UNDERSTANDING THE HIV EPIDEMIC IN VULNERABLE, SOUTHERN POPULATIONS

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THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

DISCLOSURES

Research support to UAB on my behalf from the following:

- Gilead HIV Research Scholarship
- Center for AIDS Research
- STI Cooperative Research Center
- Viiv
- National Academy of Medicine

OUTLINE

- **Cases**
- Southern priorities for Ending the HIV Epidemic (EtHE)
- Barriers to EtHE in the South
  - Drug Epidemic ≠ Opioid Epidemic
  - Stigma
  - Resources

CASE

25 year old CM with h/o heroin injection presents with fevers, chills. He is uninsured, has no PCP, lives in rural North Georgia

- Day 1. blood cultures positive for GPC in clusters, receives vancomycin
- Day 2. blood cultures with S. Aureus, TTE with small mitral valve vegetation, buprenorphine/naloxone induction
- Day 3 to week 6. MSSA confirmed, vancomycin switched to nafcillin, CT surgery recommends medical management
- Patient discharged to home with family, buprenorphine/naloxone, ID and addiction medicine follow up arranged

CASE

Which of the following behaviors would place him at risk for HIV

a. Sharing needles
b. Sharing cotton filter used to prepare drugs
c. Exchange of sex for drugs, money
d. Exchange of sex for housing or food
e. All of the above (whoops, I should have mentioned PrEP to him)

USPSTF.JAMA.2019

CASE

Which of the following behaviors would place him at risk for HIV

E. All of the above (whoops, I should have mentioned PrEP to him)

CASE

23 yo AAF presents to urgent care in Jackson, MS for foul-smelling, vaginal discharge.

- Afebrile, VSS. GU exam notable for thin green vaginal discharge but no lesions, no cervical motion TTP.
- U preg negative
- Trichomonas NAAT pos
- GC/CT NAAT neg
- HIV screen neg
- RPR 1:256
- Treatment and counseling provided

WHICH OF THE FOLLOWING HETEROSEXUAL WOMEN DO NOT MEET CRITERIA FOR PREP?

a. HIV positive partner
b. African American residing in a high prevalence region: > 4,000 cases per 100,000 persons
c. Inconsistent condom use with partner of unknown HIV status
d. An STI with syphilis or gonorrhea in the past 6 mos

USPSTF.JAMA.2019

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USPSTF.JAMA.2019

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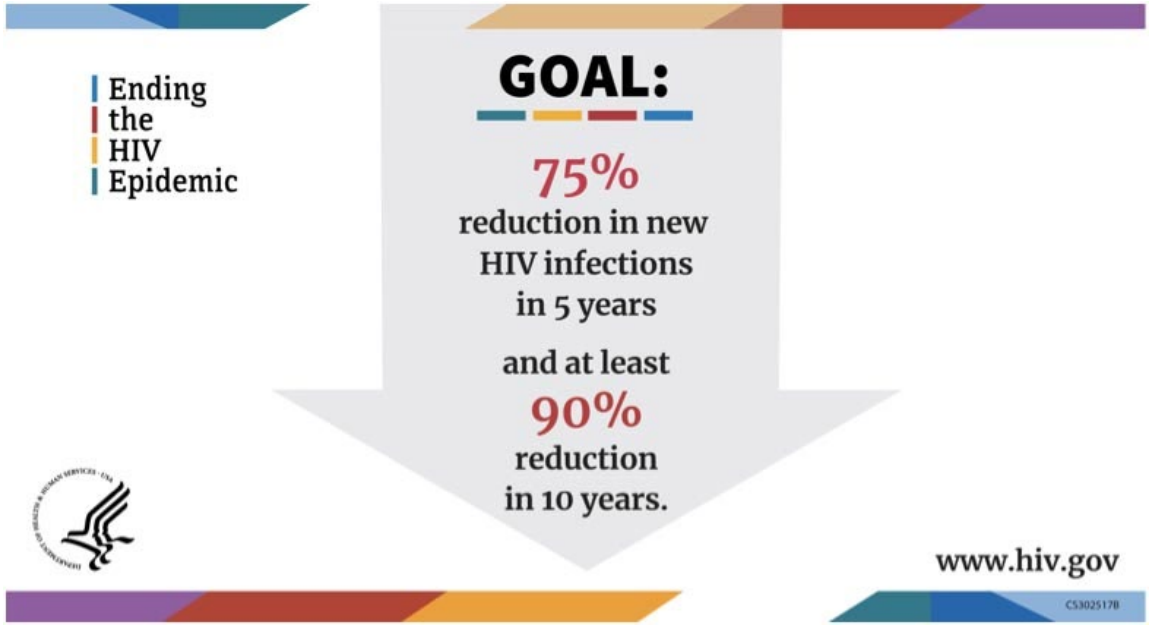
ENDING THE HIV EPIDEMIC: A PLAN FOR AMERICA

- "***We have a once-in-a-generation opportunity to end the HIV epidemic in the United States. Now is the time.***"

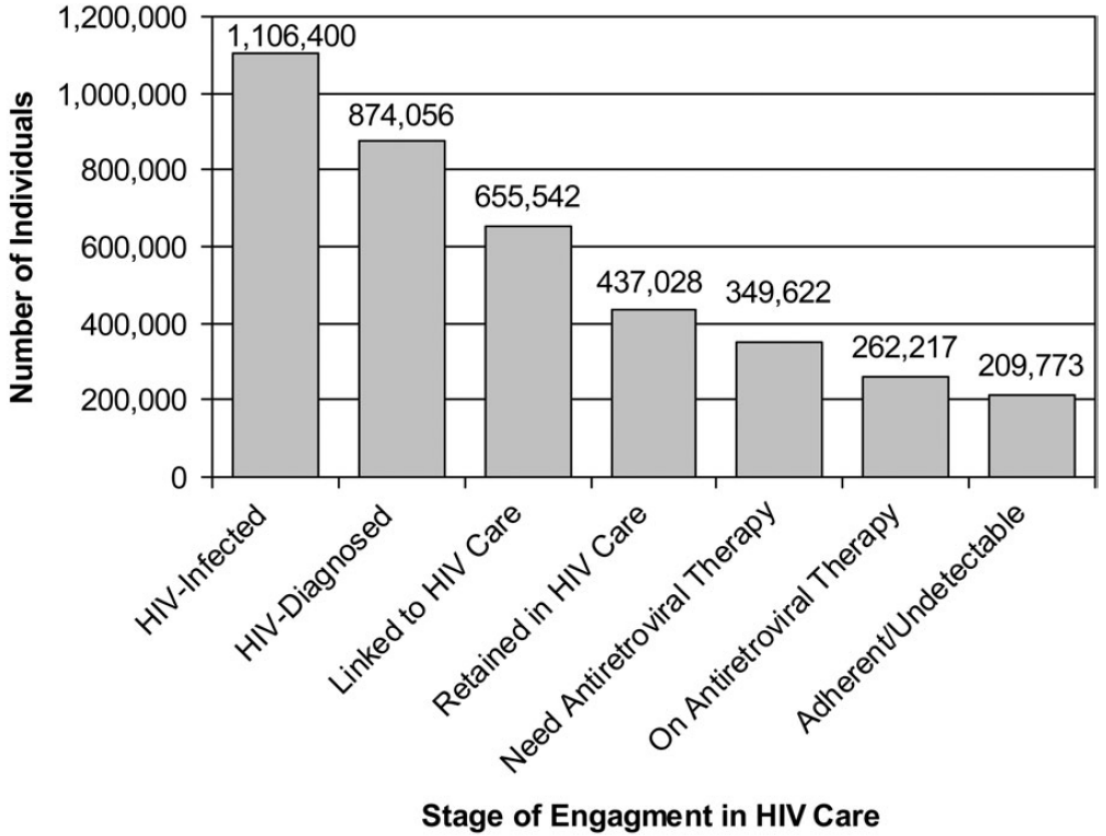
  -President Donald Trump
  State of the Union Address
  Feb 5, 2019



ENDING THE HIV EPIDEMIC: A PLAN FOR AMERICA

https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview

ENDING THE HIV EPIDEMIC: A PLAN FOR AMERICA



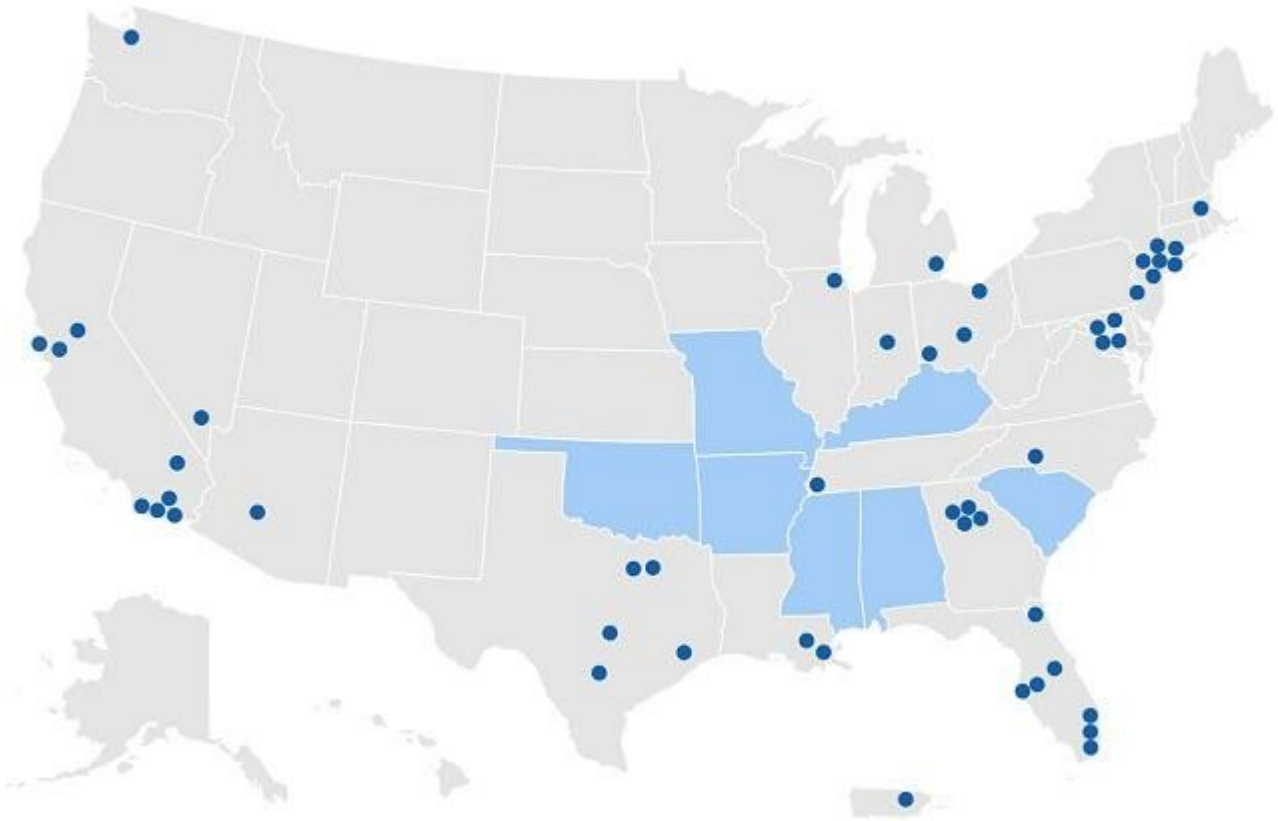
prevention

response

Figure 2. The spectrum of engagement in HIV care in the United States spanning from HIV acquisition to full engagement in care, receipt of antiretroviral therapy, and achievement of complete viral suppression. We estimate that only 19% of HIV-infected individuals in the United States have an undetectable HIV load.

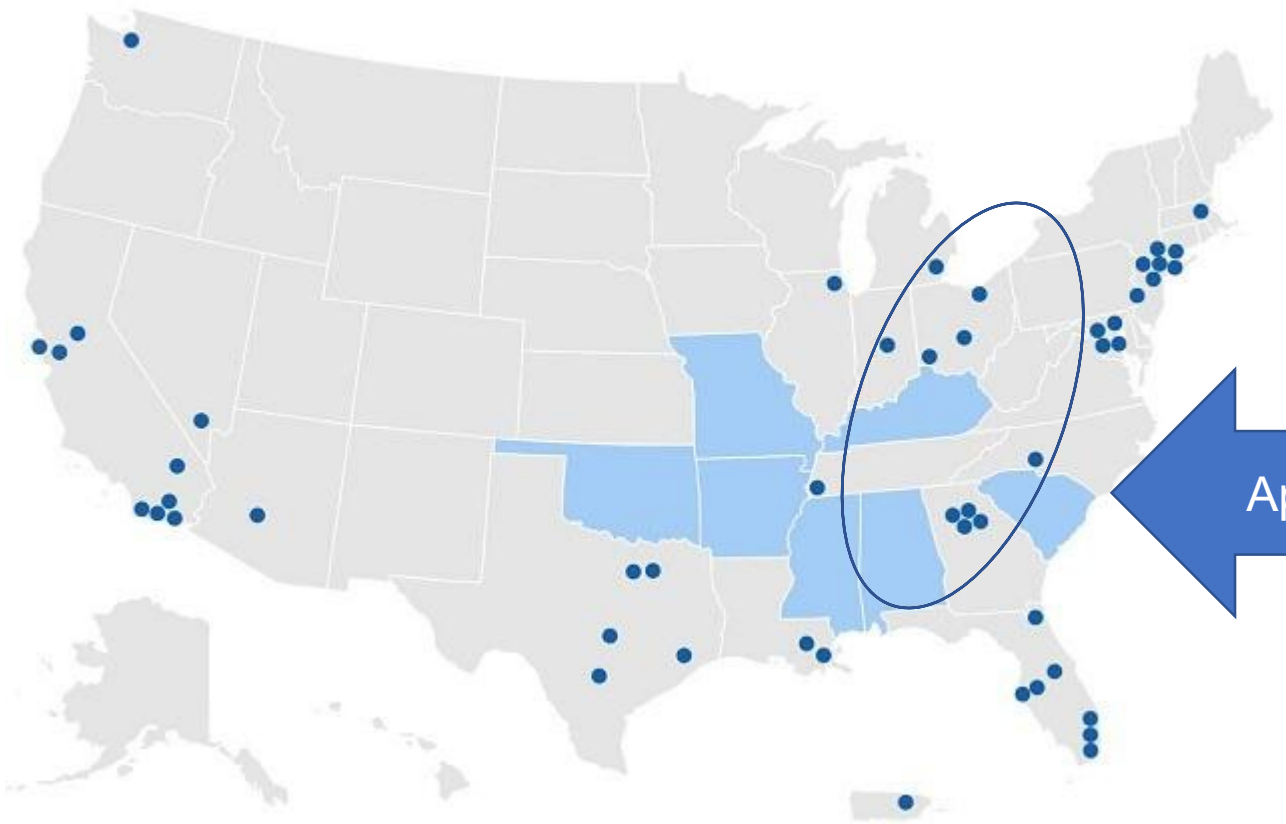
Gardner et al.CID. 2011

ENDING THE HIV EPIDEMIC: PLACE



7 States with Substantial Rural Burden:
Alabama
Arkansas
Kentucky
Mississippi
Missouri
Oklahoma
South Carolina

ENDING THE HIV EPIDEMIC: PLACE



7 States with Substantial Rural Burden:
Alabama
Arkansas
Kentucky
Mississippi
Missouri
Oklahoma

Appalachia

ENDING THE HIV EPIDEMIC: PLACE

Viewpoint

August 1, 2019

Opioid Injection in Rural Areas of the United States
A Potential Obstacle to Ending the HIV Epidemic

Andrea M. Lerner, MD[1]; Anthony S. Fauci, MD[1]

» Author Affiliations | Article Information

JAMA. 2019;322(11):1041-1042. doi:10.1001/jama.2019.10657

On February 5, 2019, President Trump announced in the State of the Union Address a plan to decrease the number of new HIV infections in the US by 75% in 5 years and by 90% in 10 years, thereby ending the United States HIV epidemic by 2030. The details of this plan were recently discussed in a Viewpoint[1] that pointed out that the tools are already at hand to accomplish this goal in the form of prevention and treatment modalities, notably, antiretroviral therapy for individuals with HIV infection and preexposure prophylaxis (PrEP) for people at increased risk of HIV infection, as well as access to needle and syringe exchange programs and treatment of opioid use disorder when needed. Implementation of these tools in the demographic and geographic hot spots of infection will be critical to the success of the plan. However, an insidious threat to the achievement of this goal is a growing risk factor for HIV transmission—opioid injection in rural areas of the United States—that involves demographically and geographically distinct populations from those seen earlier in the HIV epidemic.

Injection drug use (IDU) has been associated with the HIV epidemic since the first reports of AIDS in 1981. In the United States, the proportion of HIV transmission attributable to IDU (considering IDU, combination IDU, and male-to-male sexual contact risk groups) reached a high of more than 30% in the early 1990s. This proportion has gradually declined to less than 10% in recent years and represents a major achievement in HIV prevention in the United States.[2] Although multiple factors are responsible for this decrease, needle and syringe exchange programs have clearly been amo
provide access to sterile injectin

OUTLINE

- Cases
- Southern priorities for Ending the HIV Epidemic (EtHE)
- **Barriers to EtHE in the South**
  - **Drug Epidemic ≠ Opioid Epidemic**
  - Stigma
  - Resources

DRUG USE

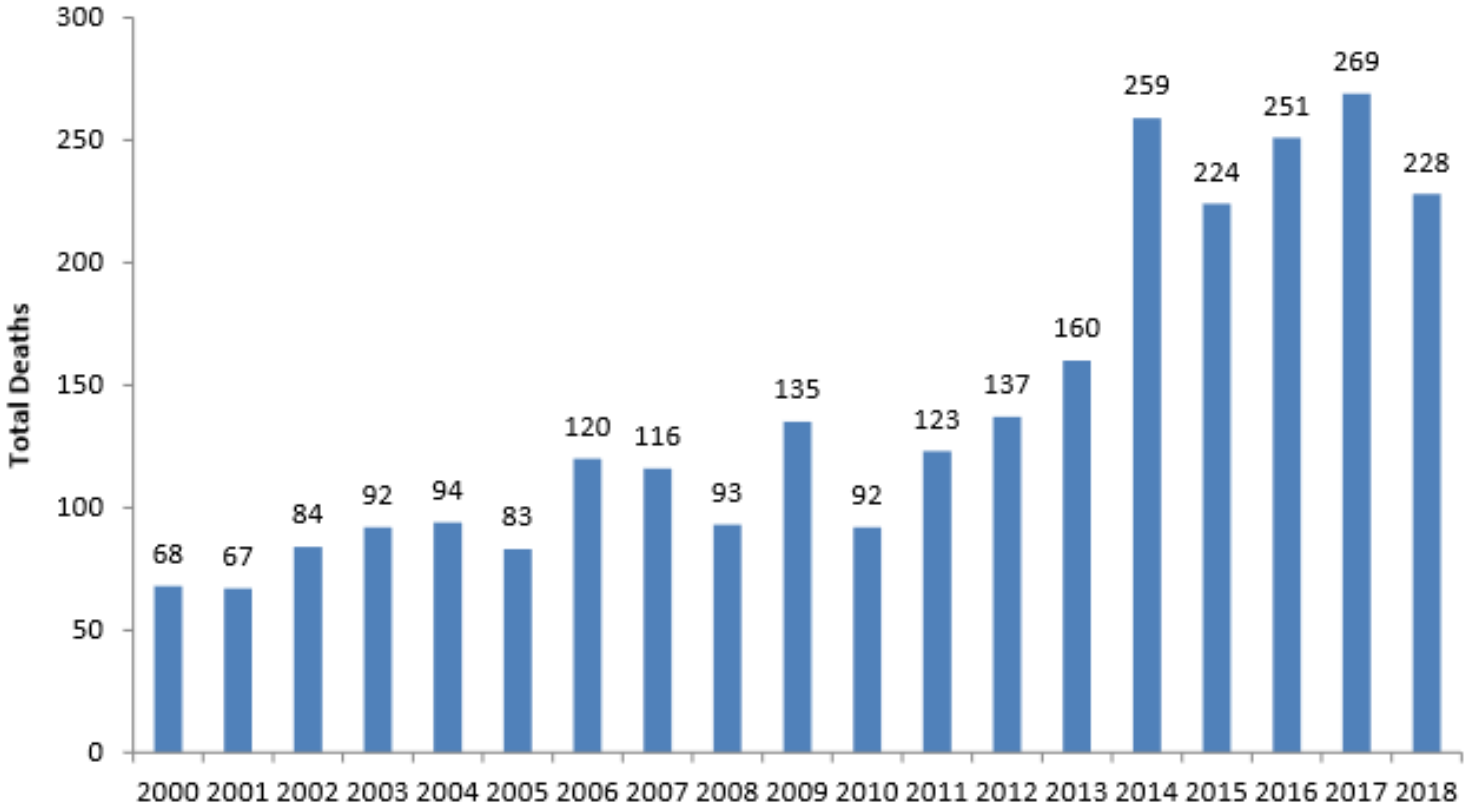
- Opioid epidemic is actually a Drug Use epidemic
  - Not just opioids, but meth, crack, benzos
  - Not just injection
  - It’s high risk sex
  - It’s exchange of drugs for sex, housing, food

Strathdee.J of Urban Health.2003

BIRMINGHAM AREA:
JEFFERSON CO MEDICAL EXAMINER OVERDOSE DEATHS

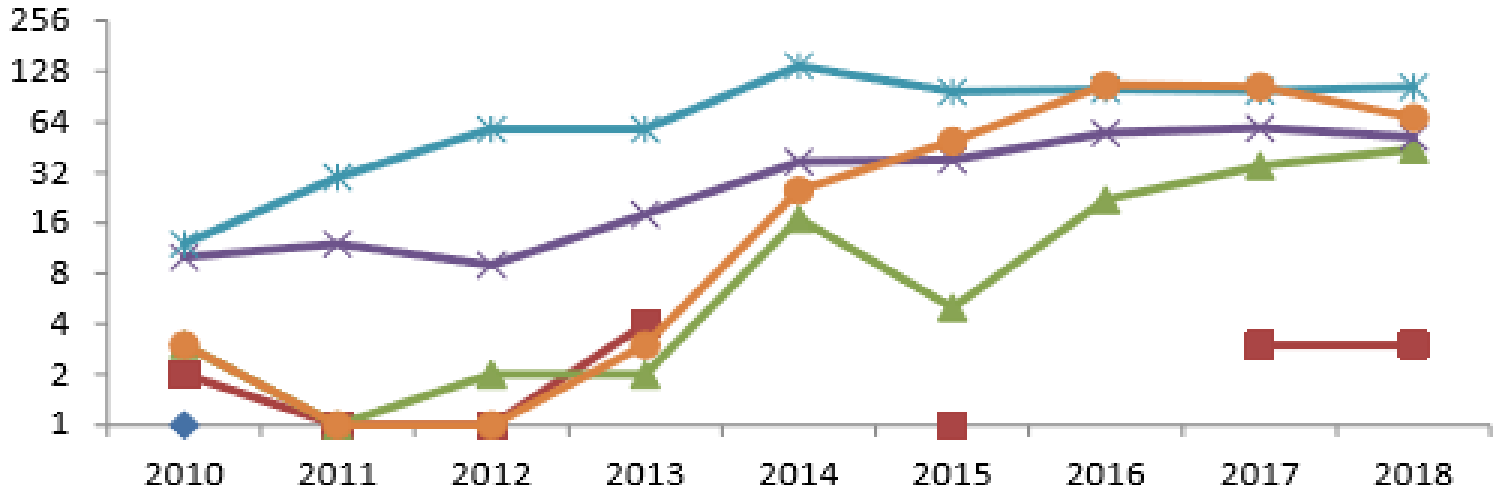
Total Number of Overdose Deaths by Year of Death 2000-2018

Figure 6.1: represents all overdose deaths investigated by the JCCMEO.



http://coroner.jccal.org/Sites/Jefferson_County/Documents/Coroner_Medical%20Examiner%20Office/2018%20annual%20report.pdf

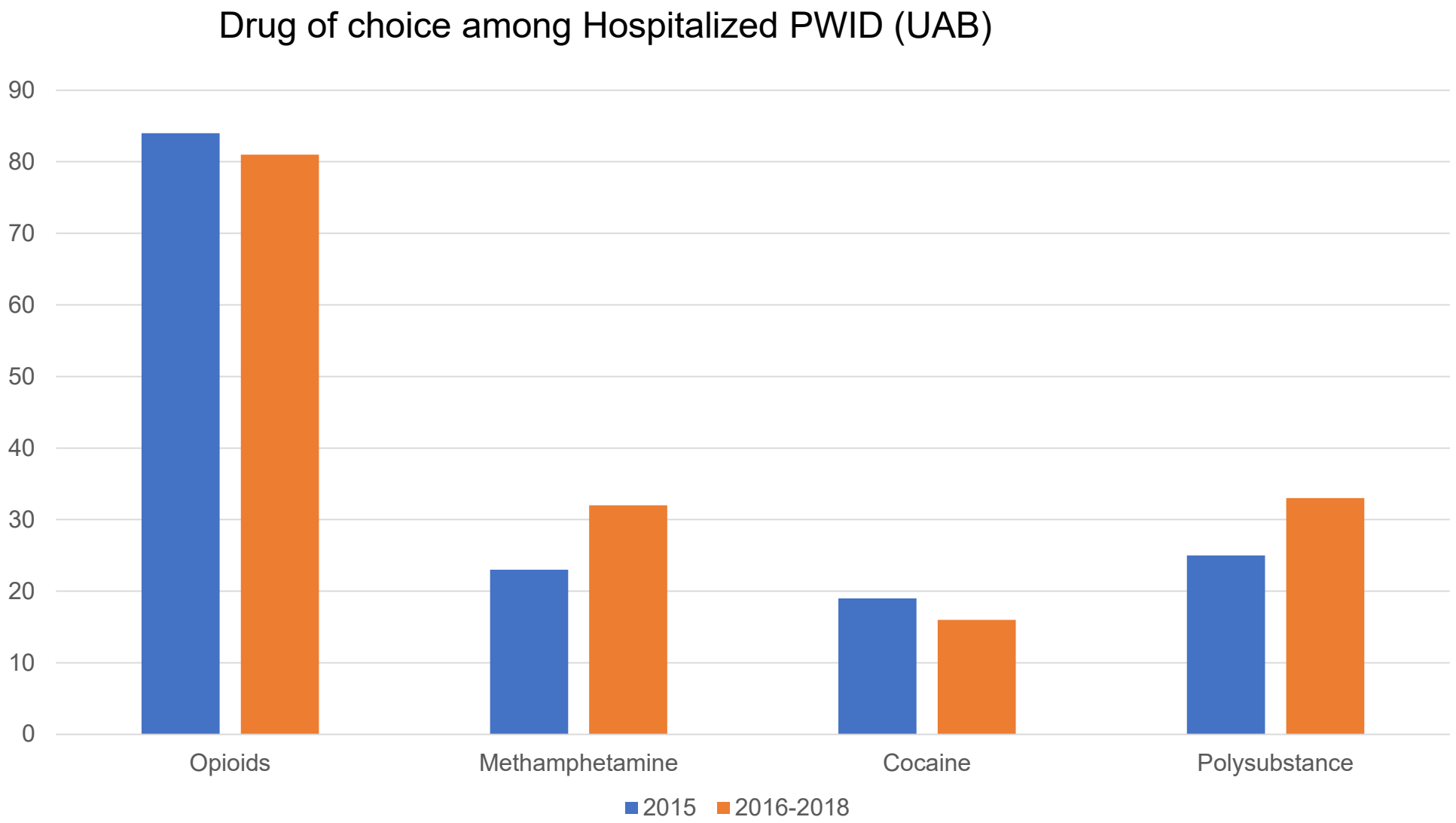
JEFFERSON CO ILLICIT DRUGS/POISONS 2010-2018



	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ethylene Glycol (antifreeze)	1	0	0	0	0	0	0	0	0
Difluoroethane (refrigerant)	2	1	1	4	0	1	0	3	3
Methamphetamine	3	1	2	2	17	5	22	35	44
Cocaine	10	12	9	18	37	38	55	59	52
Heroin	12	30	58	58	138	97	100	98	103
Fentanyl	3	1	1	3	25	49	106	104	68

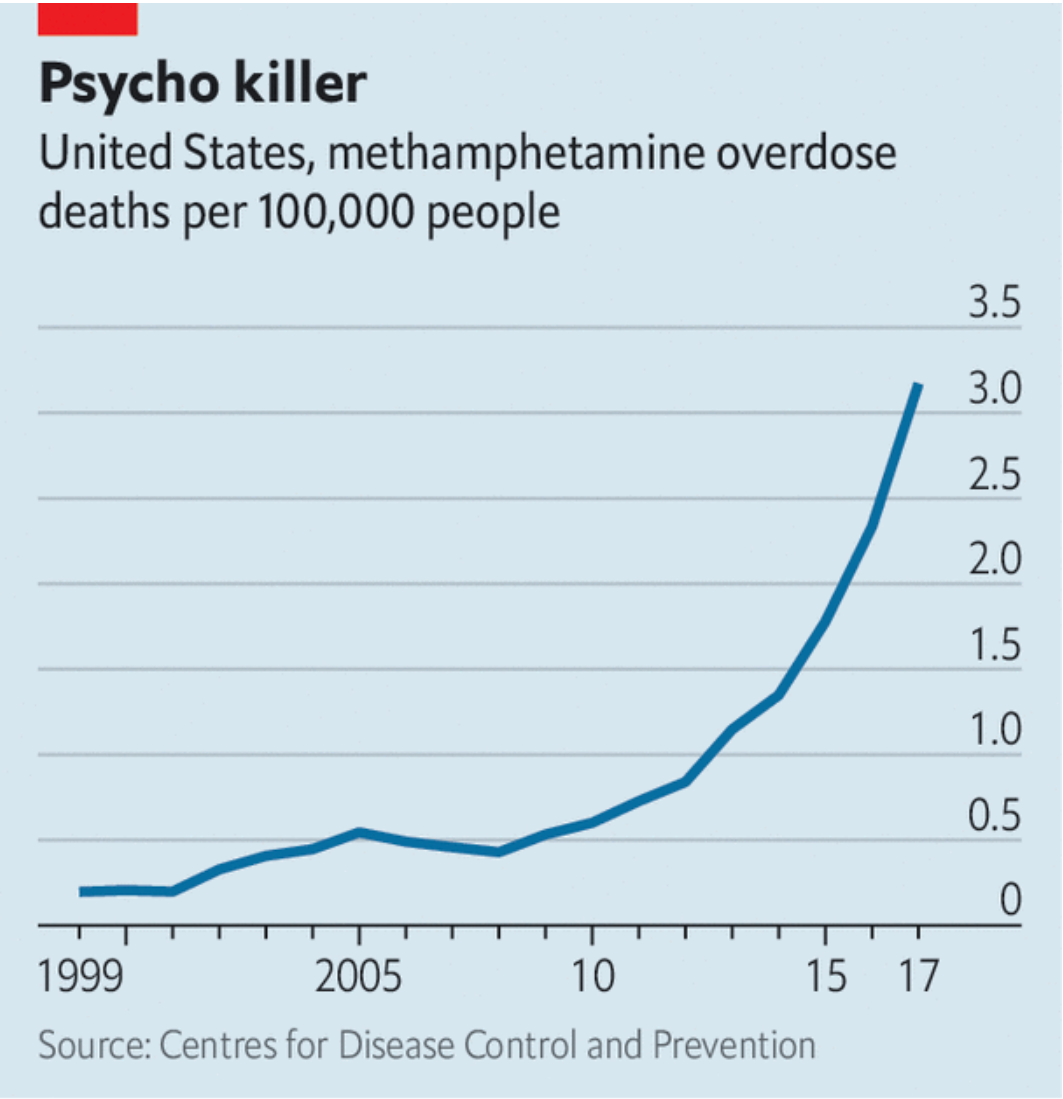
http://coroner.jccal.org/Sites/Jefferson_County/Documents/Coroner_Medical%20Examiner%20Office/2018%20annual%20report.pdf

MORE THAN JUST AN OPIOID CRISIS



Eaton et al. CROI.2018

MORE THAN JUST AN OPIOID CRISIS



Meth associated with high risk sex
Meth associated with STIs
Meth often injected

https://www.economist.com/united-states/2019/03/09/amid-the-opioid-crisis-a-different-drug-comes-roaring-back

DRUG USE AS BARRIER

- AIDS AL and UAB CFAR conducted interviews and surveys of 63 PWID in and around Birmingham, AL
- Poverty
  - 55% PWID unemployed, 50% report “survival sex” to meet basic need
- Lack of insurance, Medicaid non-expansion
  - 52% uninsured
- Criminalization
  - 30% reported unlikely to contact law enforcement in an emergency
- Stigma

DRUG USE


Diagnose all people with HIV as early as possible.
Treat people with HIV rapidly and effectively to reach sustained viral suppression.
Prevent new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).
Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.

HIV IN THE SOUTH

Case 1: 25 year old CM presents with h/o heroin injection presents with fevers, chills. He is uninsured, has no PCP, lives in North Georgia

Case 2: 23 yo AAF presents to urgent in Jackson, MS for foul smelling vaginal discharge

In addition to HIV risk,

what do Case 1 and Case 2 have in common?

HIV IN THE SOUTH

What do the Opioid/drug epidemics and HIV/AIDS Epidemics have in common?

“Parallel Epidemics”

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STIGMA


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HIV STIGMA

- Prevents HIV screening and linkage to care
- Stigma around HIV, homosexuality, and substance use higher in rural South
- Requires confidential, judgement-free, accessible interventions:
- Black MSM in Birmingham prefer HIV/STI testing in a general medical setting
  - *“The private doctor, it’s like, you just going for your normal–you could be there for a cold, or whatever”*
  - *“Doc-in-a-Box that also does HIV testing or STI testing, just because you know I’m there doesn’t mean I’m going for a test. I may be going because I have a cold or I have a headache or I need medicine or something like that. Passing by, I see your car there…Oh, he just sick today.*

Eaton et al.PlosOne.2018

SUBSTANCE USE STIGMA

- Prevents persons who use drugs from seeking medical care
  - a missed opportunity for HIV testing and treatment
- Qualitative study of persons who use drugs in South Carolina
  - Stigma named as a barrier to care by patients and providers
  - "*Everyone knew everyone, and they knew what the person was going through, what their family problems were, what their legal problems were, and that itself was a barrier to treatment*." -stakeholder
  - "*Everybody knows everybody's business*." -client
  - *There's still some, you know, cultural and racial barriers within the community down here…down South I've noticed that there's the racial and cultural stigmas…because you know there's that past history and that current issue going on*.-client of color

Browne et al. J. of Rural Health.2015

INTERSECTING STIGMA: HIV AND DRUG USE

- AIDS AL and UAB CFAR conducted interviews and surveys of PWID
- 13/63 PWID were living with HIV
- 6/13 (45%) did not have someone to confide in
- 6/13 report concerns about obtaining sterile syringes due to confidentiality, provider mistrust, criminalization
- In interviews, one participant expressed that family made him eat off paper plates and cutlery so as not to *"spread the disease to the rest of them."*
- "*a lot of people are very uneducated about it.*"

KJ Smith. A Public Health Needs Assessment of Alabamians who inject drugs and their healthcare providers

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RESOURCES

RWCA

FUNDING RESOURCES

Which Areas Targeted By Federal HIV Plan Have Expanded Medicaid?

Jurisdictions in HHS "Ending the HIV Epidemic Plan," By Medicaid Expansion Status

MEDICAID EXPANSION BY THE #s:

- 30 of 48 counties with greatest number of new HIV diagnoses
- District of Columbia
- San Juan, Puerto Rico
- 2 of 7 states with substantial rural burden

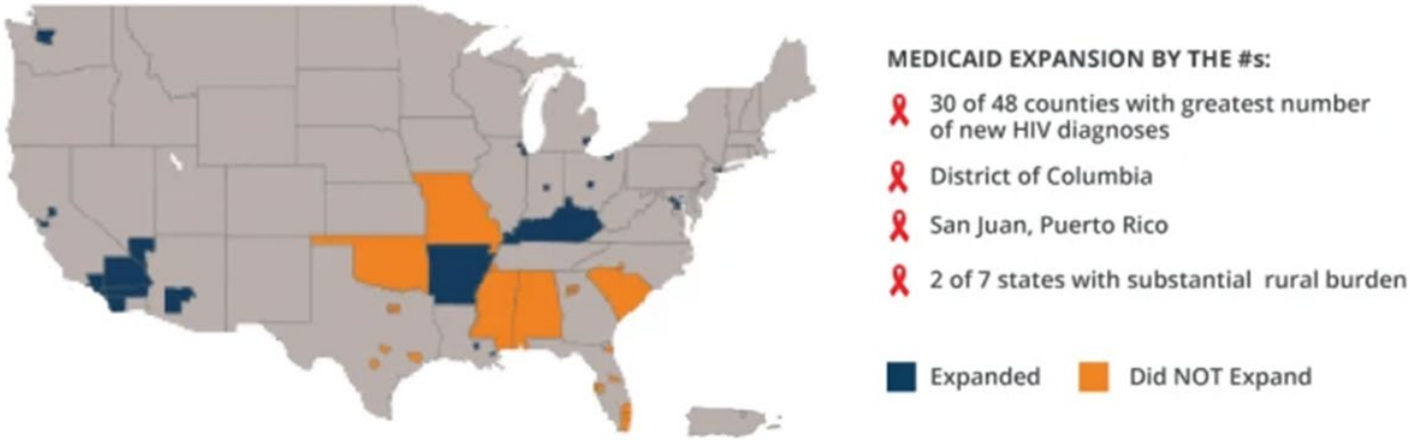
Expanded Did NOT Expand

NOTE: Puerto Rico elected to expand their Medicaid programs to the new adult group under the ACA.
SOURCE: HHS, Ending the HIV Epidemic: A Plan for America, Feb. 2019; KFF Status of State Medicaid Expansion Decisions, Jan. 23, 2019

KFF
HENRY J KAISER FAMILY FOUNDATION

FUNDING RESOURCES

- We need to integrate testing, prevention, treatment into safety net settings
  - ie) Universal screening, PrEP linkage from ob/gyn clinic, hospital, ER
- No insurance means no PCP



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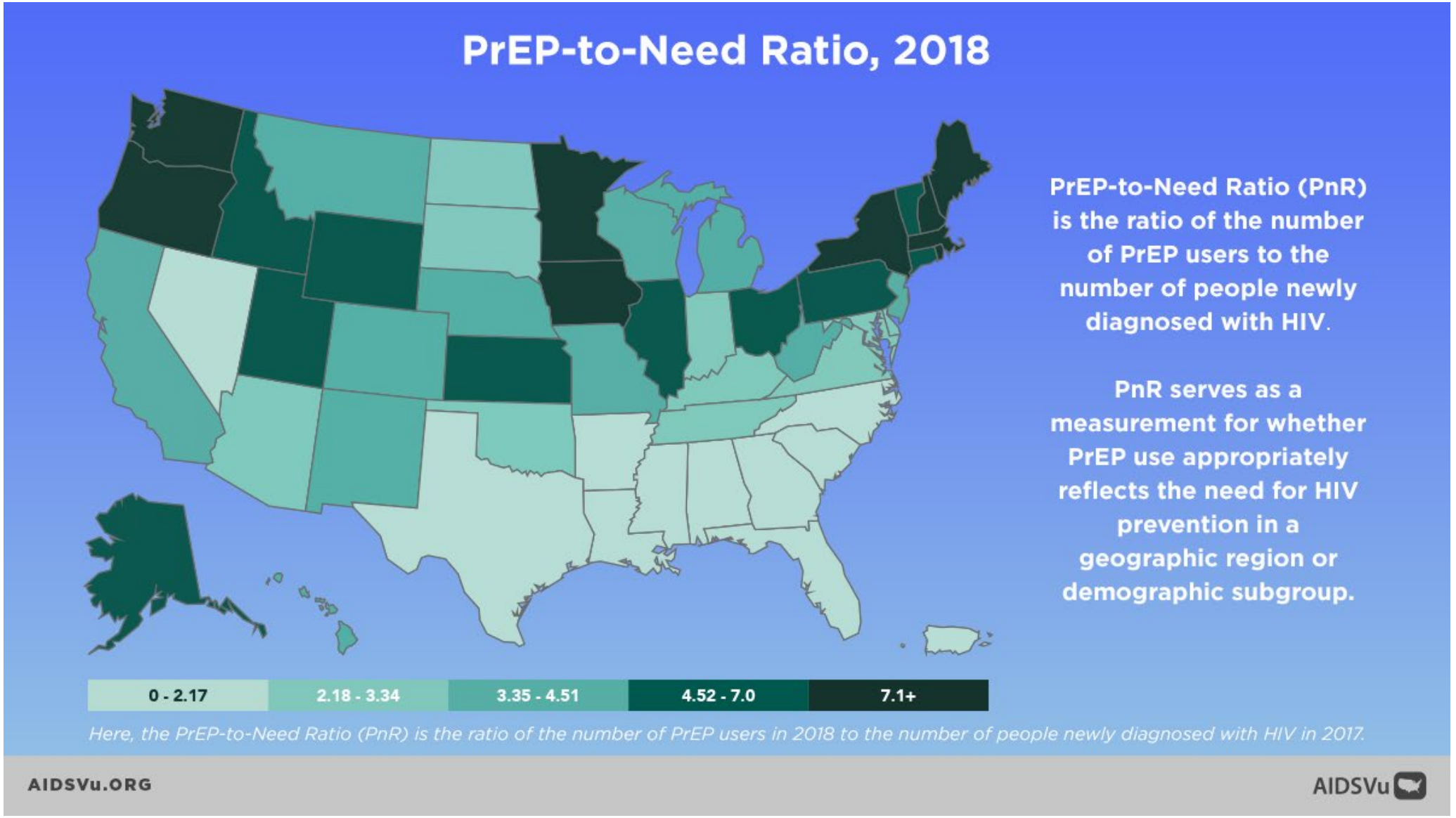
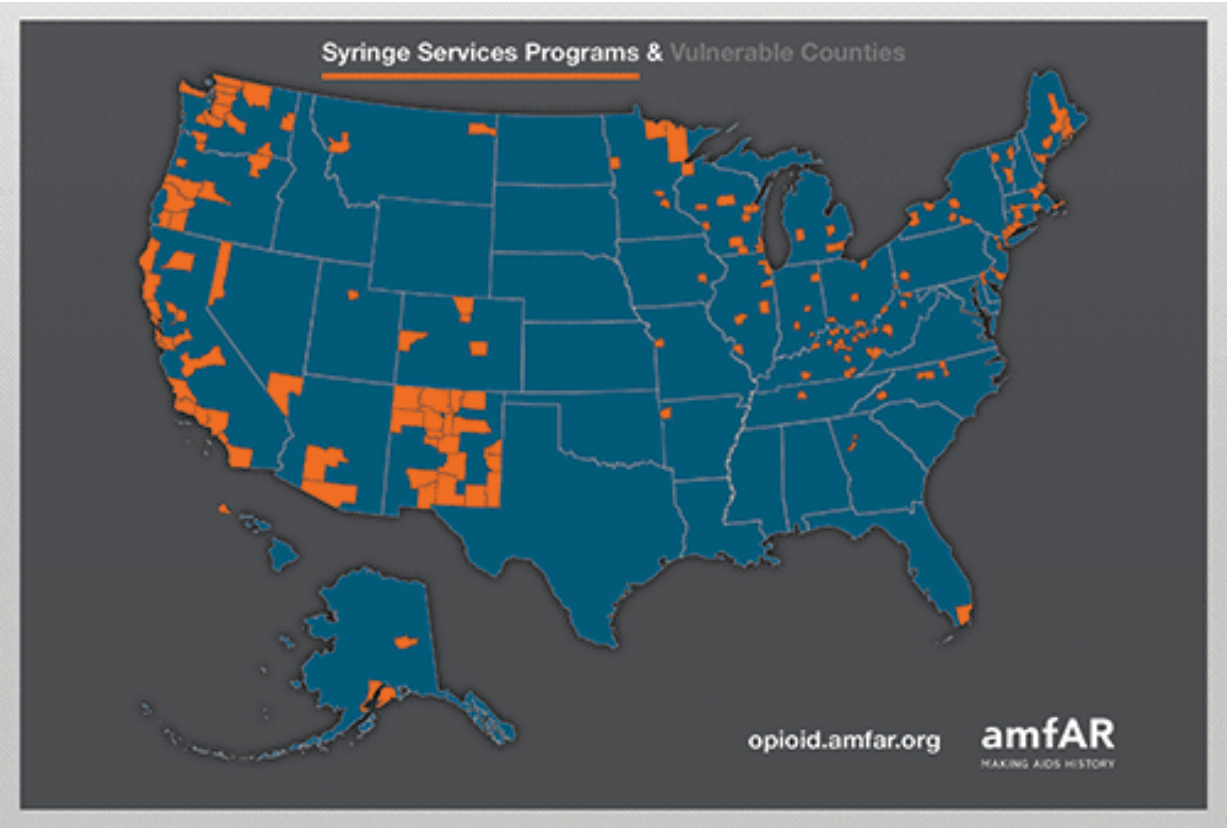
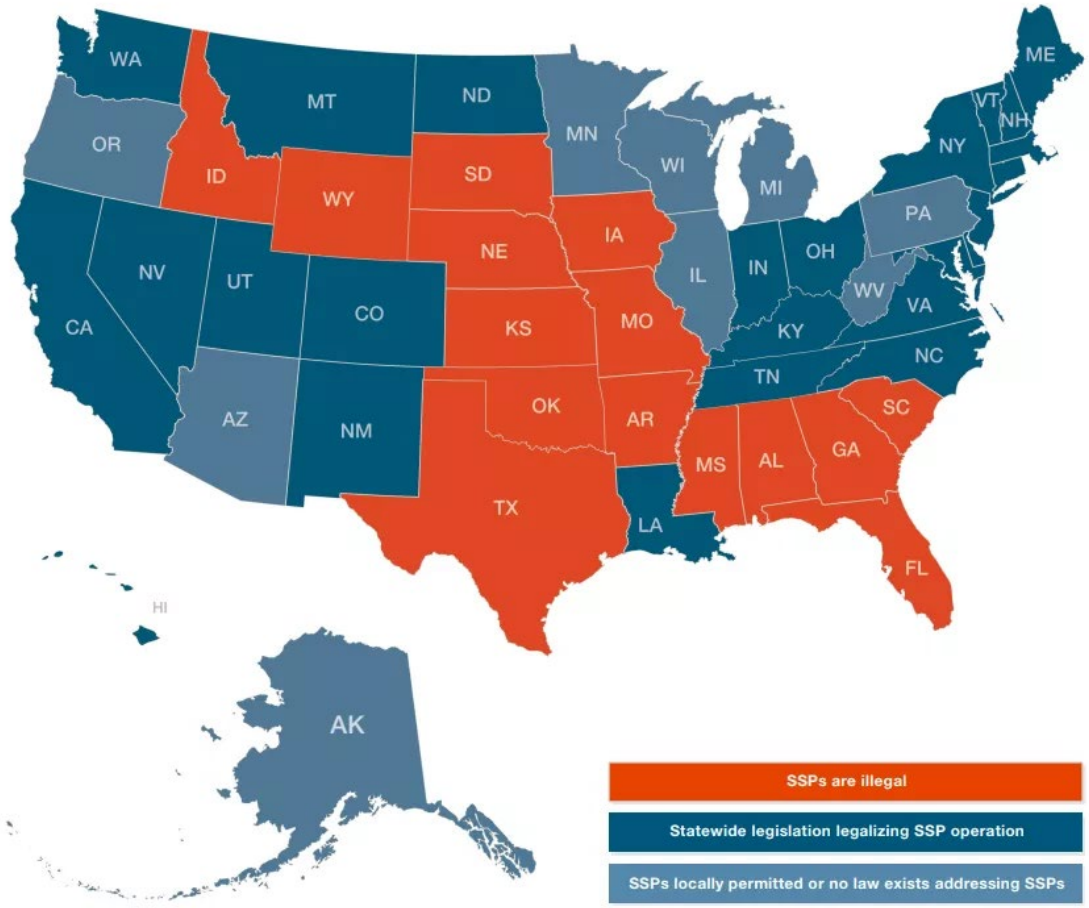
KFF
HENRY J KAISER

PREVENTION RESOURCES



HARM REDUCTION RESOURCES





https://www.vox.com/science-and-health/2018/6/22/17493030/needle-exchanges-ban-state-map

INTEGRATED CARE RESOURCES

- *Meet them where they are*
- Address multiple complex risk factors (stigma, lack of access)
- Integrate into federally funded routine care (FQHCs, health depts.)
- Opportunities for treatment and prevention
  - Sexual health care
  - PrEP
  - HIV/HCV treatment
  - Counseling
  - Addiction treatment (meds for OUD)

Rich et al. Current HIV/AIDS Reports. 2018
National Academy of Medicine. Examination of Integration of Opioid and Infectious Diseases Prevention Efforts in Select Programs. July 2019.

RESOURCES

Partners, SSPs

OPPORTUNITIES TO EHE IN VULNERABLE SOUTHERN POPULATIONS

1. STIGMA reduction
2. Identifying and screening patients in routine settings, safety net settings, all “touch points”
3. Low/no cost, integrated models that are accessible and acceptable to persons at risk for HIV
   -marketing only to YB MSM is not sufficient
4. Expanding federal funds to include HIV risk groups so that PrEP, risk reduction covered
   -similar to RWCA funds for PLWH which have made HIV a chronic condition

THANK YOU

- UAB Division of Infectious Diseases
- IVAT Team: Eddie Mathews, Rachael Lee
- Karen Cropsey, PsyD, Mike Saag, MD
- UAB Addiction Medicine: Cayce Paddock, MD, Peter Lane, DO
- National Academy of Medicine, Omenn Fellowship

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