

# **HIV Testing & Prevention:** Special Considerations for the U.S. South

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# Acknowledgments, Funding, & Disclosures

- **Acknowledgments & Funding**

**Acknowledgements:** This project was supported by PROGRESS: T32HS026122, NIMH R01 MH113438 (Pettit-PI), and the NIH-funded Tennessee Center for AIDS Research (P30 AI110527)

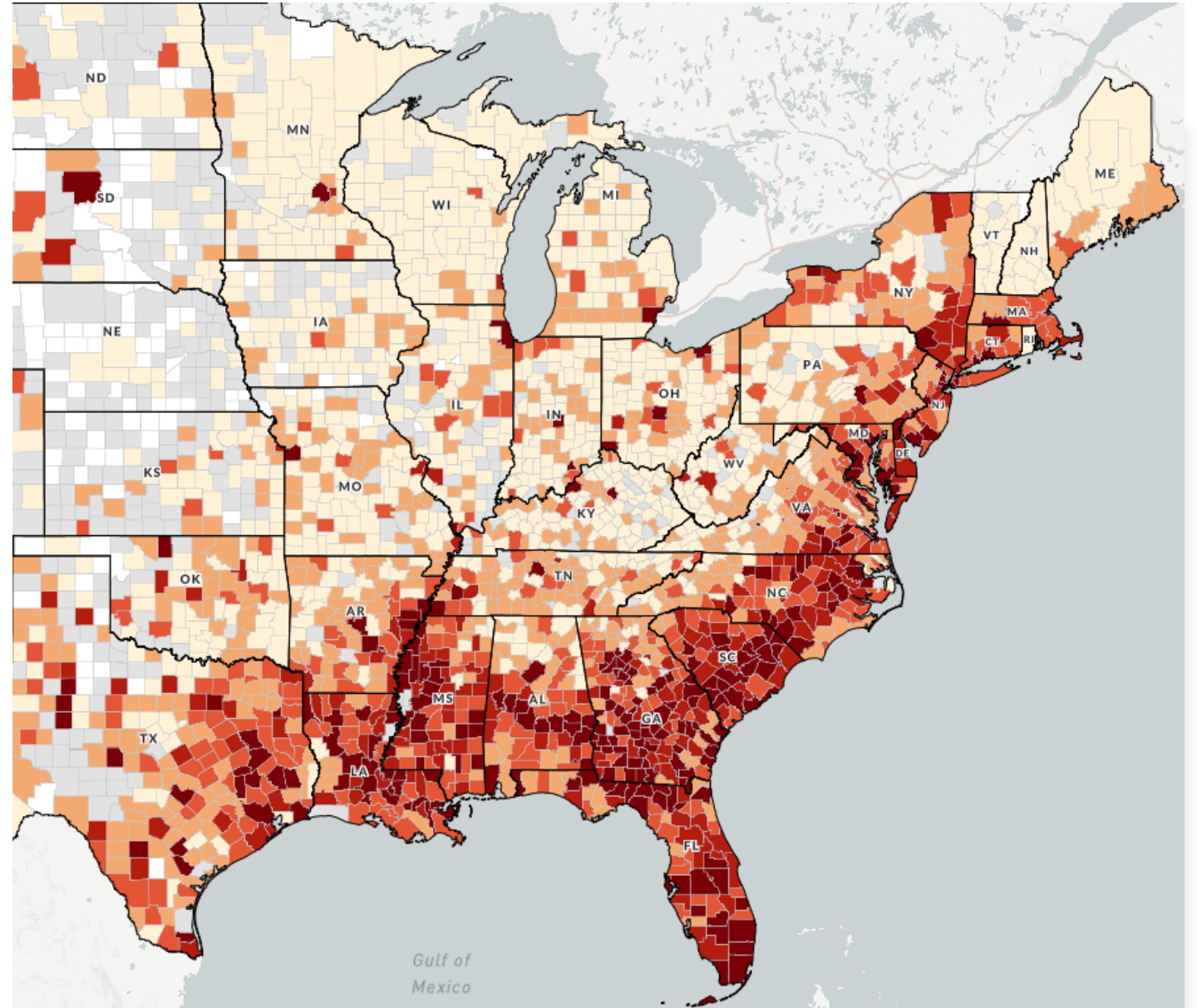


- **Disclosures:** I have no conflicts of interest or financial disclosures to disclose

# Objectives & Agenda

- **HIV Specifics:** The US South
- **The Implication of Late/ Delayed HIV Diagnoses:** Experiences in Tennessee
- ***Ending the HIV Epidemic in the U.S. (EHE):*** Basics & US South Specifics
- **HIV Testing:** Current Recommendations, Best Practices, & Future Directions
- **PrEP:** Current Recommendations, Best Practices, & Future Directions
- **Summary/Conclusions**
- **Questions & Thank You**

# HIV Specifics: The U.S. South



# Demographics of HIV in the US South (2022)

- **505,999** people living with HIV in the South, 2022
  - For context, the population of the city of Atlanta in 2022 was estimated to be **~498,715**
- **19,793** new HIV diagnoses in 2022
- **~9,000** people with HIV died in the South in 2022

# Demographics of HIV in the US South (2022)

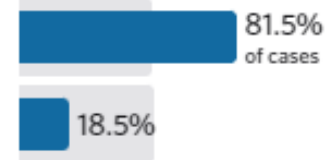
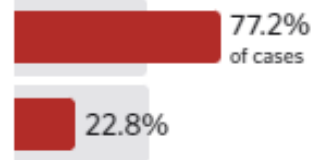
## PREVALENCE

## NEW DIAGNOSES

### SEX

**Male**  
49.6% of population

**Female**  
50.4%



## PREVALENCE

## NEW DIAGNOSES

### RACE/ETHNICITY

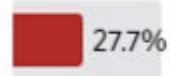
**Black**  
12.1% of population



**Hispanic**  
18.7%



**White**  
58.9%



**American Indian/Alaska Native**  
0.6%



**Asian**  
5.7%



**Multiple Races**  
3.5%



**Native Hawaiian/Pacific Islander**  
0.2%



### AGE

**13 to 24**  
15.9% of population



**25 to 34**  
13.7%



**35 to 44**  
12.9%



**45 to 54**  
12.4%



**55 to 64**  
12.9%



**65+**  
16.5%



# Demographics of HIV in the US South (2022)

PROPORTION OF CASES BY TRANSMISSION CATEGORY, 2022

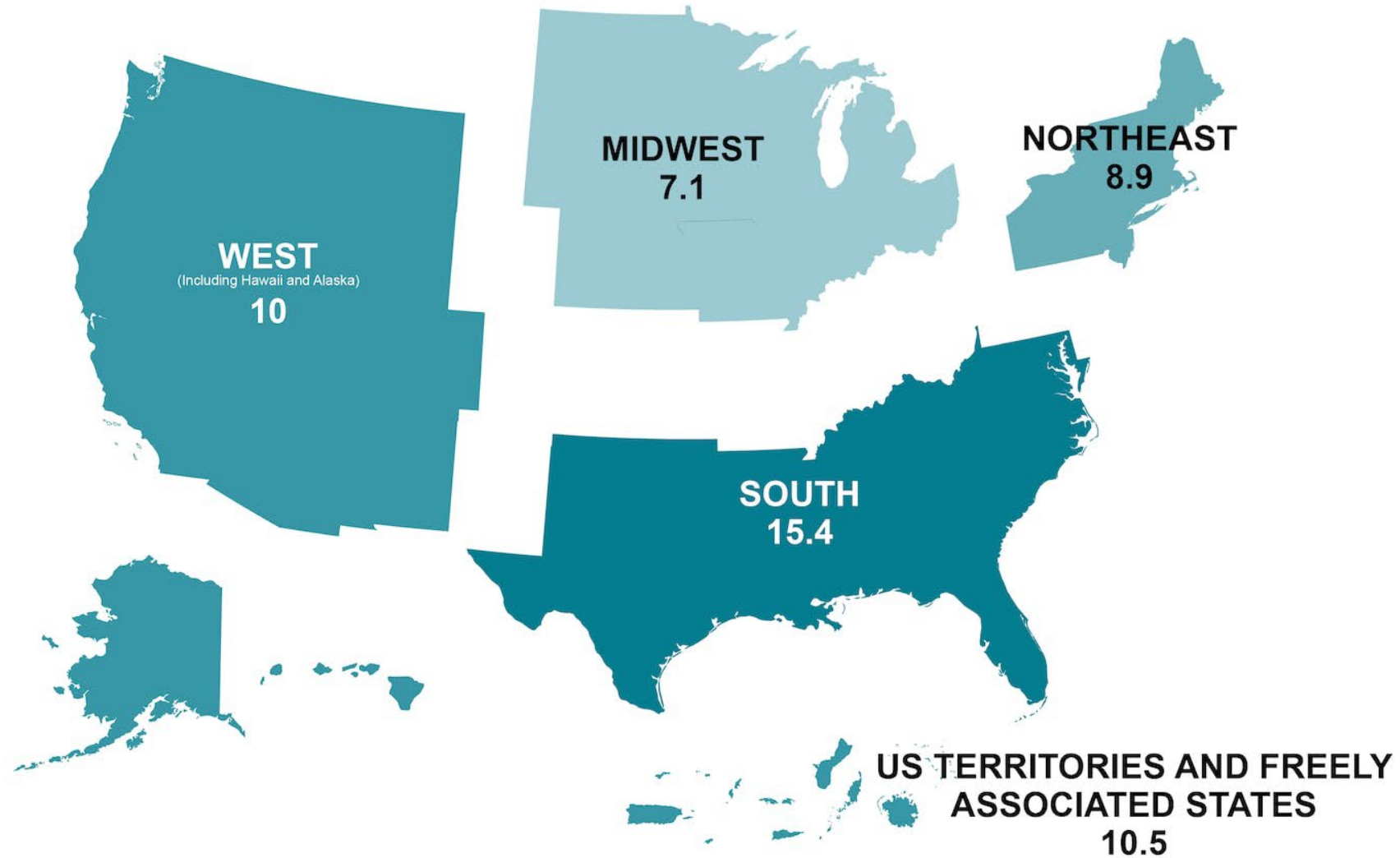
MALE CATEGORIES	PREVALENCE	CASES	NEW DIAGNOSES	CASES
	PROPORTION		PROPORTION	
Male-to-Male Sexual Contact	74.7%	638,188	82.1%	25,404
Male-to-Male Sexual Contact & Injection Drug Use	6.8%	58,353	4.3%	1,331
Injection Drug Use	7.7%	66,184	4.8%	1,487
Heterosexual Contact	9.7%	82,707	8.6%	2,658
Other/Unknown*	1.0%	8,125	0.1%	39
<b>FEMALE CATEGORIES</b>				
	PROPORTION	CASES	PROPORTION	CASES
Injection Drug Use	19.1%	48,310	16.5%	1,159
Heterosexual Contact	77.6%	196,335	82.8%	5,831
Other/Unknown*	3.2%	8,030	0.7%	52

# The South is Disproportionately Affected by HIV

- In 2021 the Southeast accounted for **38%** of the US population, but...
  - **52%** of new HIV diagnoses
    - **56%** of all new HIV diagnoses in women
    - **51%** of all new HIV diagnoses in men
  - **49%** of HIV-related deaths
  - **24%** of HIV diagnoses that are non-urban (highest in the U.S.)
  - **21%** of HIV diagnoses in the Southeast are classified as “late”
- Despite representing **52%** of all new HIV diagnoses, the South represented only **39%** of all PrEP users in 2021.



# Rates of HIV diagnoses in the US and 6 territories and freely associated states by region, 2022\*†

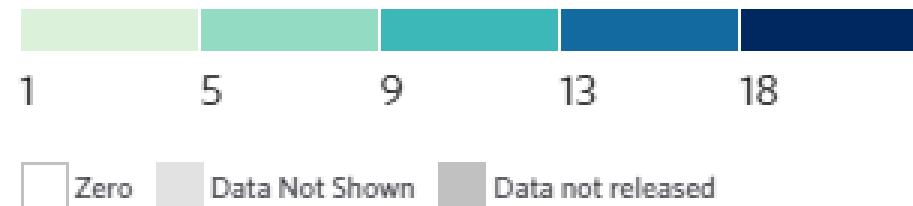
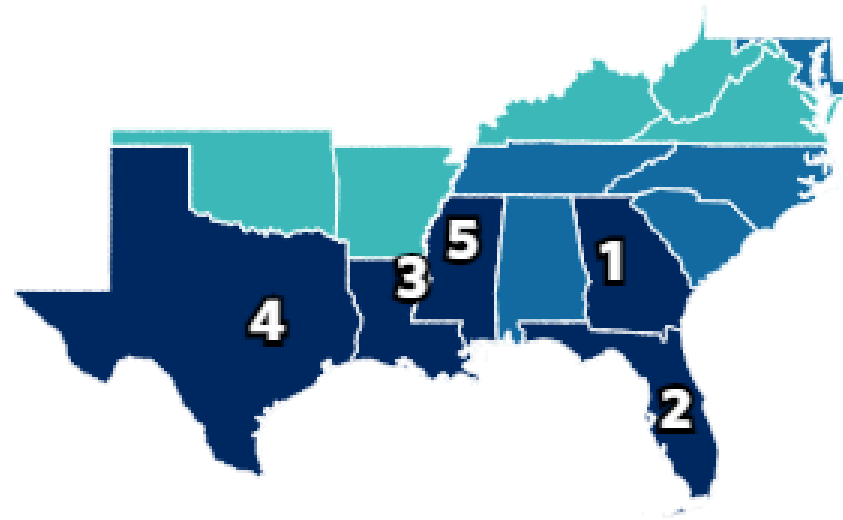
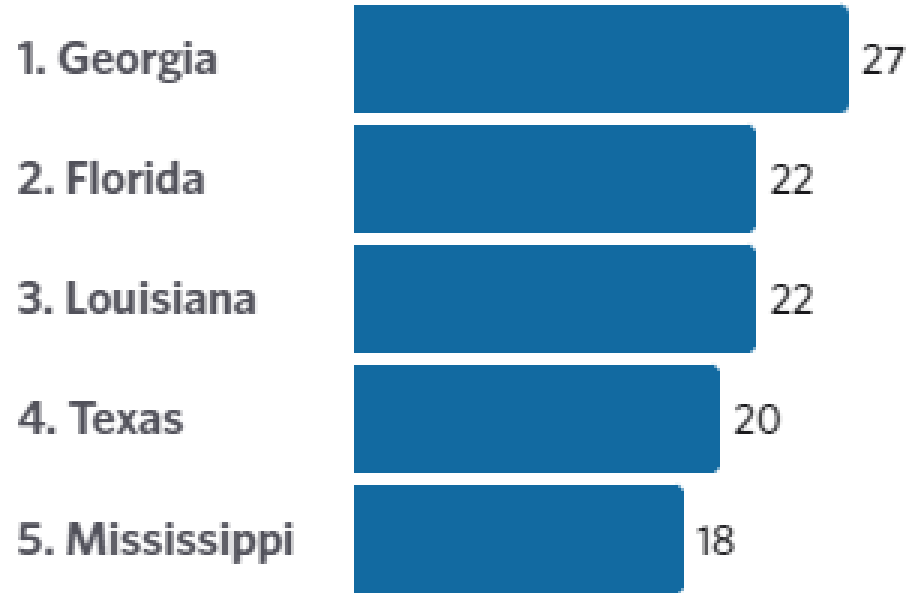


\* Rates are per 100,000 people.

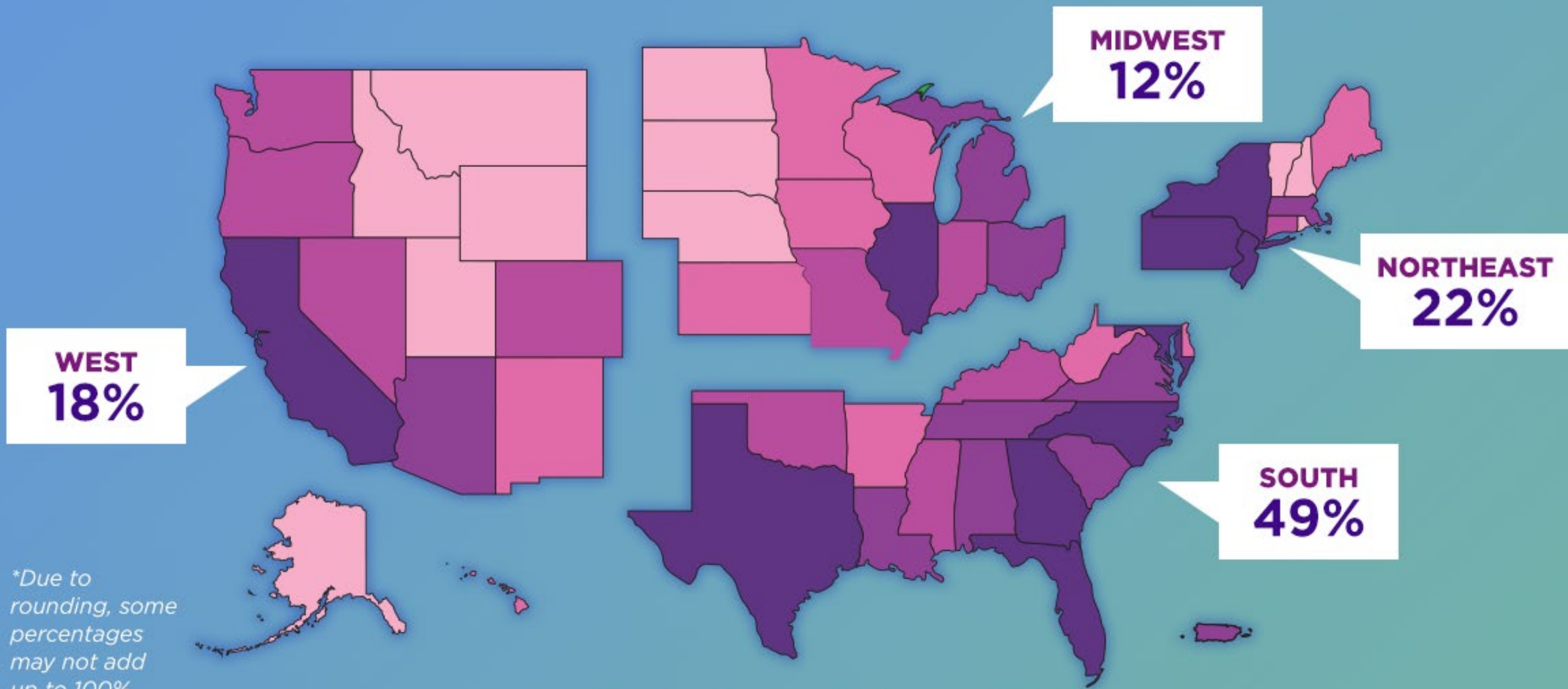
† Includes adults, adolescents, and children under the age of 13.

Source: CDC. Diagnoses, deaths, and prevalence of HIV in the United States and 6 territories and freely associated states, 2022. *HIV Surveillance Report*, 2024; 35.

## TOP AREAS: NEW DIAGNOSES RATE PER 100K, 2022



In 2021, **49%** of all **deaths** among people with HIV were in the **South**.



*\*Due to rounding, some percentages may not add up to 100%.*

Number of Deaths of Persons with Diagnosed HIV, 2021

0 - 43

44 - 124

125 - 278

279 - 511

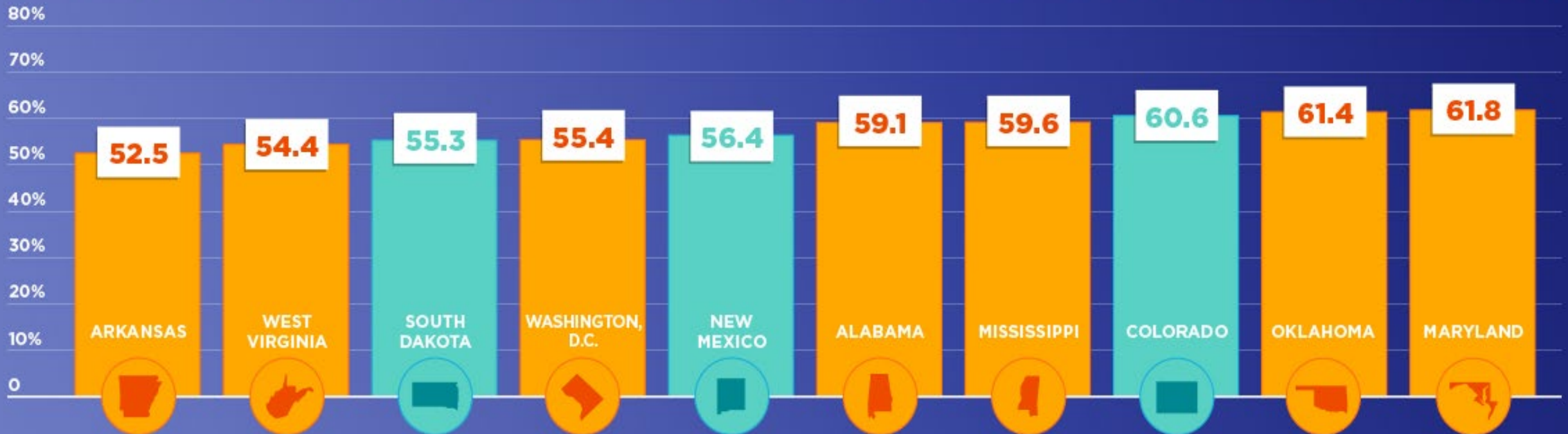
512+



In 2021, of the **10 states** with the **lowest rates of viral suppression**, **7** were in the **South**.

The **Ending the HIV Epidemic goal for viral suppression** is for **90%** of **all people living with HIV** to be **virally suppressed** by 2030.

2030 Goal: 90% Viral Suppression



**Viral Suppression\*, 2021**

*\*Individuals living with diagnosed HIV who had a low (<200 copies/mL) or undetectable viral load (the amount of HIV in the blood).*

*For the purposes of this analysis, D.C. is treated as a state*

# HIV in the US South

In 2021, **6** out of **7** counties with the **lowest percentage of individuals linked to care\*** were in the **South**.

JACKSON COUNTY, OR

13%

FAYETTE COUNTY, TN

17%

HANCOCK COUNTY, MS

20%

NOTTOWAY COUNTY, VA

20%

WARREN COUNTY, KY

33%

ORANGE COUNTY, TX

38%

TAYLOR COUNTY, TX

38%

*\*Individuals who visited an HIV health care provider within 1 month of being diagnosed.*



# Why is this happening in the South?



## Poverty



**12.6%**  
of U.S. population  
were living in poverty.



**13.9%**  
of people in the  
**South** were living  
in poverty.

Source:  
ACS, 2021



## Uninsured



**10.3%**  
of U.S. population  
were lacking health  
insurance.



**14.1%**  
of people in the  
**South** were lacking  
health insurance.

Source:  
ACS, 2021



## Median Income

The national median  
household income:

**\$69,021**

The median household income  
for people in the **South**:

**\$63,524**

Source:  
ACS, 2021



## Food Insecurity



**10.2%**  
of individuals in  
U.S. were living  
with food insecurity.



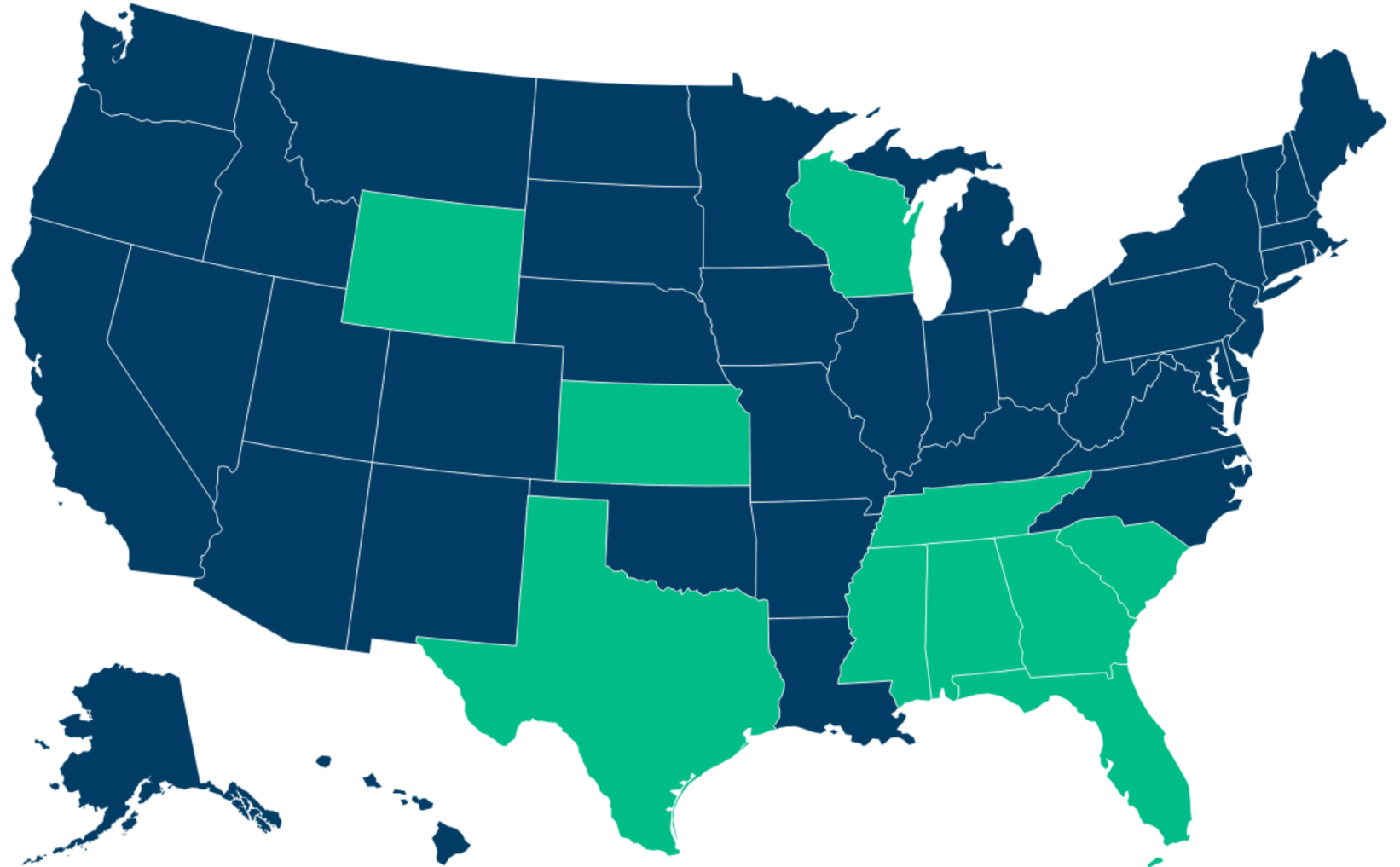
**11.4%**  
of people in the  
**South** were living  
with food insecurity.

Source:  
U.S. Dept of Agriculture, 2021

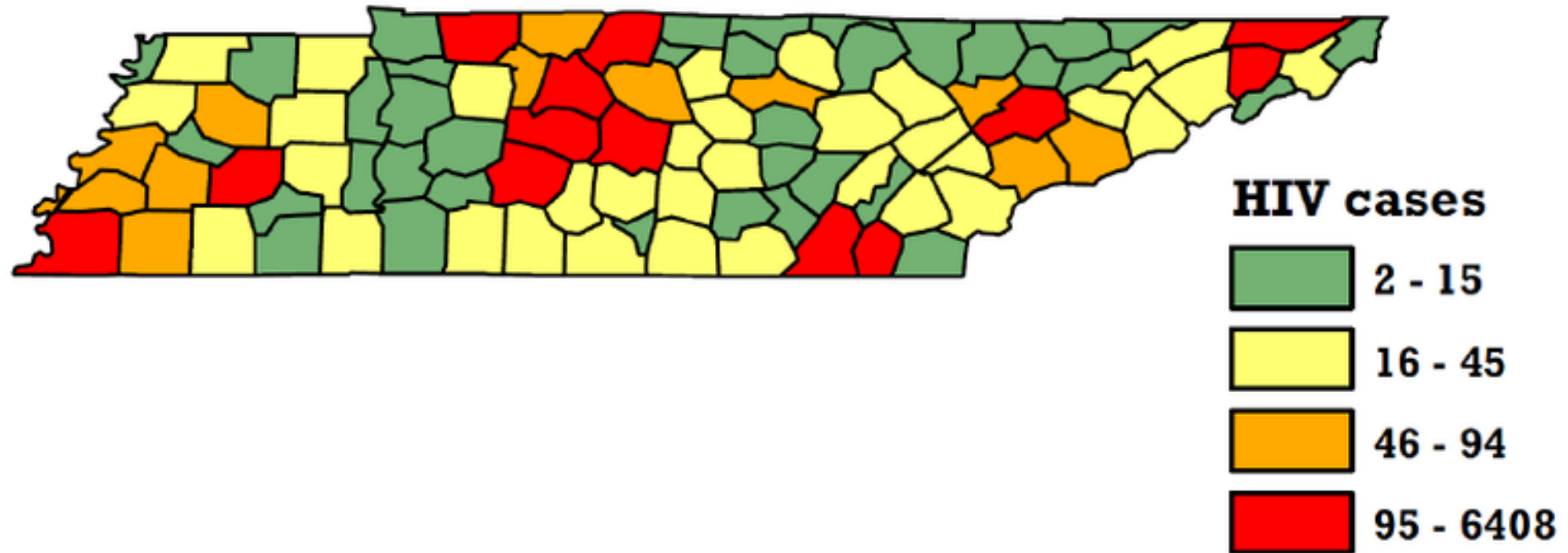
# In the Ten States That Have Not Adopted the Medicaid Expansion, About 1.5 million People Are in the Coverage Gap

The status of state action on the Medicaid expansion decision

- Adopted
- Not Adopted



# The Importance of HIV Testing & Prevention: Real World Examples From Your Neighbors in Tennessee





# Downstream Consequences: HIV Testing/Prevention & Late HIV Diagnoses

- A late diagnosis is when a person receives a CDC stage 3 HIV (AIDS) diagnosis either **at the same time** they are diagnosed with HIV or **within 3 months** of their initial HIV diagnosis.

# Downstream Consequences:

## HIV Testing/Prevention & Late HIV Diagnoses

- Late HIV diagnoses represent multiple **missed opportunities** to diagnose & treat HIV infection and to prevent transmission.
- Individuals who receive a late HIV diagnosis are at increased risk for **HIV-related morbidity & mortality** and may have a **poorer response to ART**.
- Diagnosing HIV quickly & linking people to treatment immediately are crucial to reducing the number of new HIV infections.

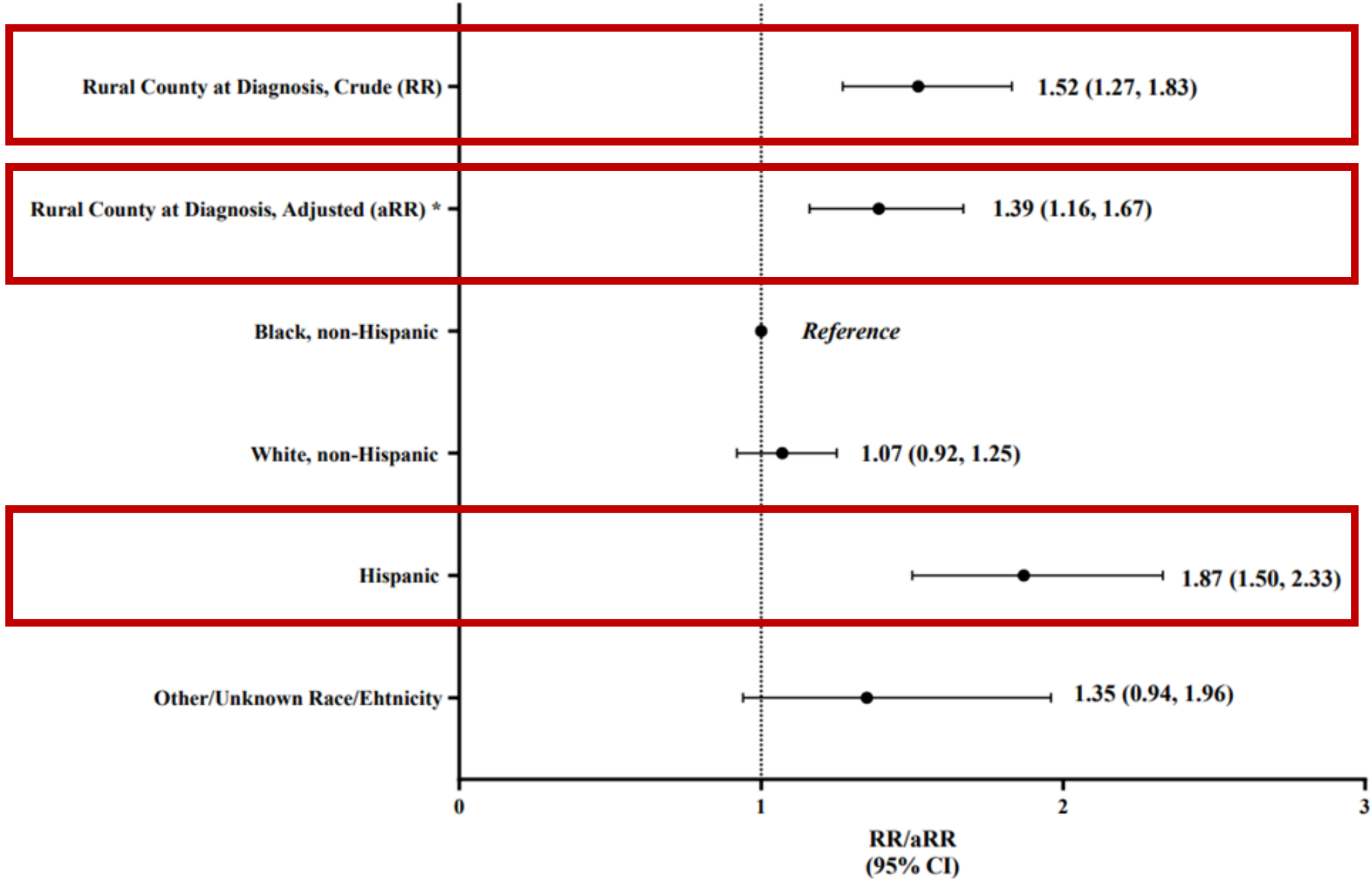
# Downstream Consequences:

## HIV Testing/Prevention & Late HIV Diagnoses

**A study of 3652 new HIV diagnoses from 2015 & 2019 showed:**

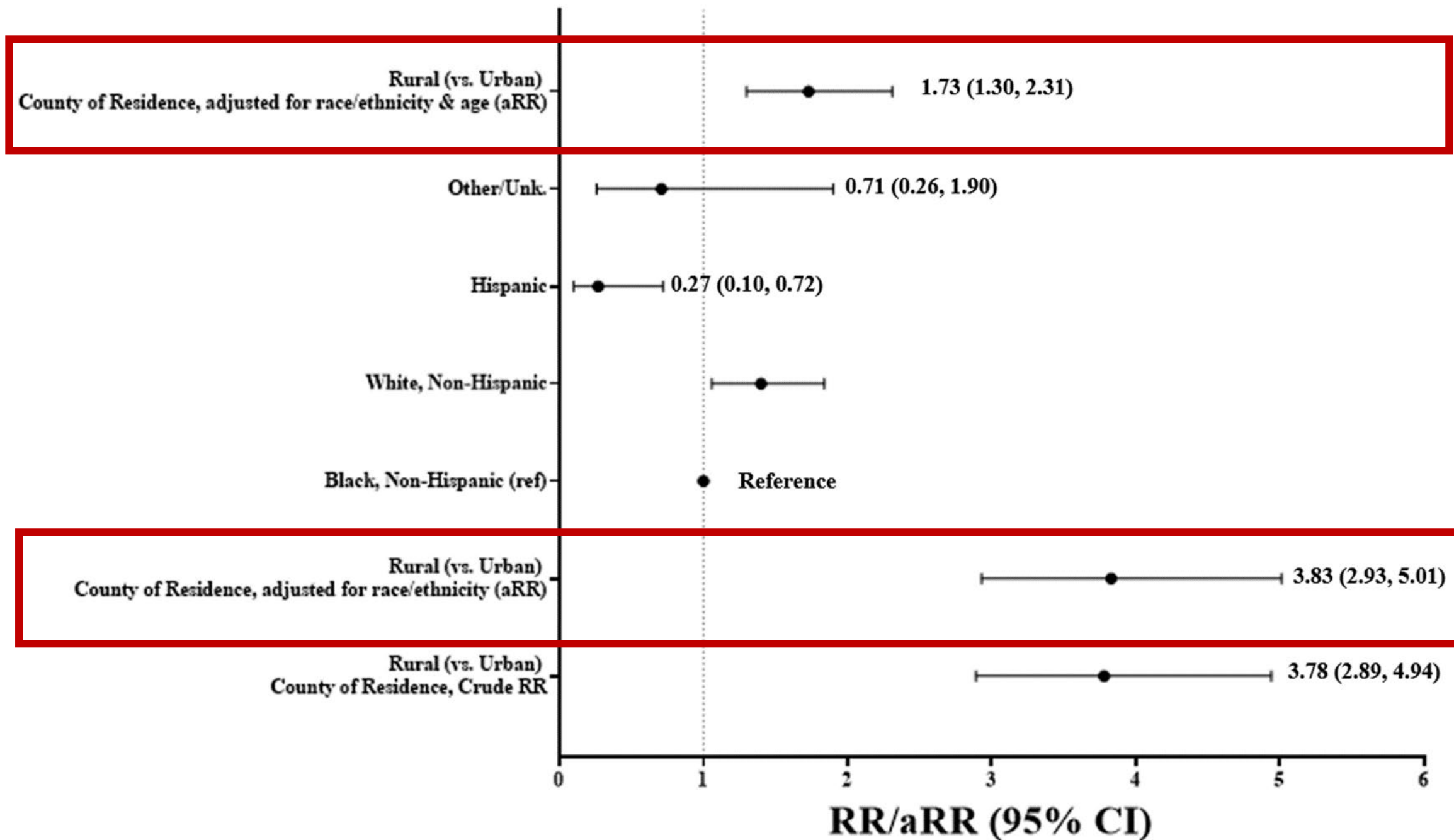
- Rural residence & Hispanic ethnicity in Tennessee was associated with increased risk of receiving a late HIV diagnosis.
- Rural residence and Hispanic ethnicity in Tennessee associated with a shorter time to Stage 3 HIV (AIDS) diagnosis.
  - **Indicates these populations are being diagnosed late in the disease process.**
- Significantly increased all cause mortality among those receiving late HIV diagnoses & and those residing in rural counties at time of HIV diagnosis.

# Risk of Late HIV Diagnosis by Majority Rural vs. Majority Urban County

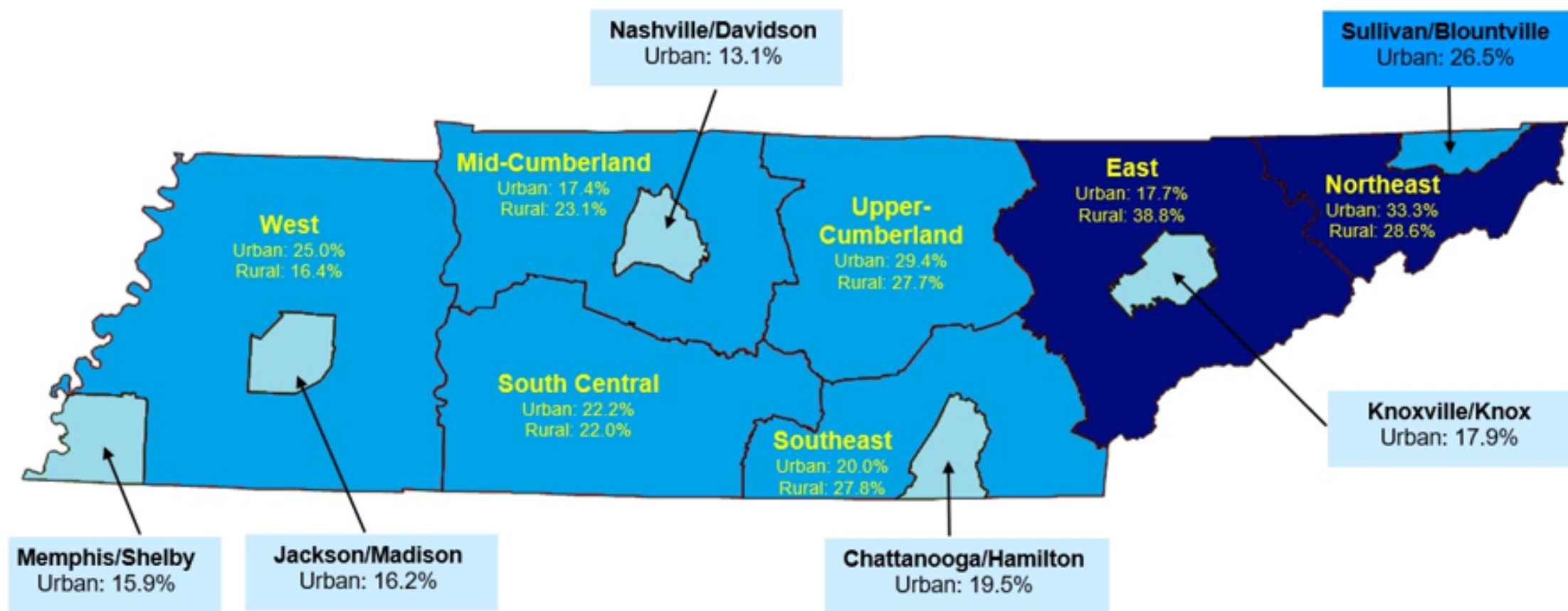


## Secondary Outcome: All-cause mortality by late vs. not-late HIV diagnosis

All Cause Mortality by Late vs. Not-Late HIV Diagnosis



**Figure 2: Proportion of HIV Diagnoses Defined as Late by Rural vs. Urban Residence & Tennessee Public Health Region (January 1, 2015- December 31, 2019) <sup>a</sup>**



**Key**

- Public health region where the percentage of both rural & urban late HIV diagnoses was <20% of all HIV diagnoses
- Public health region where the percentage of either rural or urban late HIV diagnoses was between 20-30% of all HIV diagnoses
- Public health region where the percentage of either rural or urban late HIV diagnoses was >30% of all HIV diagnoses

# How to Address Late HIV Diagnoses?

**It all comes down to early diagnosis and linking people with HIV to care!**

- **HIV Testing!**
- **HIV Prevention (PEP/PrEP)!**
- **Linking people with HIV to care and starting ART!**



# **Ending the HIV Epidemic in the US (EHE):**

## **Basics & Specifics in the US South**



# Ending the HIV Epidemic in the US (EHE):

- HHS program launched in 2019 focusing on the **50 local areas** that account **>50% of new HIV diagnoses**, and **7 states** with a substantial rural burden.
- Initiative infuses the 57 priority jurisdictions with additional resources, technology, and expertise to **expand HIV Prevention and treatment activities**

# Ending the HIV Epidemic in the US (EHE):

- Focuses on **community-driven solutions** to leverage scientific advances in **HIV prevention**, diagnosis, treatment, and outbreak response & address racial, ethnic, and geographic disparities that have contributed to HIV prevention gaps for far too long.
- **Goal: reduce new HIV infections in the U.S. by 90% by 2030 by scaling up key HIV prevention and treatment strategies.**
- If sufficient resources become available, the initiative will eventually expand to other areas.





# **HIV Testing:**

## **Current Recommendations, Best Practices, & Future Directions**

# CDC HIV Testing Recommendations

- **Everyone** between **13 and 64 years old** should be tested for HIV at least once as part of routine health care.
- People with more than one sex partner or with a partner whose sexual history they don't know.
- Some sexually active gay and bisexual men may benefit from more frequent testing (i.e., every 3 to 6 months).
- **Use “opt-out” approach to remove stigma associated with HIV testing and foster earlier diagnosis and treatment.**

# CDC HIV Testing Recommendations

**Anyone whose last HIV test was >1 year ago & answers yes to:**

- Are you a man who has had sex with another man?
- Have you had sex—anal or vaginal—with a partner who has HIV?
- Have you had more than one sex partner since your last HIV test?
- Have you injected drugs and shared needles, syringes, or other injection drug equipment with others?
- Have you exchanged sex for drugs or money?
- Have you been diagnosed with, or treated for, another STI?
- Have you been diagnosed with or treated for hepatitis or TB?
- Have you had sex with someone who could answer "yes" to any of the above questions or someone whose sexual history you don't know?

# USPSTF HIV Testing Recommendations

## Recommendation Summary

Population	Recommendation	Grade
Pregnant persons	The USPSTF recommends that clinicians screen for HIV infection in all pregnant persons, including those who present in labor or at delivery whose HIV status is unknown.	<b>A</b>
Adolescents and adults aged 15 to 65 years	The USPSTF recommends that clinicians screen for HIV infection in adolescents and adults aged 15 to 65 years. Younger adolescents and older adults who are at increased risk of infection should also be screened. See the Clinical Considerations section for more information about assessment of risk, screening intervals, and rescreening in pregnancy.	<b>A</b>

# Opt-Out HIV Testing Recommendations

- The CDC and USPSTF recommend an **opt-out approach** for HIV screening in adults and adolescents as part of routine care.
- The **CDC, ACOG, American Academy of Pediatrics, American College of Physicians, and American Academy of Family Physicians** all recommend routine screening for HIV infection **in all pregnant women using an opt-out approach**, and rapid screening for women who present in labor whose HIV status is unknown.
- Patients should be informed that an HIV test will be included in the standard preventive screening tests, and that they may decline the test.



# Why Opt-Out vs. Risk-Based Screening?

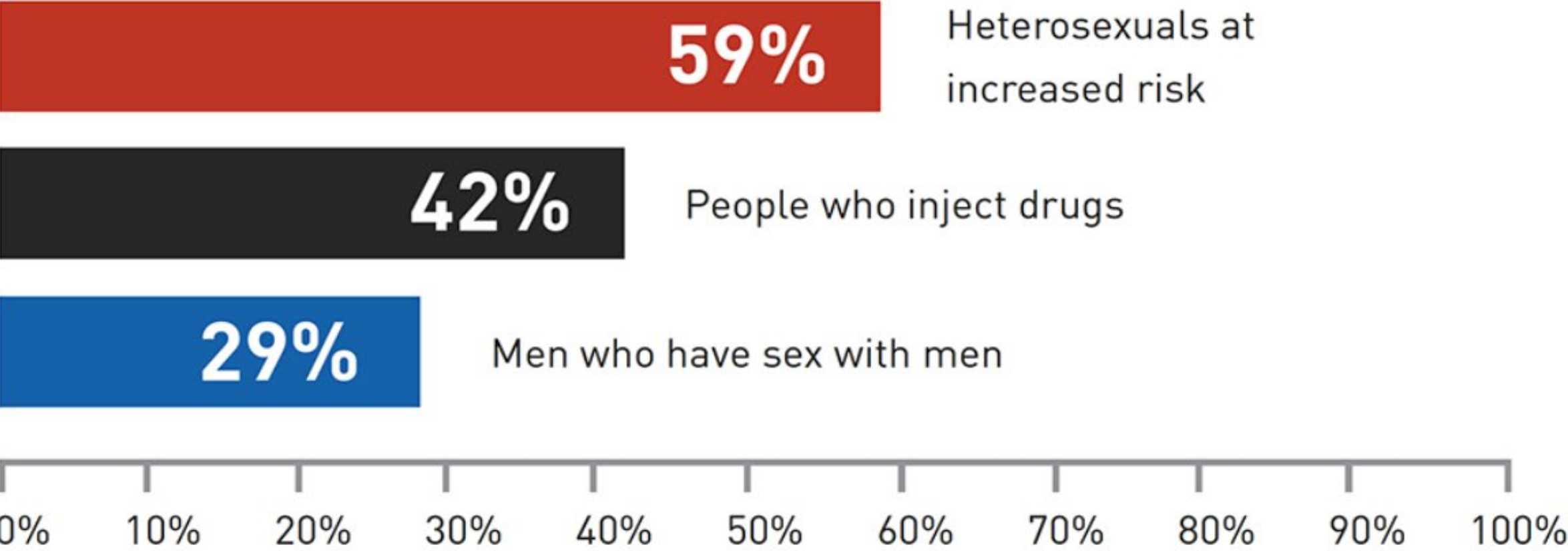
- **Conducting risk-based screening may fail to identify HIV in:**
  - People <20 years of age
  - Women
  - Members of minority races/ethnicities
  - Residents of non-urban areas & low-incidence areas
  - Heterosexual men & women who are unaware of their risk of HIV
- **Many PWH are not diagnosed until they have advanced HIV**
- **Routine, opt-out screening has proved highly effective!**
  - Removes the stigma associated with HIV testing
  - Earlier diagnosis and treatment & reduces risk of transmission
  - Cost-effective

# Justifying Opt-Out Testing to Patients

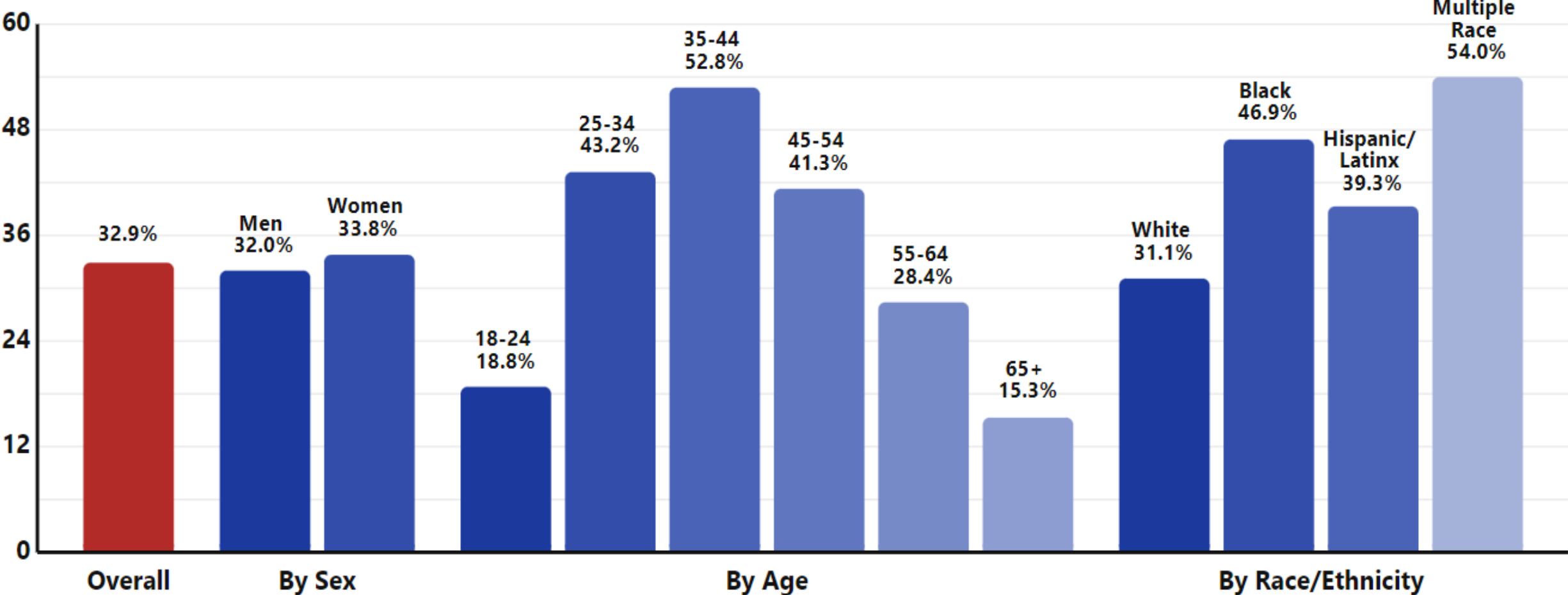
- HIV is a serious health disorder that can be detected before symptoms develop
- Detectable by reliable, inexpensive, acceptable screening tests
- People diagnosed with HIV have years of life to gain if treatment is started early, before symptoms develop
- Screening costs are reasonable in relation to anticipated benefits

# Despite Clear Guidelines, We Are NOT Testing

Despite seeing a primary care provider, approximately 75% of people at ongoing risk for HIV are not getting tested every year.<sup>3</sup> The graph below shows the percentages of people at risk who were not tested in the last year.



# Despite Clear Guidelines, We Are NOT Testing



# Why is the Uptake of HIV Testing So Poor?

- Patient and provider lack of knowledge about HIV risk
- Stigma surrounding HIV and HIV-acquisition risk factors
- Perceived and tangible financial barriers
- Lack of knowledge about where to get tested for HIV
- Distance from HIV testing sites & transportation issues (especially in rural communities)
- Concerns about privacy and anonymity
- Religious/cultural attitudes regarding HIV and HIV-acquisition risk factors
- Concerns about homophobia/transphobia; lack of LGBTQ+ community organizations outside of urban cores offering HIV/STI screening

# How to Increase the Uptake of HIV Testing

- Consistent adherence to opt-out screening recommendations
- Universal HIV testing in EDs & Urgent Cares for recommended groups
- Expansion of syringe service programs
- Expansion of mobile & home HIV testing programs/services
- Expansion of PrEP & PEP services—such as novel approaches (Pharmacist prescribed, nursing only visit, online prescribed, etc.)
- Expansion of telemedicine services and telemedicine compensation
- HIV testing and prevention education for front line providers—especially PCPs and ED providers
- Comprehensive sexual education programming
- Involvement of & buy in from religious and community-based organization

# Summary

- **Ending the HIV epidemic starts with decreasing incident HIV through improving uptake of HIV testing and HIV testing services (such as PrEP and PEP).**
- **Universal opt-out testing is one intervention that outpatient providers and ED's can implement to improve HIV testing rates.**
- **PrEP should be discussed with all patients who are at risk for HIV infection.**

# Questions? Feedback?



**Please provide your  
feedback! It is very much  
appreciated!**





# Thank you

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