PARTNERS.

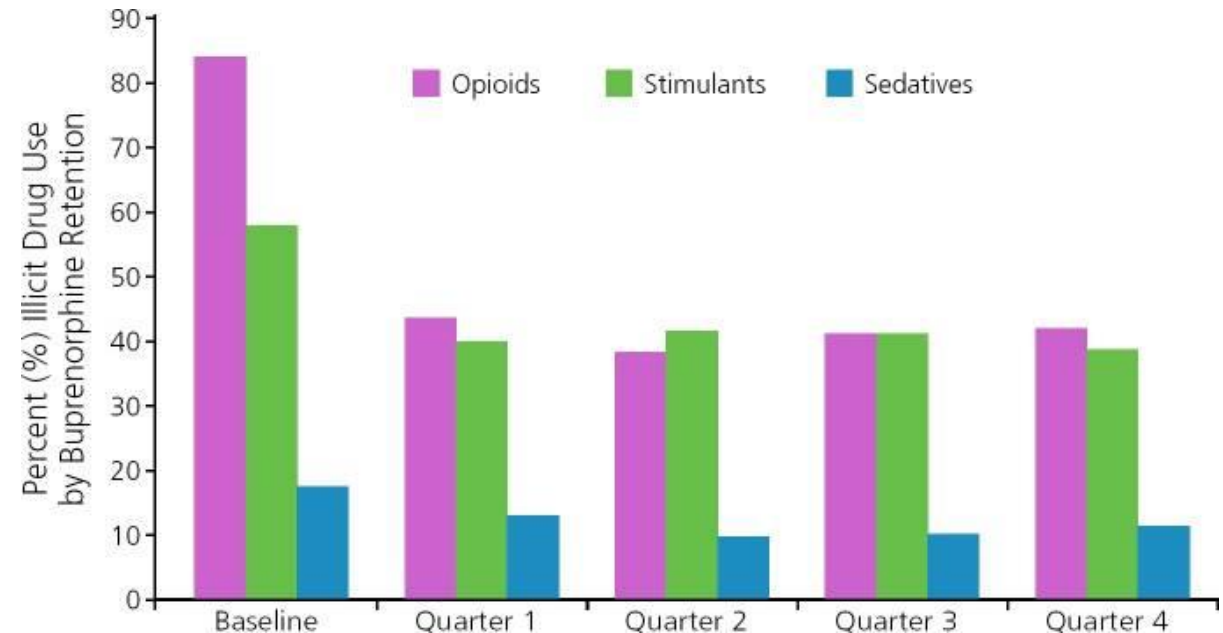
The International AIDS Society is proud to endorse the U=U consensus statement of the Prevention Access Campaign.

IAS

# OPIOIDS AND HIV

The opioid epidemic has called for a resurgence in advocacy for traditional harm reduction practices to curb the tide of increasing transmission.

New approaches including a Treatment as Prevention model of treating opioid use disorder with agonist medications to prevent continued use and potential transmission of HIV.



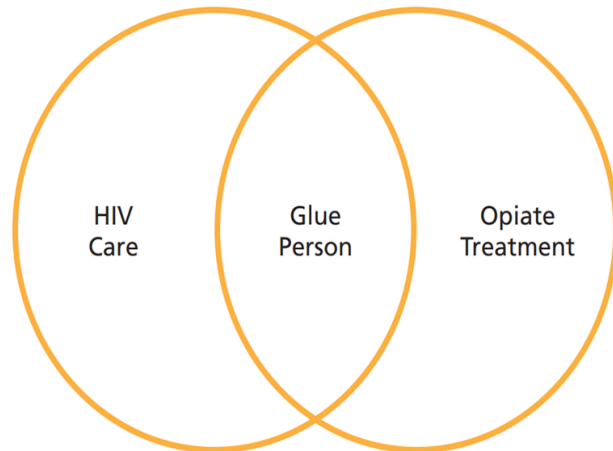
As patients are treated for their opioid use disorder, their viral load and retention in care rates both improve. A study published in 2018 examined data from the BHIVES (Buprenorphine HIV Evaluation and Support) network and demonstrated a reduction in both opioid use and stimulant use overall.



# Integration of Care

## Key Components of Integration of Care

FIGURE 4-1. ROLE OF THE GLUE PERSON.



Data 2000 made it possible for primary care providers to provide medication treatment for SUD.

HIV primary care visits are separate from SUD treatment and management visits.

Safe, non-judgmental environment with the ability to start medications right away and referral options for other levels of treatment if necessary.



# THE TANZANIA EXPERIENCE

~15,000 people living in Dar es Salaam had an untreated OUD in 2010 and about 42% were living with HIV (WHO, 2013).

First MMTP opened in 2011 in Dar es Salaam and saw enrollment of about 600 patients by November 2012 (WHO, 2013).

Integration of care for HIV, TB, and OUD in Muhimbili hospital with strict guidelines regarding initiation of MOUD (Liswai & Nsimba, 2017).



# THE TANZANIA EXPERIENCE

Over the course of one year they had a greater than 75% retention in care rate (Liswai & Nsimba, 2017).

Participants cited transportation issues and experiences related to compounded stigma as the greatest barriers to remaining engaged in care (Liswai & Nsimba, 2017).





# COMPOUNDED STIGMA

According to the *Center for HIV Law and Policy*,

“Stigma is a product of misinformation and broad societal acceptance of certain human characteristics or behaviors as inherently bad or spoiling of individual identity.”

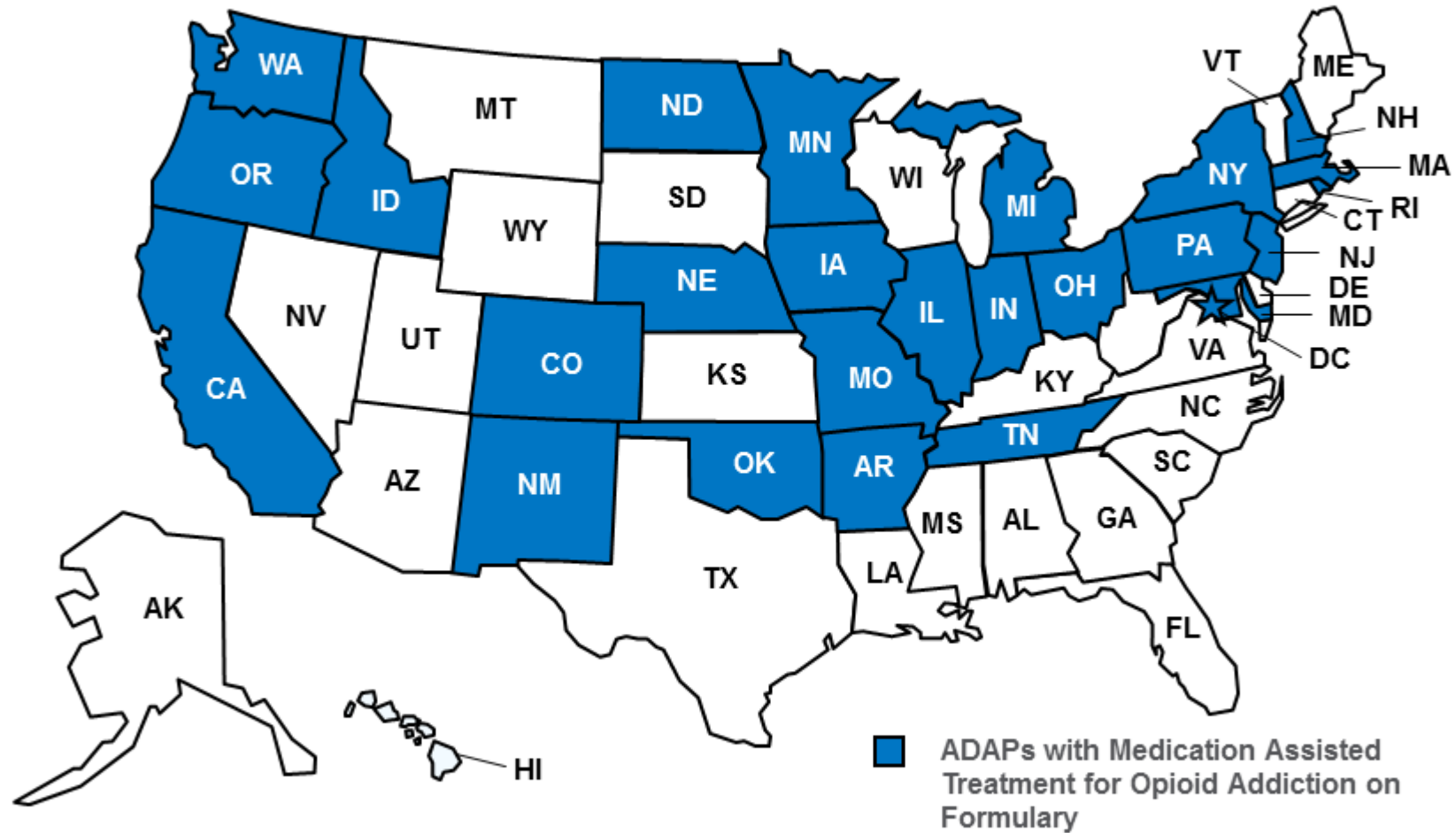
“This HIV Policy Resource Bank category includes materials examining the magnitude and causes of HIV-related stigma and its impact on the health, rights, and well-being of people living with HIV, with a focus on those who face additional marginalization, such as women, people of color, immigrants, those living in poverty, young people, and the LGBT community.”

Patients with HIV and SUDs face stigma even within their already marginalized community and are often left out of comprehensive plans to improve care of PLWHA.



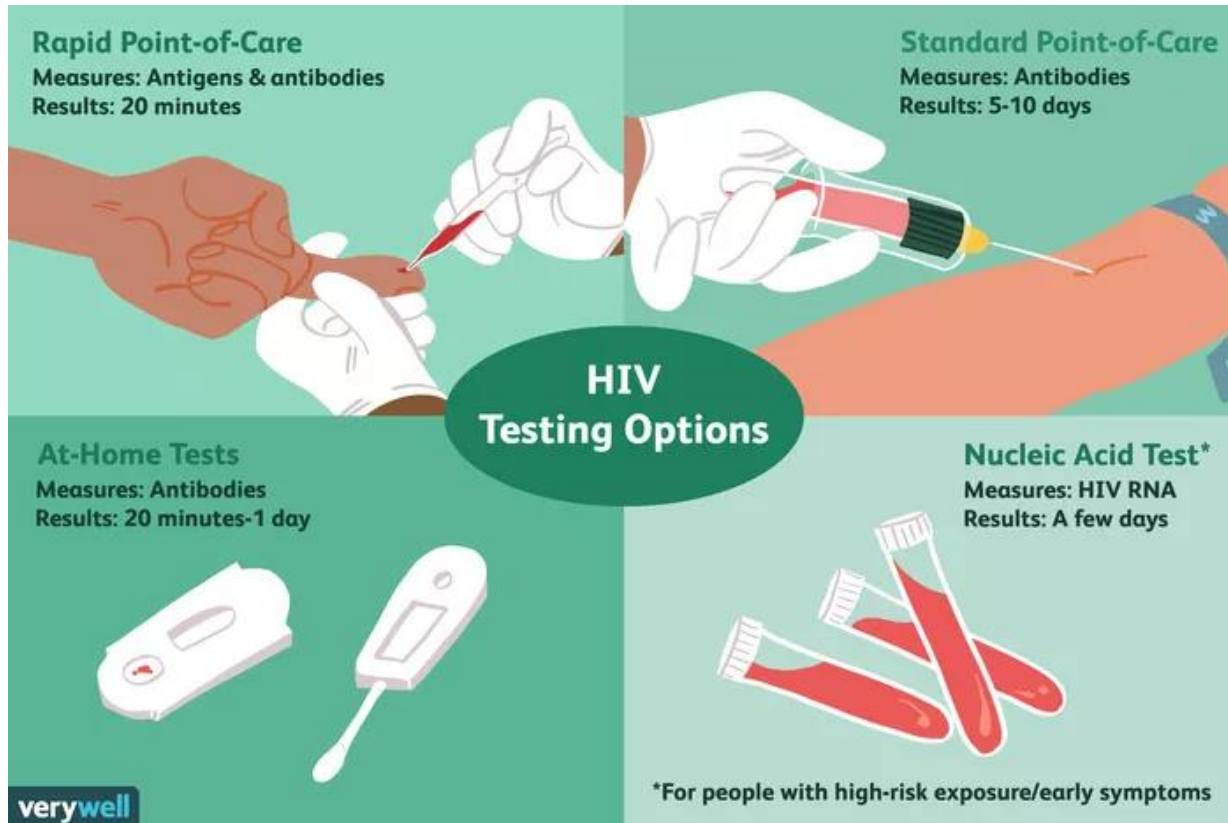
Figure 5

# ADAPs with Medication-Assisted Treatment for Opioid Addiction on Formulary, 2018



Source: Kaiser Family Foundation Analysis of NASTAD's 2018 ADAP formulary database: <https://www.nastad.org/adap-formulary-database>.

# SCREENING FOR HIV IN SUD TREATMENT FACILITIES



In 2017, according to SAMHSA data of the facilities offering substance use assessments, mental health disorder screenings, drug and alcohol urine screenings, or substance use education, only **22-38%** screened for HIV, STIs, and/or TB.

## SUBSTANCE USE SCREENING FOR PLWHA

Always ASK, Don't ASSUME!

Ask open-ended questions:

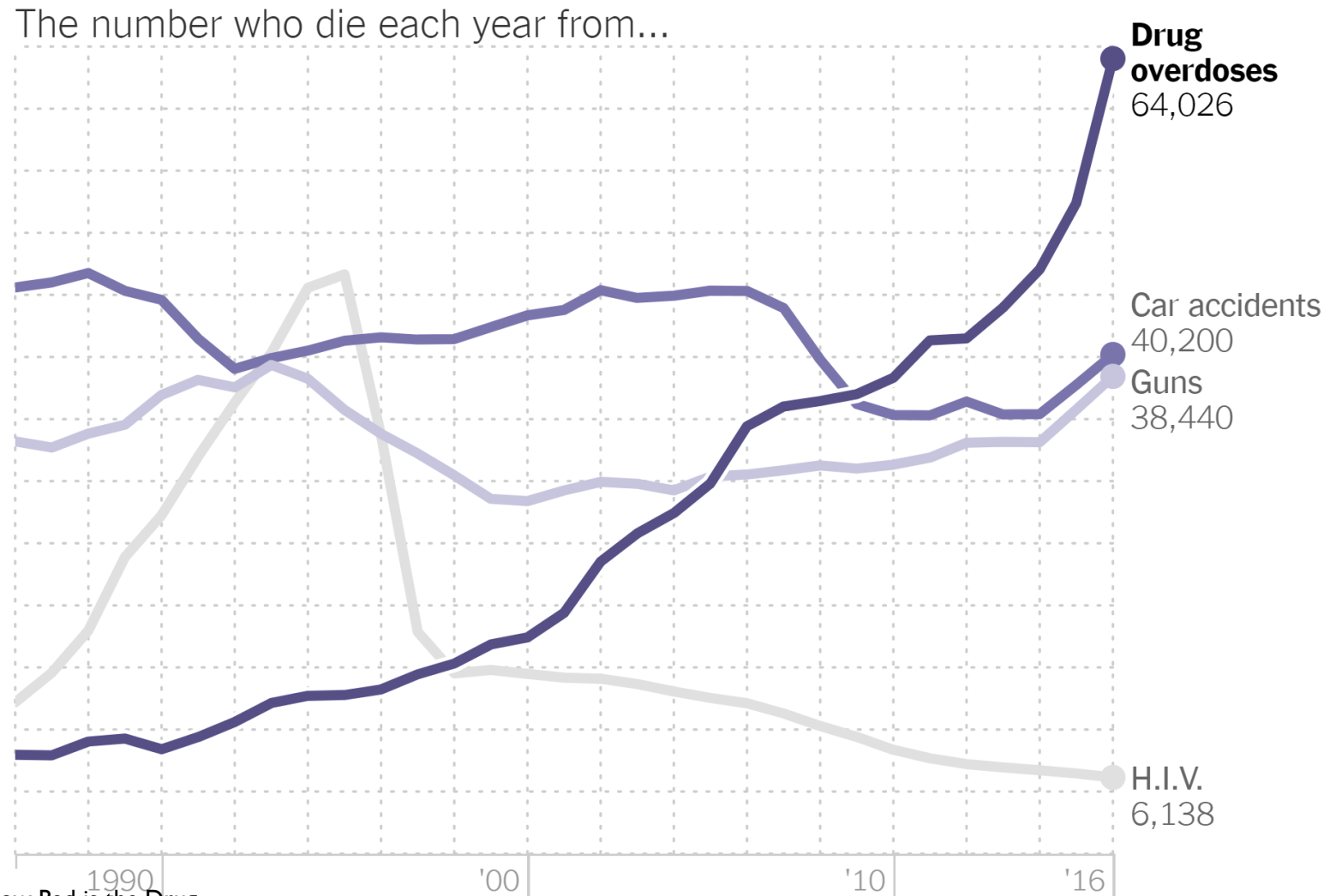
What kind of drugs do you use recreationally?

How often do you drink alcohol?

Have you ever used drugs to enhance a sexual experience?



# THE OVERDOSE CRISIS



Josh Katz, New York Times, Just How Bad is the Drug Overdose Epidemic? 10/26/2017



## CHEMSEX AND HIV

ChemSex is an encompassing term for the illicit substances used by MSM and others while having sex.

Substances may include:  
methamphetamines, GHB, ketamine, amyl nitrates, GBL, Viagra, MDMA, and cocaine.

ChemSex increases traumatic experiences of PLWHA and may put them at increased risk for multiple negative health effects including other infections, suicide, and psychosis.

- There is a time-to-response link that has been demonstrated with methamphetamine use and HIV infection.
- 86% of inpatient admissions to SUD treatment facilities for methamphetamine use were PLWHA.

(Shoptaw, 2006)





Justin.alves@bmc.org  
617-414-6677

# Office Based Addiction Treatment Training and Technical Assistance



BOSTON MEDICAL CENTER'S OBAT TTA PROVIDES EDUCATION TO AND TECHNICAL SUPPORT FOR HEALTH CARE PROFESSIONALS AND SUPPORT STAFF TREATING SUBSTANCE USE DISORDERS. WE SUPPORT AND FACILITATE IMPLEMENTATION OF THE MASSACHUSETTS NURSE CARE MANAGER MODEL INTO PRACTICE SETTINGS WITH A FOCUS ON COMMUNITY HEALTH CENTERS (CHC's).

Trainings include:

- Introduction to Addiction and Treatment
- Essentials of Office Based Addiction Treatment
- Buprenorphine Waiver Training for Prescribers
- Certified Addiction Registered Nurse (CARN) Review Course
- And many more....

Our website offers resources, including national and Massachusetts Clinical Guidelines, assessment tools, and documentation templates from NIDA.

To register for a scheduled training event, request a training event for your organization, or request technical assistance from our experienced addiction treatment team, please visit:

[WWW.BMCOBAT.ORG](http://WWW.BMCOBAT.ORG)