

Infectious Disease Consequences of the Opioid Crisis

**Kentucky Budget Review Subcommittee on Human Resources
Interim Joint Committee on Appropriations and Revenue**

Tuesday, November 19, 2019

R. Paul McClung, MD, LCDR USPHS

Division of HIV/AIDS Prevention

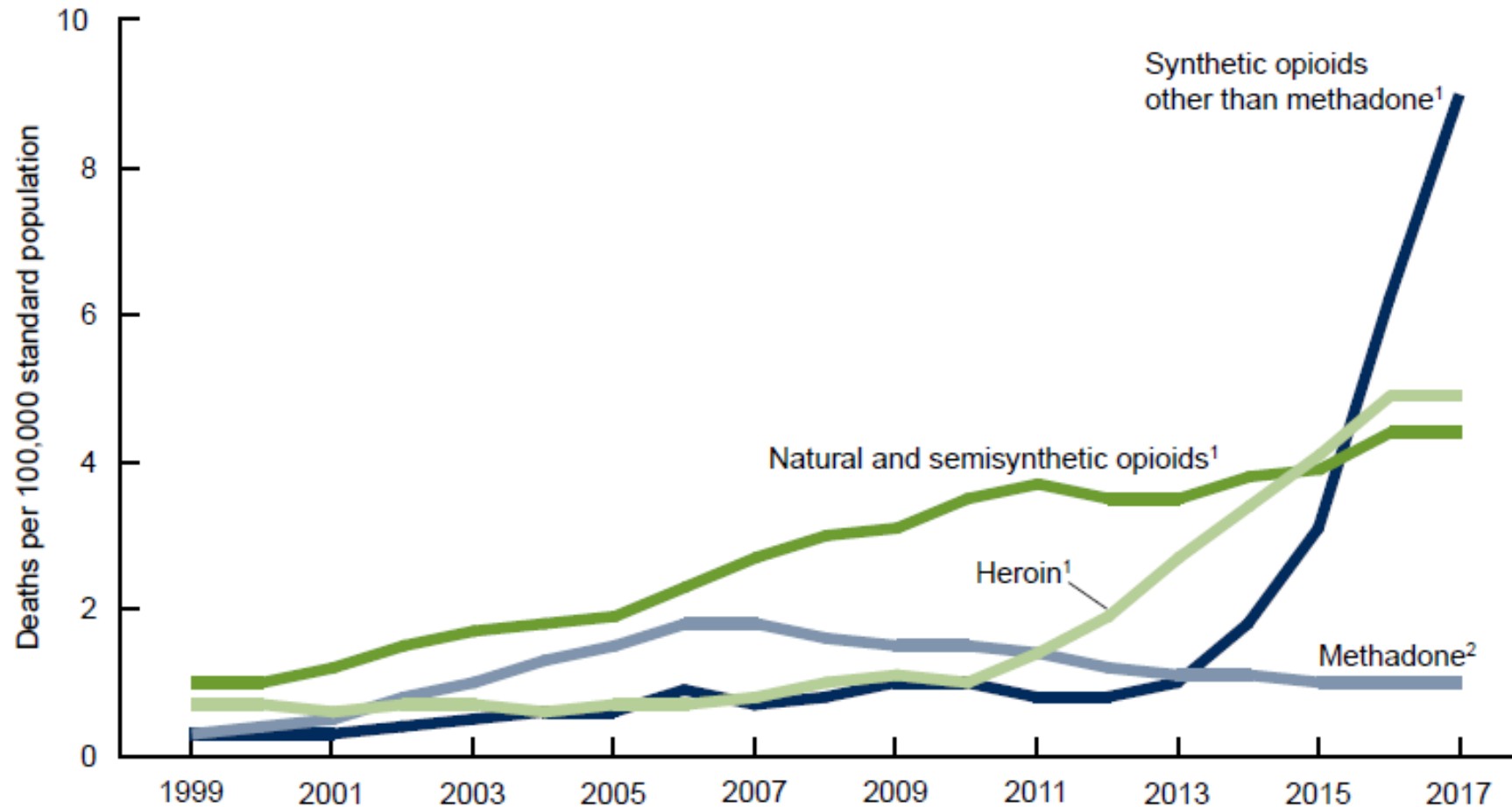
US Centers for Disease Control and Prevention

Infectious disease consequences of the opioid crisis

Overview:

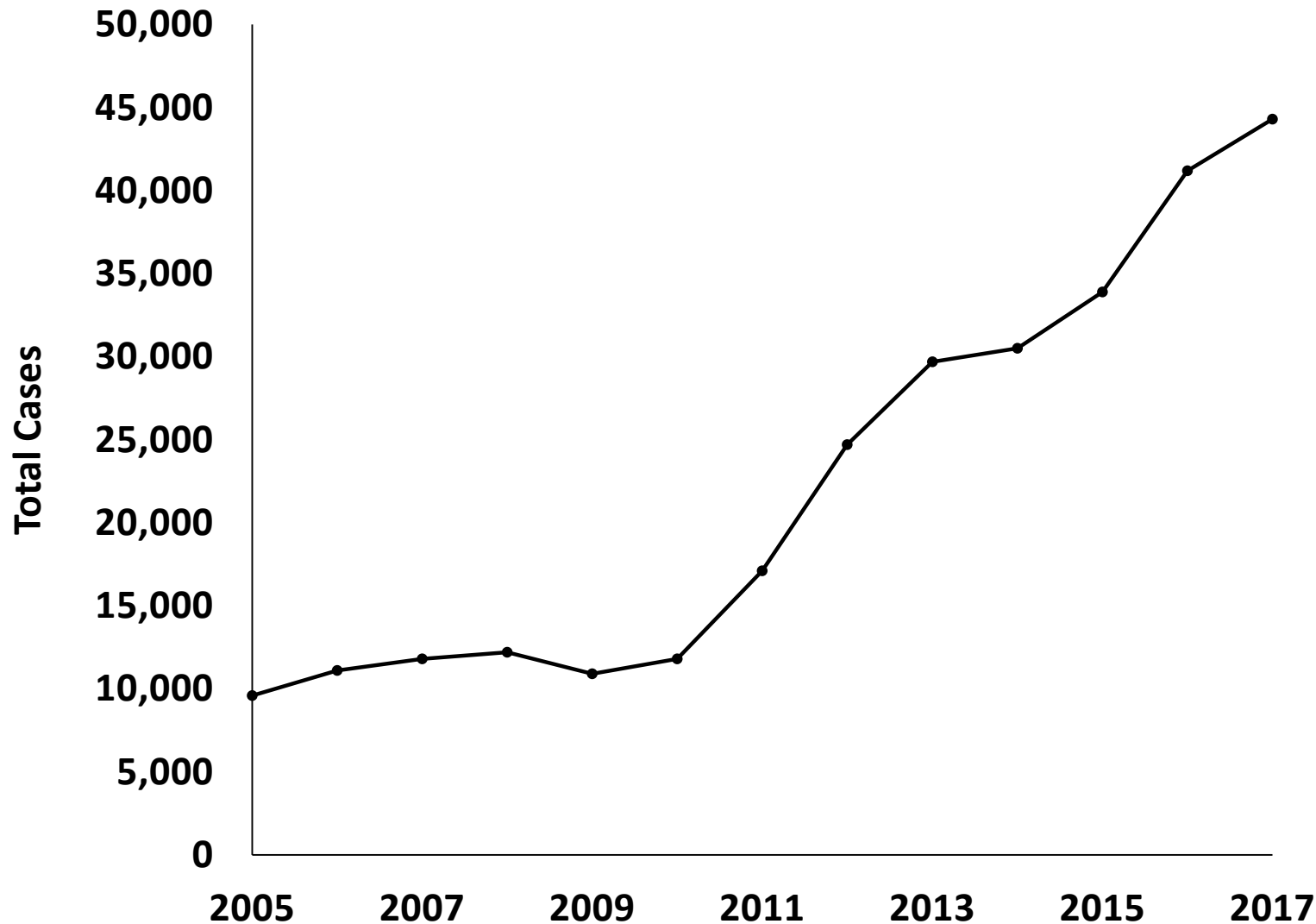
- Challenges: Burden of disease and barriers to progress
- Solutions: Evidence-based Interventions
- Next steps: Recent examples and future opportunities

Massive increase in opioid deaths



Suggested citation: Hedegaard H, Miniño AM, Warner M. Drug overdose deaths in the United States, 1999–2017. NCHS Data Brief, no 329. Hyattsville, MD: National Center for Health Statistics. 2018. (Available from <https://www.cdc.gov/nchs/products/databriefs/db329.htm>)

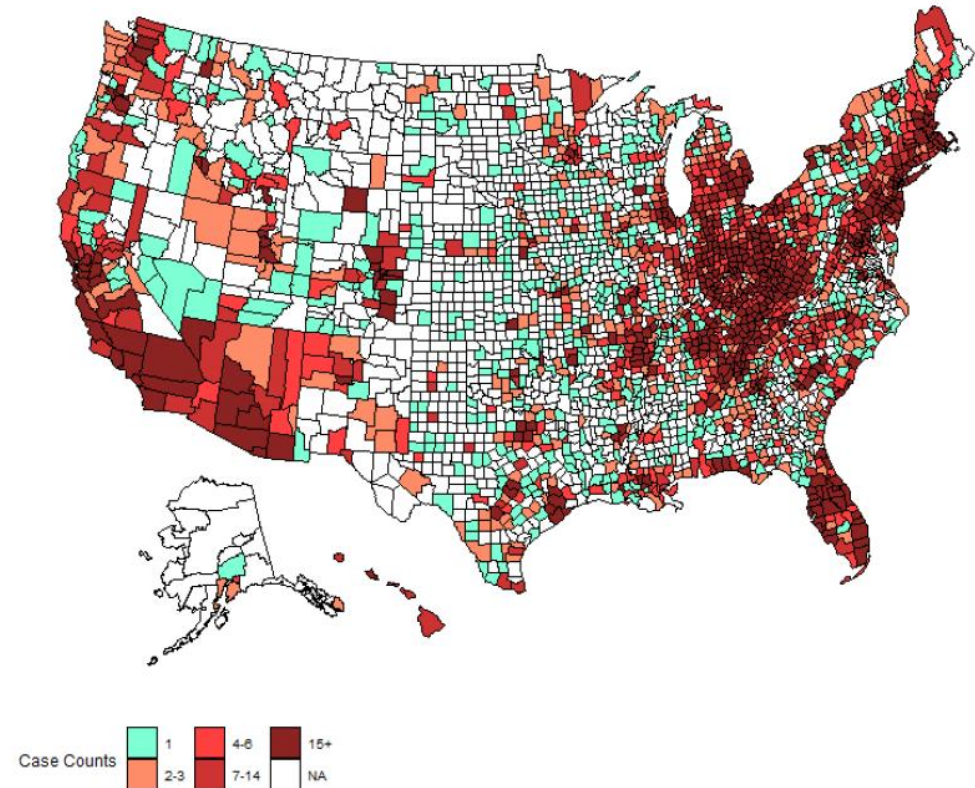
New cases of hepatitis C have increased dramatically



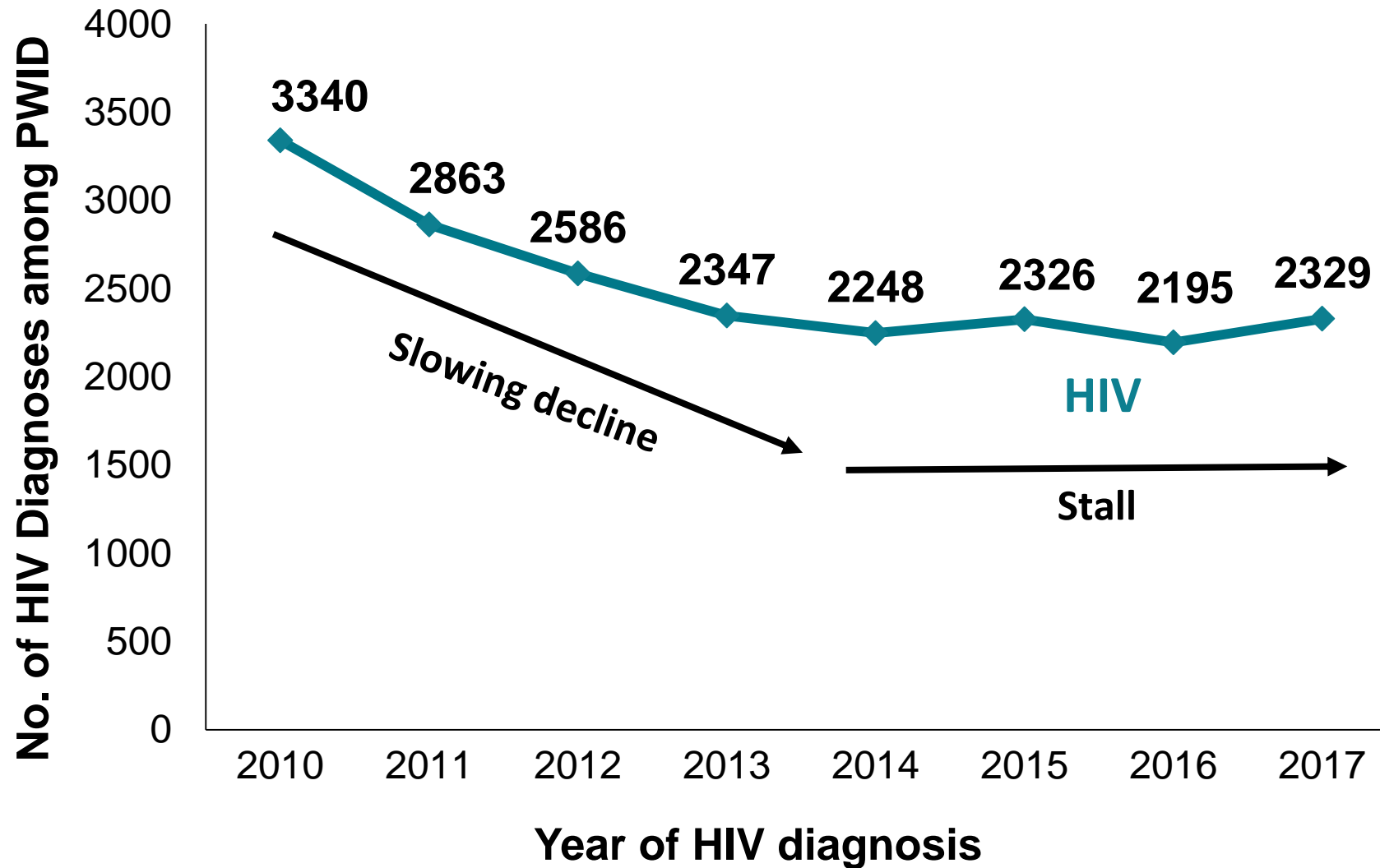
- Number of pregnant women with HCV **doubled**
- Acute HCV increased **364%** among people ≤ 30 yrs (2006–2012: KY, TN, VA, WV)

30 states reporting hepatitis A outbreaks, 2016–2019

- **Total cases: 27, 282**
 - Hospitalizations: 16,451 (60%)
 - Deaths: 274
- **Primary groups affected**
 - People who use drugs
 - People experiencing homelessness
 - Men who have sex with men
- **Over \$200 million in state health care costs**

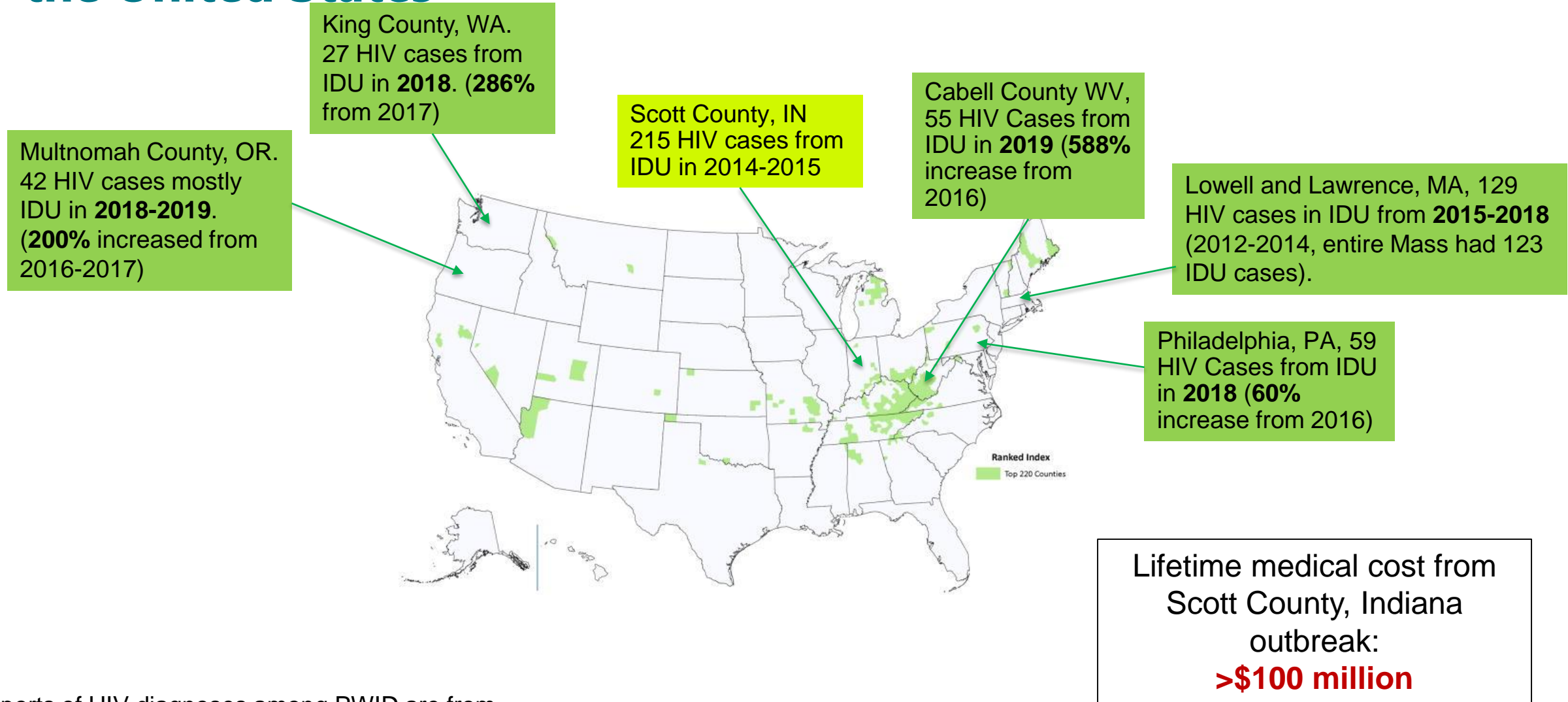


The longstanding decline in HIV diagnoses among persons who inject drugs in the United States has now stalled



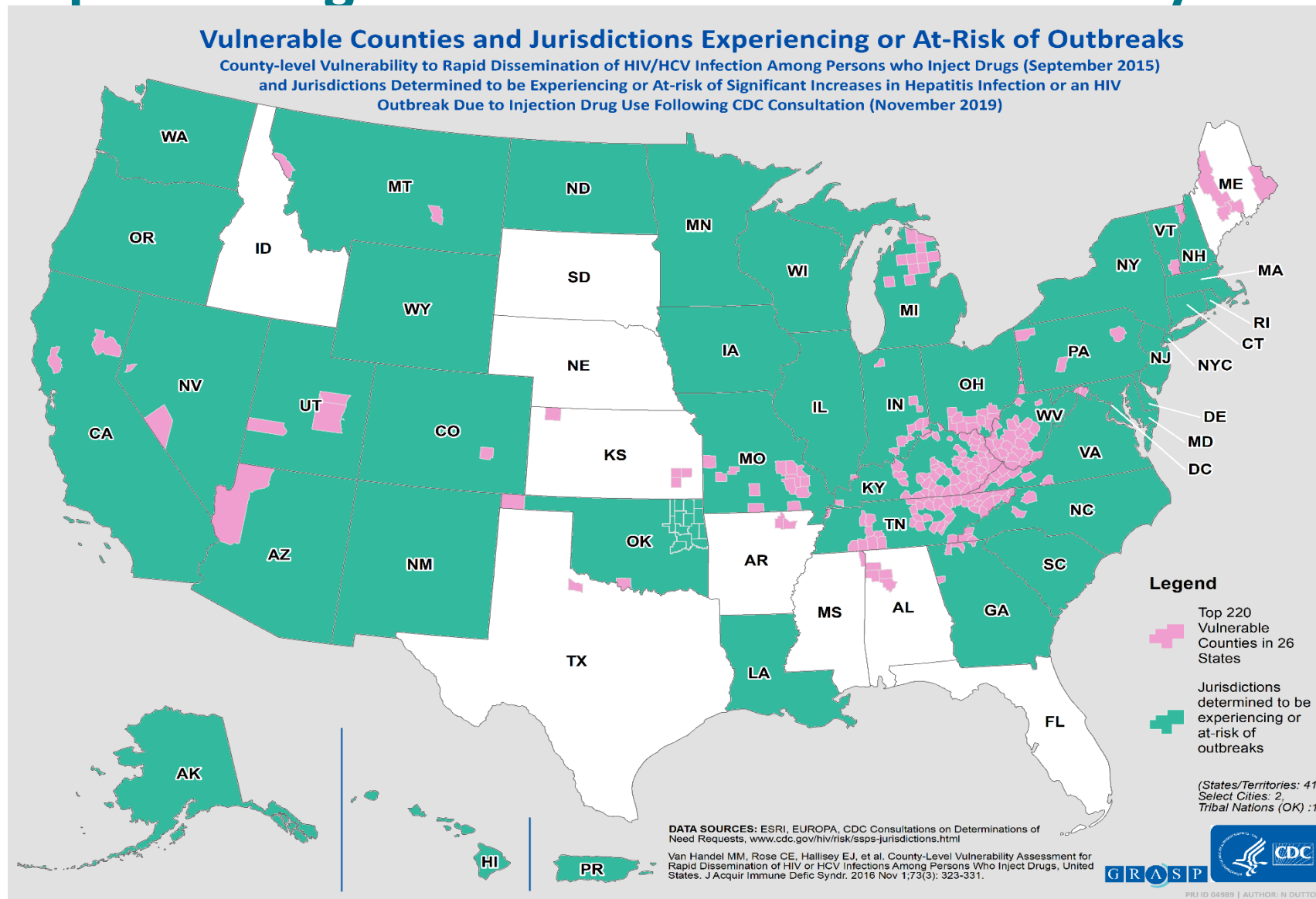
Lifetime
cost to treat
HIV
infection:
\$478,000

HIV outbreaks among people who inject drugs have increased across the United States



Reports of HIV diagnoses among PWID are from local newspapers (search Volkow et al., 2019)

46 states, DC, and Puerto Rico have documented they have areas experiencing or at risk for increases of HCV/HIV



Bacterial infections associated with substance use have high consequences and high costs

- In 2013, there were 12,600 cases of endocarditis
- Invasive MRSA infections among PWID increased 124% from 2011 to 2016

Cost of hospitalizations for substance-use related infections:

>\$700 million

(2012, not including HIV and viral hepatitis)



References:

Collier, et al. Journal of Urban Health, 2018. Jackson et al. Invasive Methicillin-Resistant Staphylococcus aureus Infections Among Persons Who Inject Drugs — Six Sites, 2005–2016. MMWR Morb Mortal Wkly Rep 2018;67:625–628. Ronan & Herzig (2016). Hospitalizations Related To Opioid Abuse/Dependence And Associated Serious Infections Increased Sharply, 2002–12. *Health affairs (Project Hope)*, 35(5), 832-7.



How do we tackle these infectious disease challenges?

- This is not an easy task.
 - Multiple complex infectious diseases
 - Numerous complicating factors
 - Difficult-to-reach population
 - Substance use disorder
 - Housing instability, incarceration
- The stakes are high.
 - A generational challenge for many affected by the opioid crisis
 - Immense cost for individuals, communities, and society



Stigma is the enemy of public health

- Dehumanizes people struggling with substance use disorder
- Pushes people to the margins of society
- Discourages people who use drugs from accessing healthcare
 - Often limited to emergency department visits
 - Study: <50% of people who inject drugs (PWID) saw a healthcare provider in the past year
- Reducing stigma is essential for reducing infectious disease transmission
 - Use a patient-centered approach to providing care in current systems
 - Create settings where PWID can more comfortably access key services



To help people who inject drugs to succeed,
we must meet them where they are.

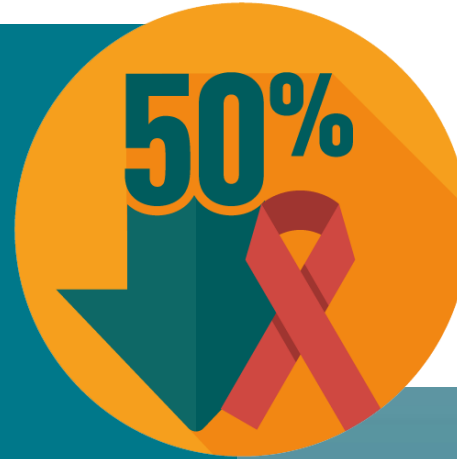
Comprehensive syringe services programs provide essential services for people who inject drugs

- **Access to sterile needles and syringes**
- **Safe disposal of used injection equipment**
- **Services (or referrals to services):**
 - Substance use disorder treatment
 - Infectious disease screening and treatment
 - Overdose prevention and naloxone distribution
 - Vaccinations
 - Health education
 - Social, mental health, other medical services
- **Develop relationships and build trust**
- **Harm reduction syringe exchange program (HRSEP) = Syringe Services Programs (SSP)**



Syringe services programs prevent transmission of blood-borne infections

- Access to sterile injection equipment can help prevent blood-borne infections (e.g., hepatitis B, hepatitis C, HIV) as well as skin infections and endocarditis
- Health care provided at syringe service programs can catch problems early and provide easy-to-access treatment
- In Philadelphia, syringe service programs averted 10,582 HIV infections over 10 years; 1-year ROI of \$243.4M



Providing testing, counseling, and sterile injection supplies helps prevent outbreaks of other diseases. For example, SSPs are associated with a **50% decline** in the risk of HIV transmission.



Syringe services programs support public safety



Law enforcement benefits from reduced risk of needlesticks, no increase in crime, and the ability to save lives by preventing overdoses.

- Provide naloxone to first responders
- Do not increase crime
- Provide safe disposal of needles/syringes
- Reduce the presence of sharps in public areas
 - When two similar cities were compared, the one with an SSP had **86% fewer syringes** in places like parks and sidewalks.
 - In the city without an SSP, after an SSP was implemented, presence of syringes in public places **decreased 49%**



Syringe service programs prevent overdose deaths

- Syringe service programs provide education and training on how to prevent, recognize, and respond to a drug overdose
- Syringe service programs offer naloxone, a medication used to reverse overdose and prevent death
- Syringe service programs offer referrals to medication-assisted treatment (MAT) for substance use disorder

SSPs + MAT
together
↓ 74%
HIV & Hepatitis C
Transmission



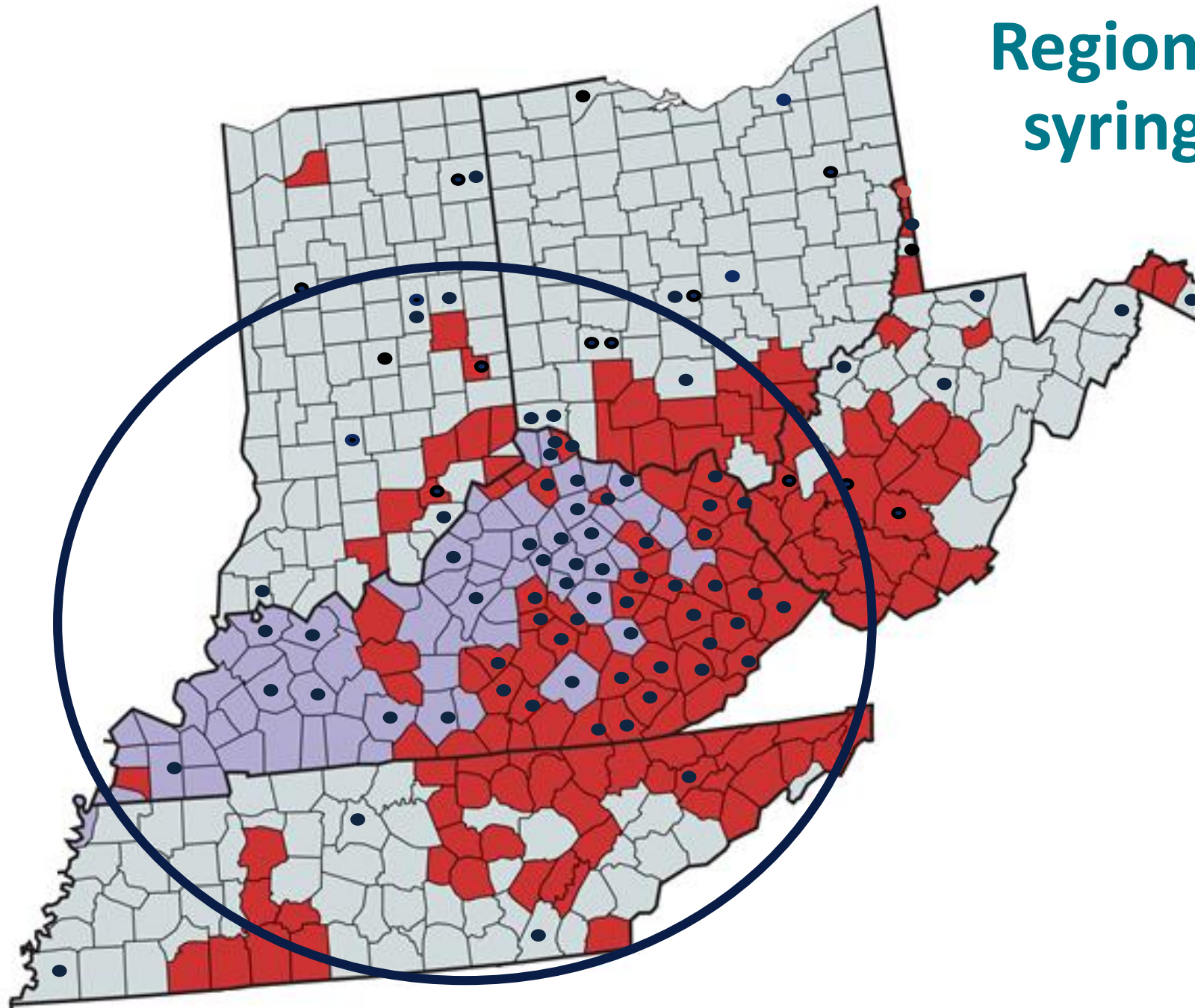
Syringe service programs help people overcome substance use

People who inject drugs who regularly use an SSP are

- **5 times** as likely to enter treatment for a substance use disorder
- **3 times** more likely to stop using drugs than those who don't use the programs



Regional implementation of syringe services programs



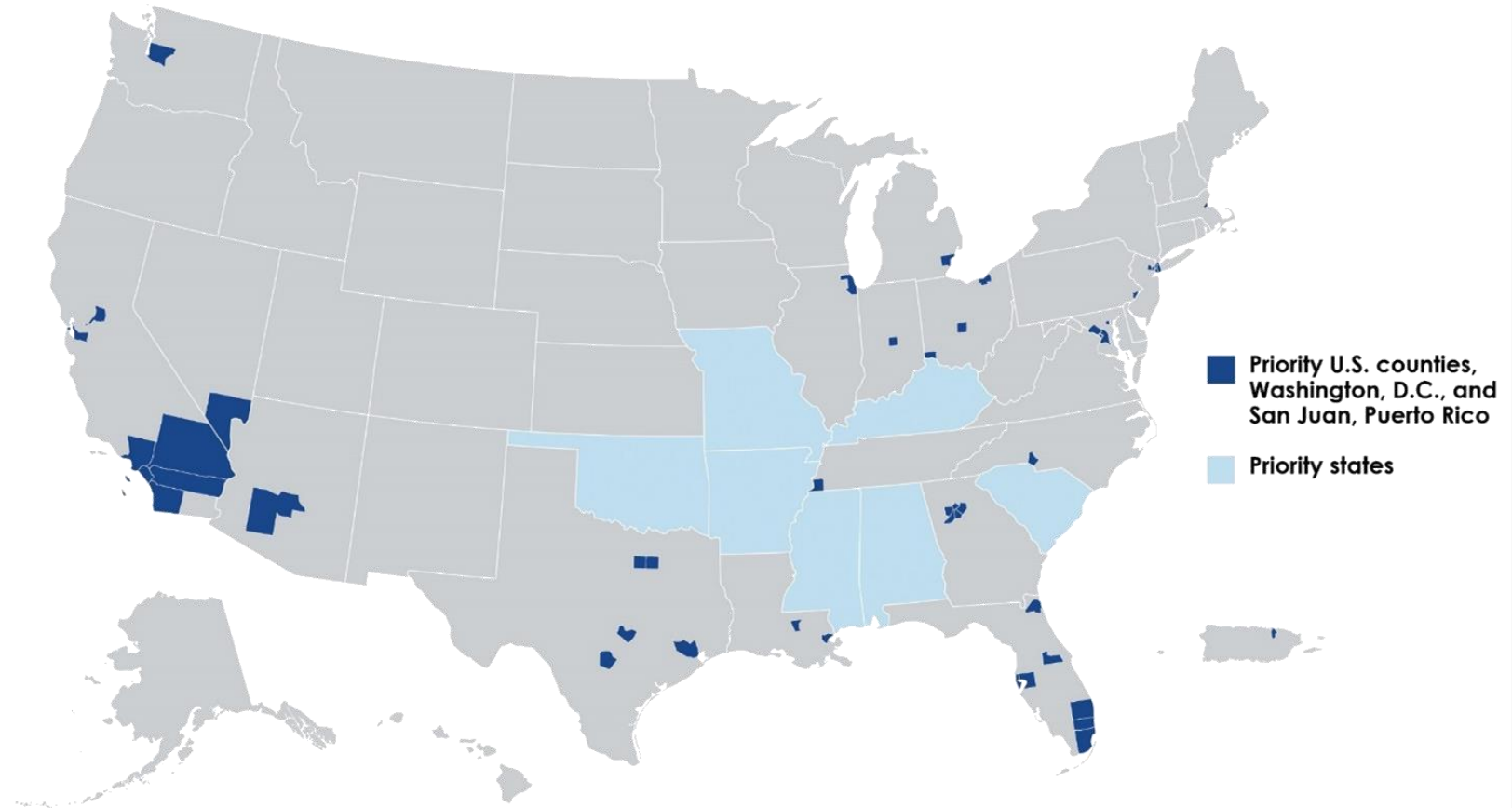
- **Vulnerable County:** county was determined to be experiencing or at-risk of significant increases in hepatitis infection or an HIV outbreak due to injection drug use
- **County in Kentucky**

Early Progress in Ending the HIV Epidemic

Full list of Locations:
<https://www.cdc.gov/endhiv/priorities.html>

Targeting Resources for Greatest Impact

- More than 50% of new HIV diagnoses* occurred in only 48 counties, Washington, D.C., and San Juan, Puerto Rico.
- In addition, seven states have a substantial rural burden.
- *Ending the HIV Epidemic* will prioritize populations at greatest risk, including African Americans and Hispanic/Latinos



*2016-2017 data

\$12M awarded to target jurisdictions to develop EHE plans
Spring 2020 funds to be awarded to implement EHE



Ending
the
HIV
Epidemic

www.hiv.gov

Innovative models for hepatitis C treatment

Target population: Medicaid beneficiaries, other low-income adults, incarcerated persons



NM uses technology, best-practice protocols, rural & community primary care clinicians to deliver care

Innovative Care Delivery Model



WA and LA will pay a fee up to a cap for access to treatment. After that, state will pay per prescription at a lower cost.

Innovative Financing Models

Federal assistance opportunities

- Resources to support implementation of syringe services programs and related services for injection drug use:
 - SAMHSA
 - CDC
 - HRSA
- Prevention and Care
- Capacity Building
- Technical Assistance



Together we can stop infectious disease transmission

- The progression of these epidemics is not inevitable
- We have powerful tools to reach people with effective interventions
- Comprehensive programs can prevent infections, save lives, and save money
- Society, public health, healthcare systems, and individuals must work together

Thank you & time for questions

