

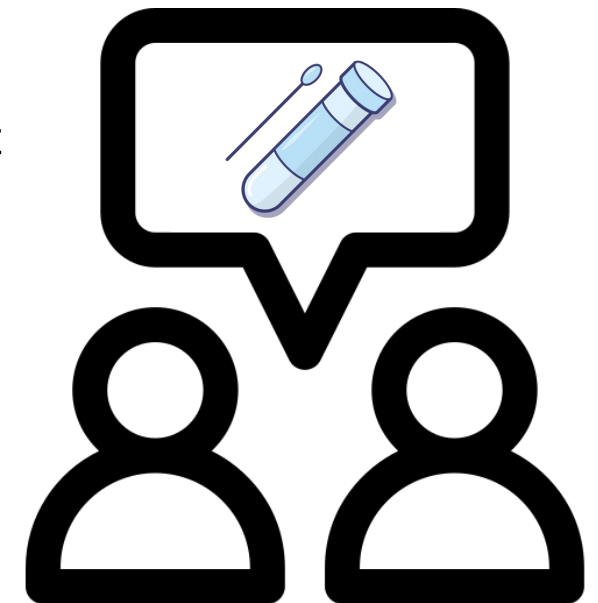


# A Quality Improvement Initiative Addressing STI Services Provided in Rural South Carolina Primary Care Clinics



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Department of Psychology  
SC SmartState Center for  
Healthcare Quality  
University of South Carolina





## **Disclosures**

I receive research funding from NIH, HRSA, and ViiV Healthcare.

# Healthy Futures Lab

at the University of South Carolina

## Mission

The mission of the Healthy Futures Lab at the University of South Carolina is to engage in innovative, community-engaged research to help people—particularly those from marginalized communities—to achieve optimal health and wellbeing. This lab is committed to engaging in anti-racist dialogue and actions; to advocating for equity for lesbian, gay, bisexual, and transgender (LGBT) individuals; and to recognizing and honoring the humanity of individuals from all creeds, religions, and nations. A major focus of our work is to improve outcomes for those living with or affected by human immunodeficiency virus (HIV)—and we are strongly committed to ending stigma associated with HIV and HIV criminalization.



Meet the faculty, staff, and students involved in Healthy Futures.

PEOPLE



Learn more about our current research projects.

RESEARCH



Stay updated on recent news involving our team.

NEWS

# About me...

- Health psychologist
- Overcome “gaps” in prevention and treatment frameworks for infectious diseases (HIV, HPV, STIs, etc.)
- Director of **Healthy Futures Lab**  
<http://www.healthyfutureslab.com>
- Director of **Supporting Substance Use Disorder Services in South Carolina (SSUDS-SC) Center**

# Objectives

- Review trends in HIV and STIs in South Carolina
- Learn best practices in HIV and STI testing, including recommendations for multi-site extragenital STI testing
- Review basics of Pre-exposure Prophylaxis (PrEP) for HIV prevention
- Understand barriers to HIV and STI prevention and treatment in rural communities
- Learn about a pilot project to increase extragenital STI testing among PrEP patients in rural communities in South Carolina

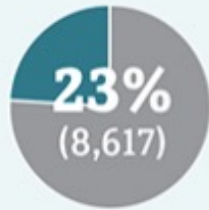


# Current State of the US HIV Epidemic

There were **36,801 NEW HIV DIAGNOSES** in the US and dependent areas in 2019. Of those:



were among gay  
and bisexual men\*



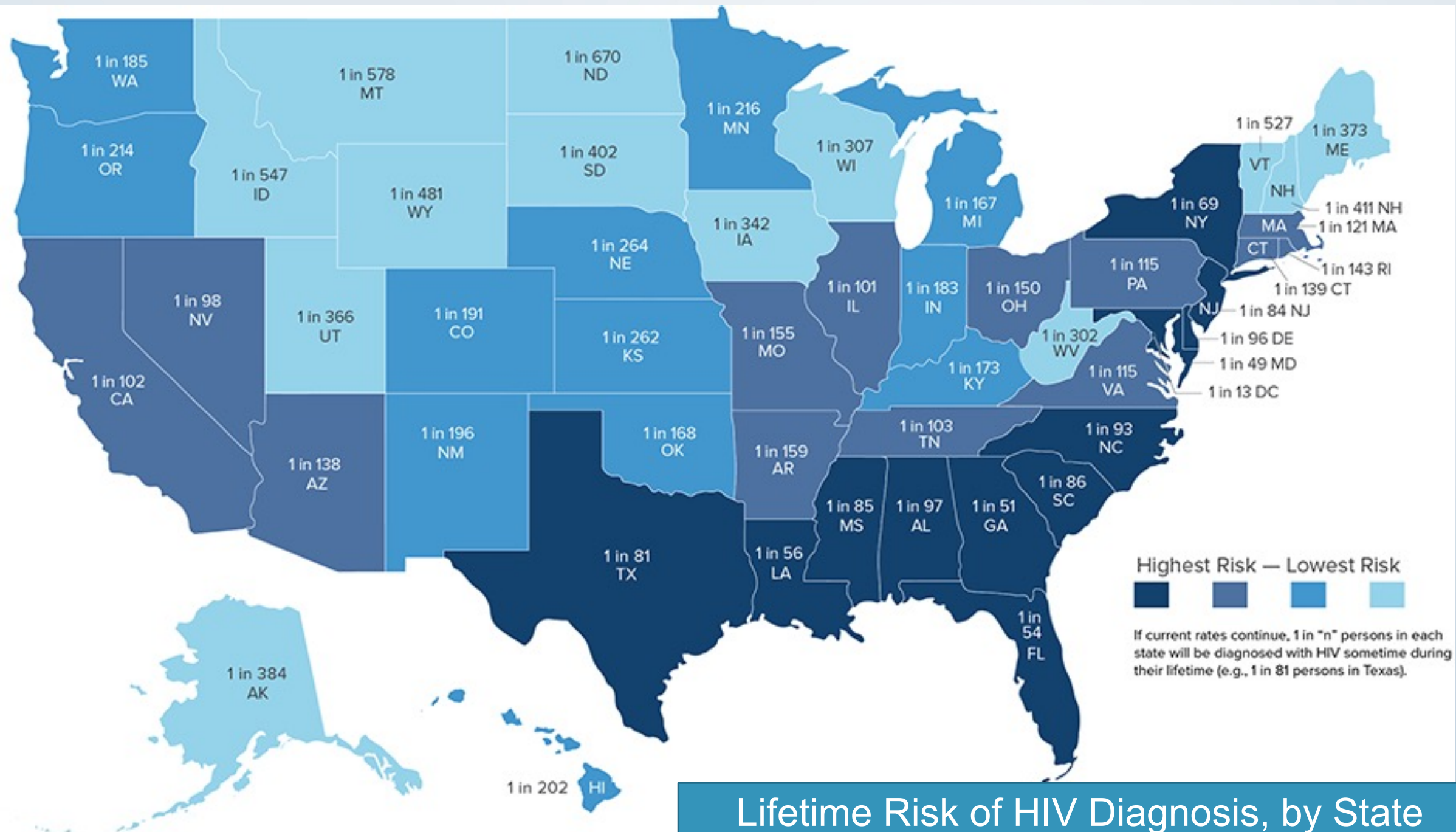
were among  
heterosexuals



were among people  
who inject drugs

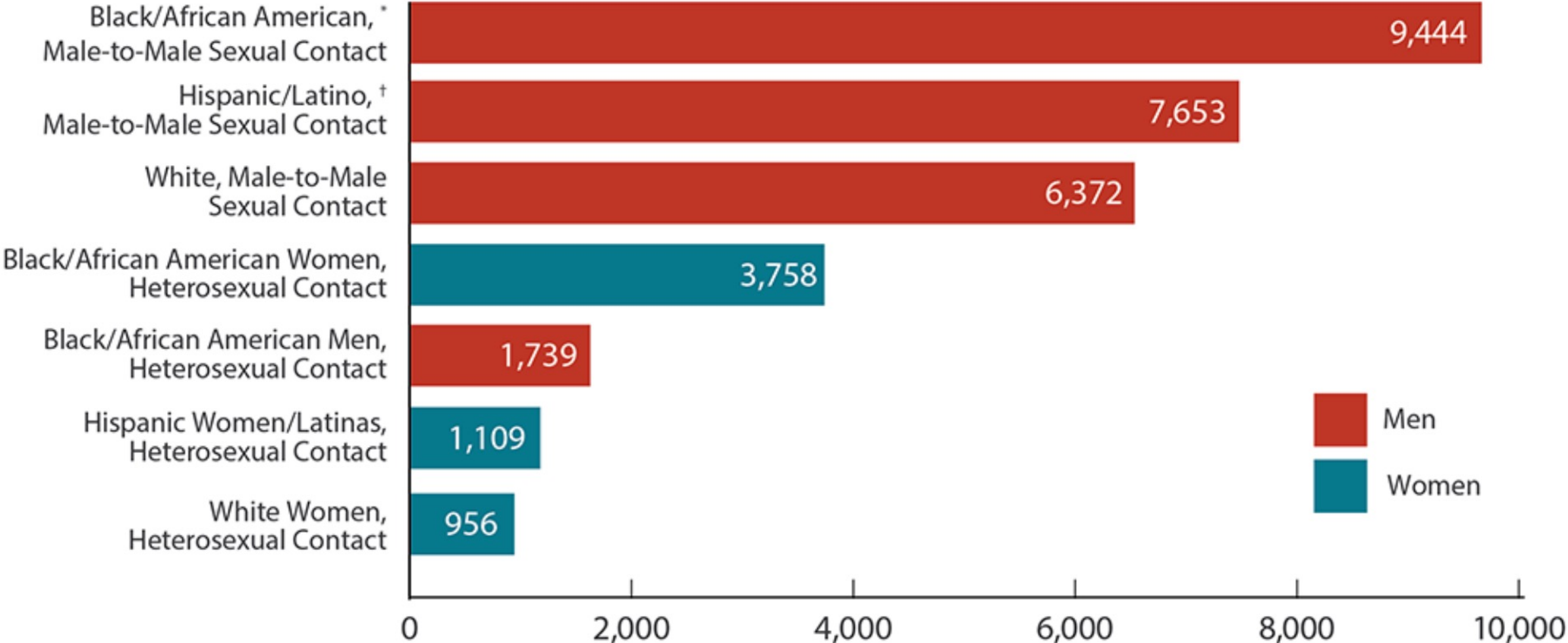
\* Includes infections attributed to male-to-male sexual contact *and* injection drug use (men who reported both risk factors).

- ~1.2 million people in the US are living with HIV
- Around 15% of those are undiagnosed
- Annual number of new HIV infections has remained steady for many years ☹️
- New infections have increased among some groups, including individuals from Hispanic and Latinx backgrounds



Lifetime Risk of HIV Diagnosis, by State

# New HIV Diagnoses in the US and Dependent Areas for the Most-Affected Subpopulations, 2018



If current rates persist, **1 in 2 Black men who have sex with men** and **1 in 4 Latino men who have sex with men** in the US will be diagnosed with HIV during their lifetime.

-Centers for Disease Control & Prevention



# Ending the HIV Epidemic: A Plan for the United States

## GOAL:

**75%**  
reduction  
in new HIV  
infections  
in 5 years  
and at least  
**90%**  
reduction  
in 10 years.



HHS will work with each community to establish local teams on the ground to tailor and implement strategies to:



**Diagnose** all people with HIV as early as possible.

**Treat** people with HIV rapidly and effectively to reach sustained viral suppression.

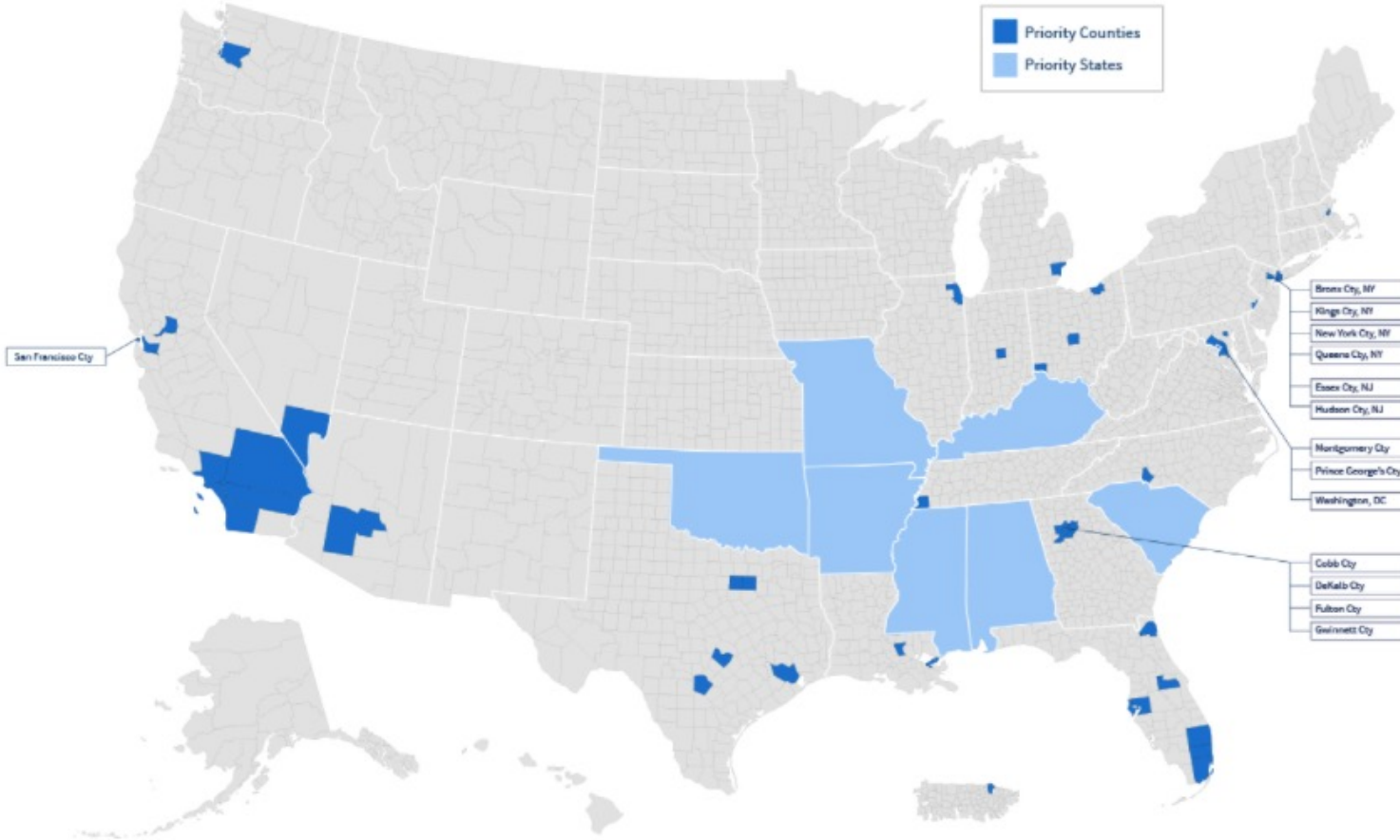


**Prevent** new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).

**Respond** quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.



# Ending the HIV Epidemic: Priority Jurisdictions



- **More than 50% of new HIV diagnoses** occur in only 48 counties, Washington, DC, and San Juan, Puerto Rico
- **Seven states have a substantial rural burden** – 10% or more of their diagnoses in rural areas

# Ending the HIV Epidemic: Four Pillars



Diagnose



Treat

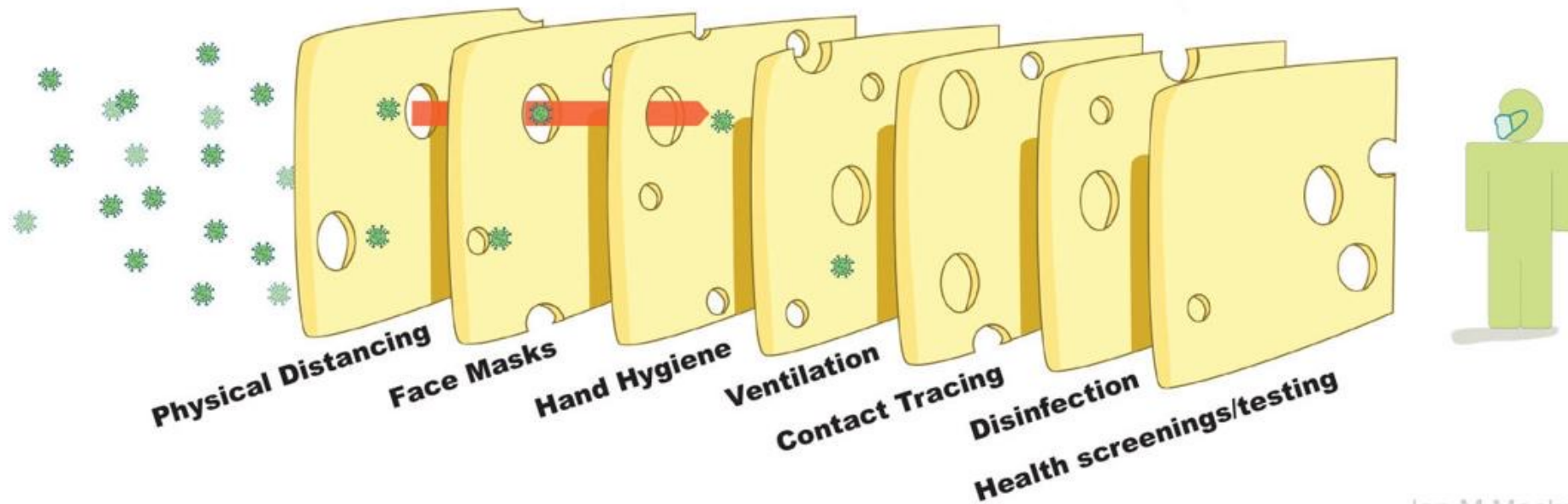


Prevent



Respond

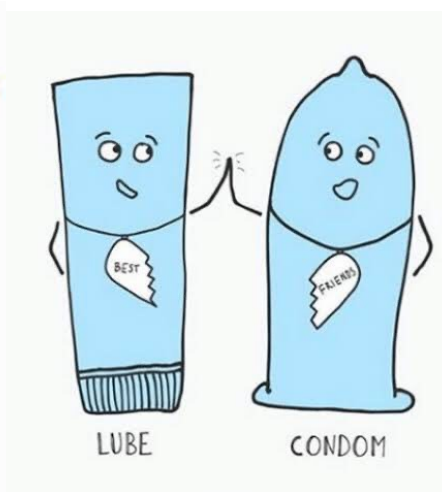
# The Swiss Cheese Model of COVID-19 Defense



Ian M Mackay  
virologydownunder.com  
Derived from @sketchplanator  
Based on the Swiss cheese model of accident causation, by James T Reason, 1990  
version 1.3  
update: 12oct2020



# The Swiss Cheese Model of Ending the HIV Epidemic?



HEALTH AND SEX BELONG TOGETHER

Healthysexuals  
**DON'T RUSH**

You've got prevention options. Find what fits.

VISIT  
**HEALTHYSEXUALS.COM**  
AND TALK TO A HEALTHCARE PROVIDER

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Introducing  
**HONESTLY**

**A National TV Commercial  
about HIV Prevention**

HEALTH AND SEX BELONG TOGETHER

Healthysexuals  
**LOVE SHARING**

Talk about your sexual health. #NoFilter

VISIT  
**HEALTHYSEXUALS.COM**  
AND TALK TO A HEALTHCARE PROVIDER

GILEAD HEALTHYSEXUAL, GILEAD, and the GILEAD Logo are trademarks of Gilead Sciences, Inc. © 2017 Gilead Sciences, Inc. All rights reserved. UNBC3907 01/17

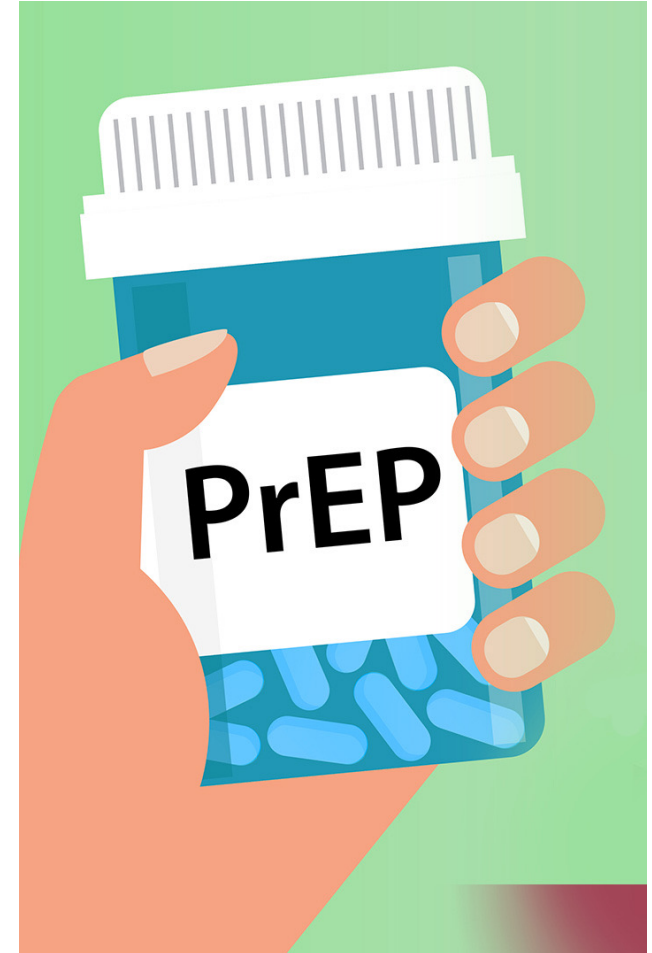
# Pre-Exposure Prophylaxis (PrEP): Critical Tool to End the HIV Epidemic

Emtracitabine +  
Tenofovir



Truvada®  
Descovy®

- PrEP = A once-a-day pill taken to prevent HIV
- Initially approved in 2012
- PrEP reduces risk of acquiring HIV through sex by ~99% if taken daily
- 74% risk reduction for injection drug use
- Most effective when combined with other prevention tools
- Long-acting injectables are here now too! (Apretude®)



# Who is a candidate for PrEP?

Clinicians should recommend PrEP for individuals, including adolescents, who meet any of the following characteristics:

- Engage in **condomless sex** with **partners of unknown HIV status**
- Have partners who may have **multiple or anonymous sex partners**
- Engage in **sex at parties** or other high-risk venues (or have partners who do)
- Are involved with **transactional sex** (or have partners who do)
- Have been diagnosed with  $\geq 1$  **bacterial STI** in past 12 months





# Who is a candidate for PrEP?

Clinicians should recommend PrEP for individuals, including adolescents, who meet any of the following characteristics :

- Are **attempting to conceive with a partner who has HIV**
- Are at **ongoing risk of HIV during pregnancy** (e.g., through inconsistent condom use with unknown partners, have sexual partner with unsuppressed HIV)
- Report **injecting substances** (e.g., drugs, hormones, silicone) (or have partners who do)
- **Self-identify** as being at-risk without disclosing specific risk behaviors

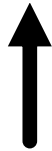


# Who is a candidate for PrEP?



← Use this code with your phone's QR code reader to go directly to a mobile-friendly version of the guideline.

■ This 1/4-Folded Guide is a companion to the New York State Department of Health AIDS Institute guideline *PrEP to Prevent HIV and Promote Sexual Health*. The full guideline is available at [www.hivguidelines.org](http://www.hivguidelines.org).



SCAN THIS for an excellent clinical pocket guideline!

## Truvada<sup>®</sup> vs Descovy<sup>®</sup>

TDF/FTC VERSUS TAF/FTC AS PrEP		
	TDF/FTC	TAF/FTC
<b>Effectiveness</b>	All populations.	Cisgender MSM and transgender women [a].
<b>Renal safety</b>	<ul style="list-style-type: none"> <li>• Potential effect on renal tubular function. Meta-analysis shows good safety.</li> <li>• Discontinue if confirmed CrCl &lt;50 mL/min.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved renal biomarkers compared to TDF.</li> <li>• Can be used with stage 3 CKD (CrCl 30–59 mL/min).</li> </ul>
<b>Bone safety</b>	Potential decrease in bone mineral density. Meta-analysis shows good safety.	Favorable bone biomarkers compared with TDF.
<b>Weight</b>	Weight neutral.	Mild weight gain observed in studies.
<b>LDL cholesterol</b>	Small decreases.	Small increases.
<b>Dosing</b>	Daily dosing is preferred. On-demand dosing is an option in cisgender MSM.	Daily dosing only.
<b>Cost</b>	Will go off patent in 2020.	Currently similar to TDF/FTC.

a. Transgender women made up only 1% of the DISCOVER study population.

# Long-acting Injectables for PrEP

## 2021 CDC Guidelines for PrEP

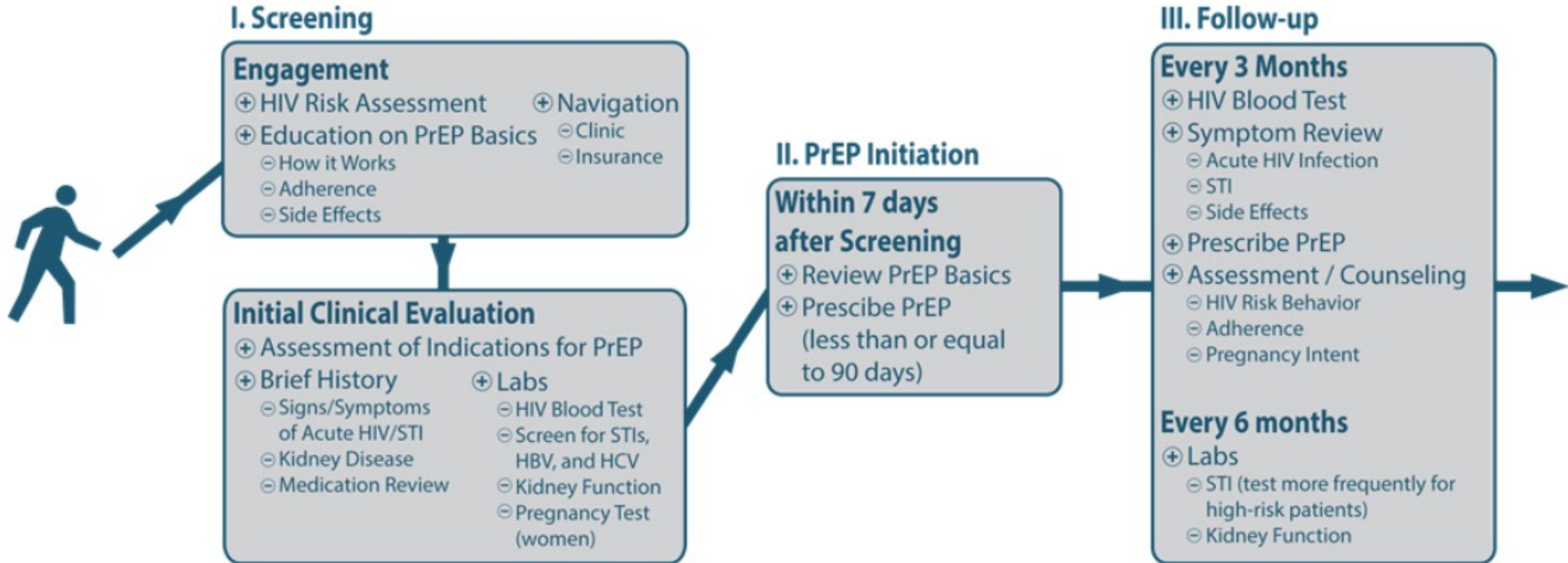
Drug(s)	Brand name	Mode of administration	Dose	Frequency
Emtricitabine/tenofovir disoproxil fumarate (F/TDF) <sup>a</sup>	Truvada	Oral tablet	200 mg/ 300 mg	Once per day
Emtricitabine/tenofovir alafenamide (F/TAF)	Descovy	Oral tablet	200 mg/ 25 mg	Once per day
Cabotegravir	Apretude	Intramuscular injection	600 mg	Once every 2 months <sup>b</sup>

<https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf>



- Cabotegravir is a **long-acting integrase inhibitor** from ViiV
- Approved for **cisgender and transgender men and women** with no limitations based on type of sex they have
- Receive 2 intramuscular injections in the buttocks administered 1 month apart, and then every 2 months afterwards
- Every-other-month injections can be given within a **seven-day window** before or after the scheduled dose
- If a person misses an injection by more than a week, they can substitute daily cabotegravir pills for up to two months

# PrEP Care System: Screening, Initiation, Follow-Up





# Q = How are we doing with getting PrEP to all of those groups?

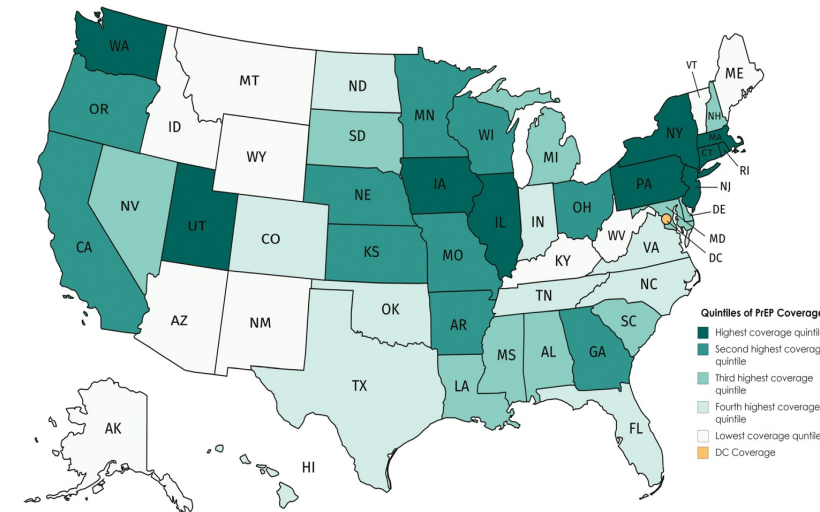
## A = **NOT GOOD!**

- 2015 – CDC estimated that ~1.5 million adults had indications for PrEP use
- PrEP use was *slightly* higher in 2018 when compared to 2012
  - Very low uptake in the South, including South Carolina
- Recent national survey among young Black men who have sex with men:
  - 78% reported they felt they were likely to be infected with HIV
  - 39% had heard of PrEP
  - Only 8% reported having ever taken PrEP

EVEN when we look at metro areas, missed opportunities in uptake

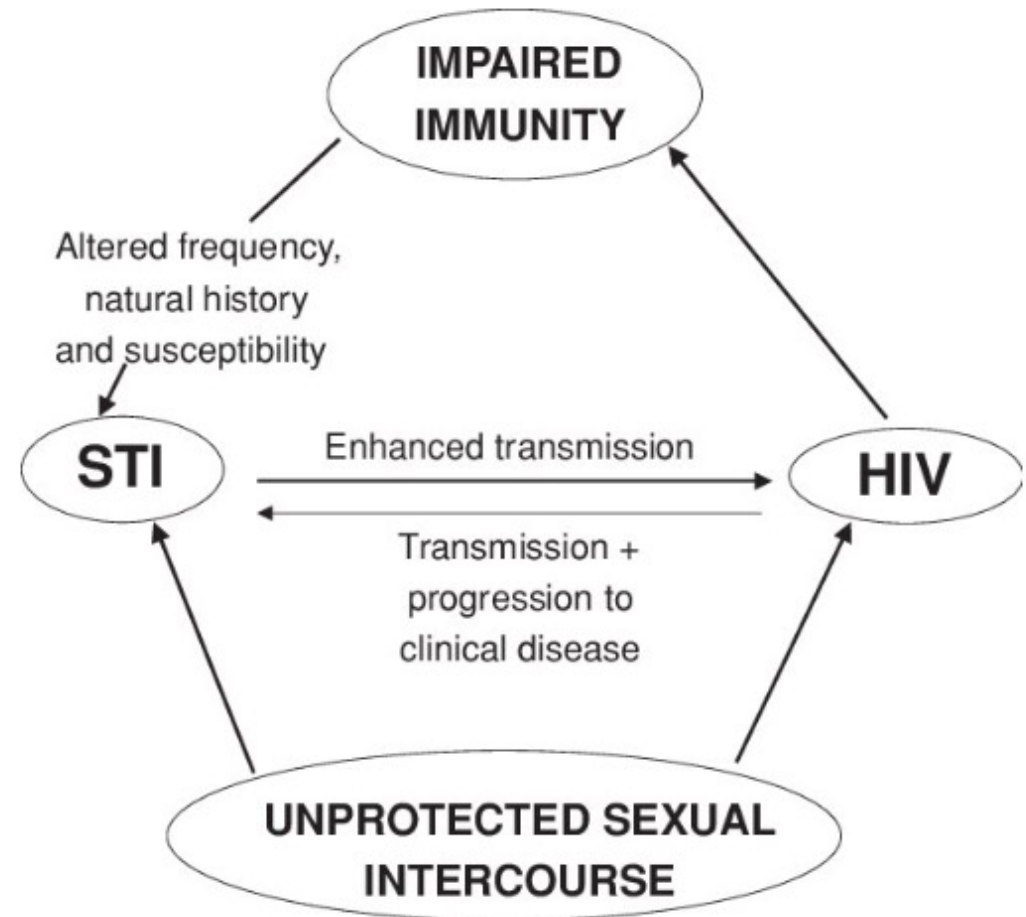
- Study of 778 MSM from Atlanta, Detroit, & NYC:
  - 31.2% reported current use of PrEP
  - Majority (61.2%) reported they had never used it for a variety of reasons (e.g., health concerns, safety concerns, cost issues, access issues)

**Changes in PrEP Coverage, 2012-2016**  
(Darker = more increases in PrEP use)



# Sexually Transmitted Infections (STIs) & HIV Risk

- The HIV and STIs epidemics are deeply intertwined and **syndemic**
- Complementary prevention strategies are needed
  - Increase uptake of **Pre-exposure Prophylaxis (PrEP)** for individuals at-risk for HIV
  - Ensuring access to and adherence for **Anti-Retroviral Therapy (ART)** for those already living with HIV
  - Routine **STI screening and HIV testing**
  - Promoting **consistent condom use** and other risk reduction strategies



THE  
**STATE OF STDs**  
IN THE  
**UNITED STATES,**  
2021

**STDs remain far too high,  
even in the face of a  
pandemic.**

Note: These data are considered preliminary prior to official 2021 close-out. Data also reflect the effect of COVID-19 on STD surveillance trends.



**1.6 million**  
CASES OF CHLAMYDIA  
4.7% decrease since 2017



**696,764**  
CASES OF GONORRHEA  
25% increase since 2017



**171,074**  
CASES OF SYPHILIS  
68% increase since 2017



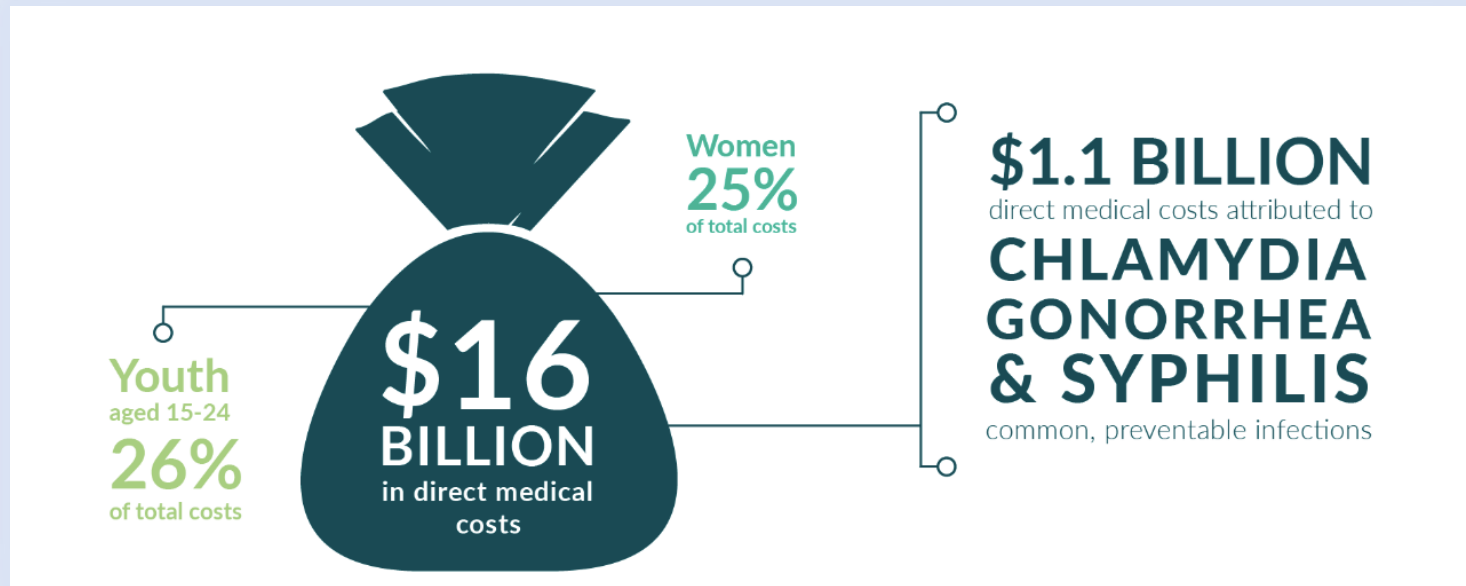
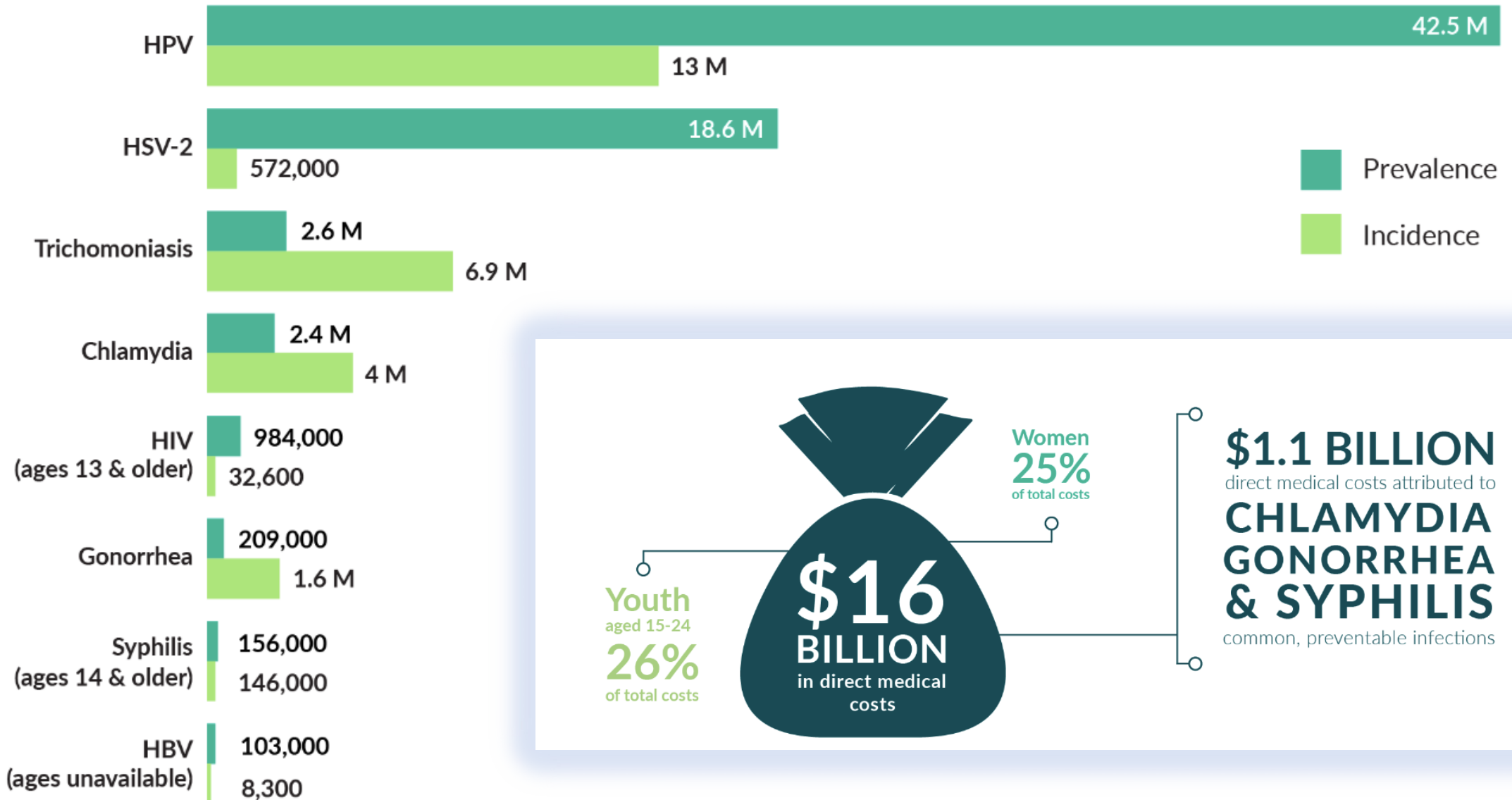
**2,677**  
CASES OF SYPHILIS  
AMONG NEWBORNS  
185% increase since 2017

LEARN MORE AT: [www.cdc.gov/std/](http://www.cdc.gov/std/)

**ANYONE WHO HAS SEX COULD  
GET AN STD, BUT SOME GROUPS  
ARE MORE AFFECTED**

- YOUNG PEOPLE AGED 15-24
- GAY & BISEXUAL MEN
- PREGNANT PEOPLE
- RACIAL & ETHNIC MINORITY GROUPS

## STI Prevalence and Incidence in the US



# Burden of STIs in South Carolina

- According to CDC data on chlamydia, gonorrhea and primary and secondary syphilis, **South Carolina has the 3<sup>rd</sup> highest rate for STIs in the US**
- **Richland County, SC** ranks 3<sup>rd</sup> among all US counties for STI rate

1. Hinds County, MS: 2,253.2
2. St. Louis City, MO: 2,122.6
3. Richland County, SC: 1,939.4
4. Norfolk City, VA: 1,932.9
5. Richmond County, GA: 1,932.2
6. Baltimore City, MD: 1,896.9
7. Cumberland County, NC: 1,776.4
8. Orleans Parish, LA: 1,741.4
9. Milwaukee County, WI: 1,724.7
10. Richmond City, VA: 1,724.6

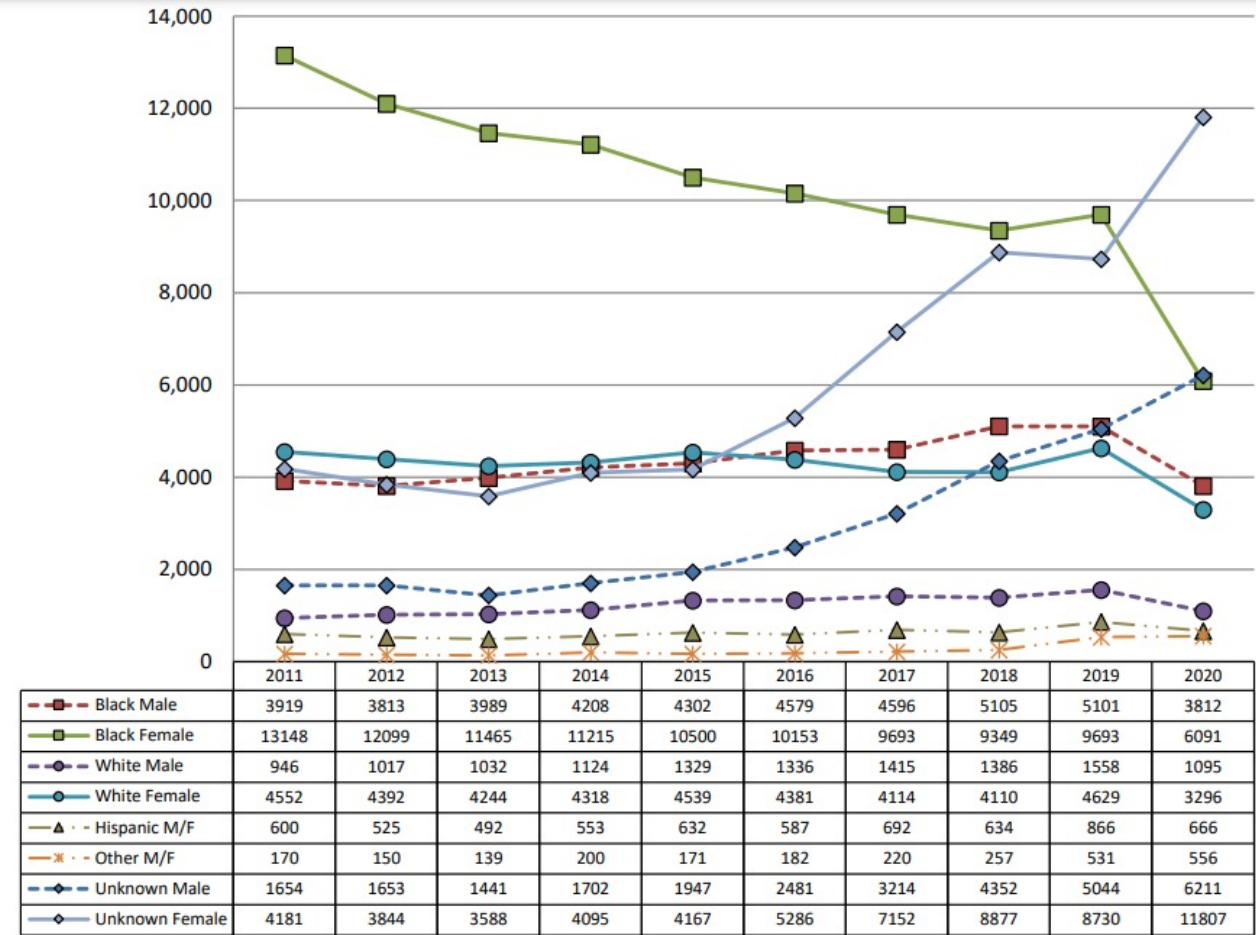


# Chlamydia

**Chlamydia** – STI caused by bacterium *Chlamydia trachomatis*; can cause multiple infections (e.g., cervicitis, urethritis, proctitis)

- Spreads through vaginal, anal, or oral sex
- Can also be transmitted from mother-to-child during childbirth
- In women, can lead to pelvic inflammatory disease (PID) infertility, ectopic pregnancy, and chronic pelvic pain
- Often a “**silent infection**”—most people with chlamydia have no symptoms and therefore do not seek testing
- Can cause serious health problems in short- and long-term as well as serious complications for newborns born to persons with untreated chlamydia
- Chlamydia can be easily cured with antibiotics if we know there!

South Carolina Chlamydia Cases by Diagnosis Year, Race and Sex



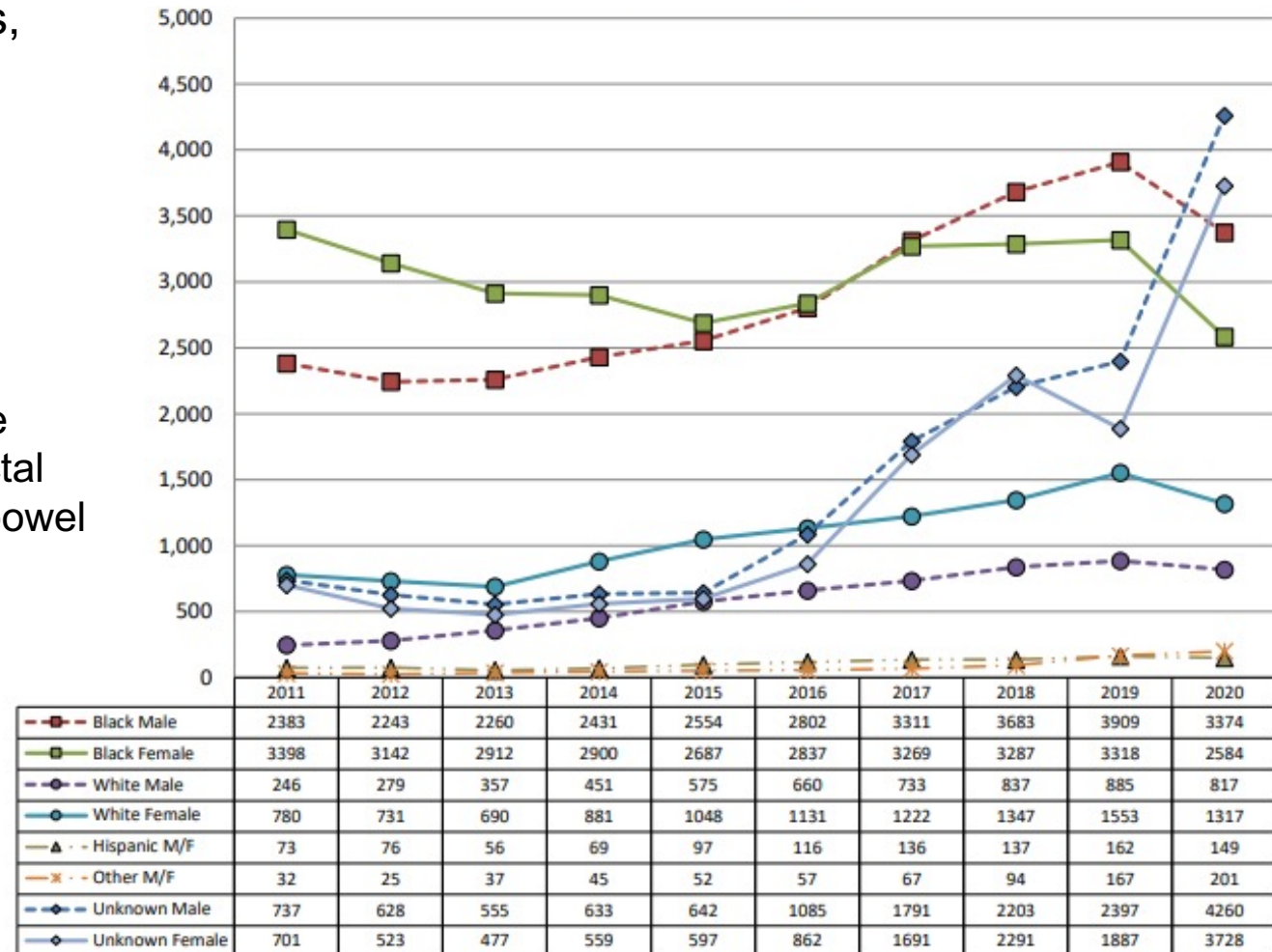
# Gonorrhea

**Gonorrhea** – STI caused by bacterium *Neisseria gonorrhoeae*; infects mucous membranes of the reproductive tract (e.g., cervix, uterus, fallopian tubes, urethra)

- Most women with gonorrhea are **asymptomatic** but risk serious and permanent complications from infection
- Untreated gonorrhea in a pregnant person may cause blindness, joint infections, and life-threatening blood infections in the baby
- Many men also asymptomatic; if symptoms, may include dysuria, urethral discharge, testicular or scrotal pain, rectal discharge, anal itching and soreness, bleeding, painful bowel movements
- Gonorrhea can be cured if we know it's there!



South Carolina Gonorrhea Cases by Diagnosis Year, Race and Sex



# Syphilis

**Syphilis** – STI caused by bacterium *Treponema pallidum*

- Spread person-to-person by direct contact with a syphilitic sore (*chancre*)
- “The Great Pretender”
- Four stages
  - **Primary stage** = Sore at site where syphilis entered your body (i.e., penis, vagina, anus, rectum, lips/mouth)
  - **Secondary stage** = Skin rashes and other symptoms
  - **Latent stage** = No visible symptoms but still in body
  - **Tertiary stage** = Multi-organ and systemic impacts
- Curable with certain antibiotics
- Cases rapidly rising in SC and congenital syphilis continues to be a major concern

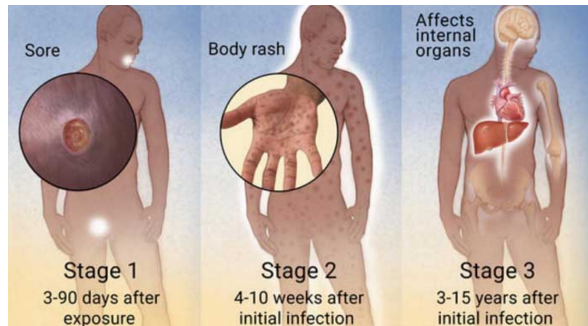
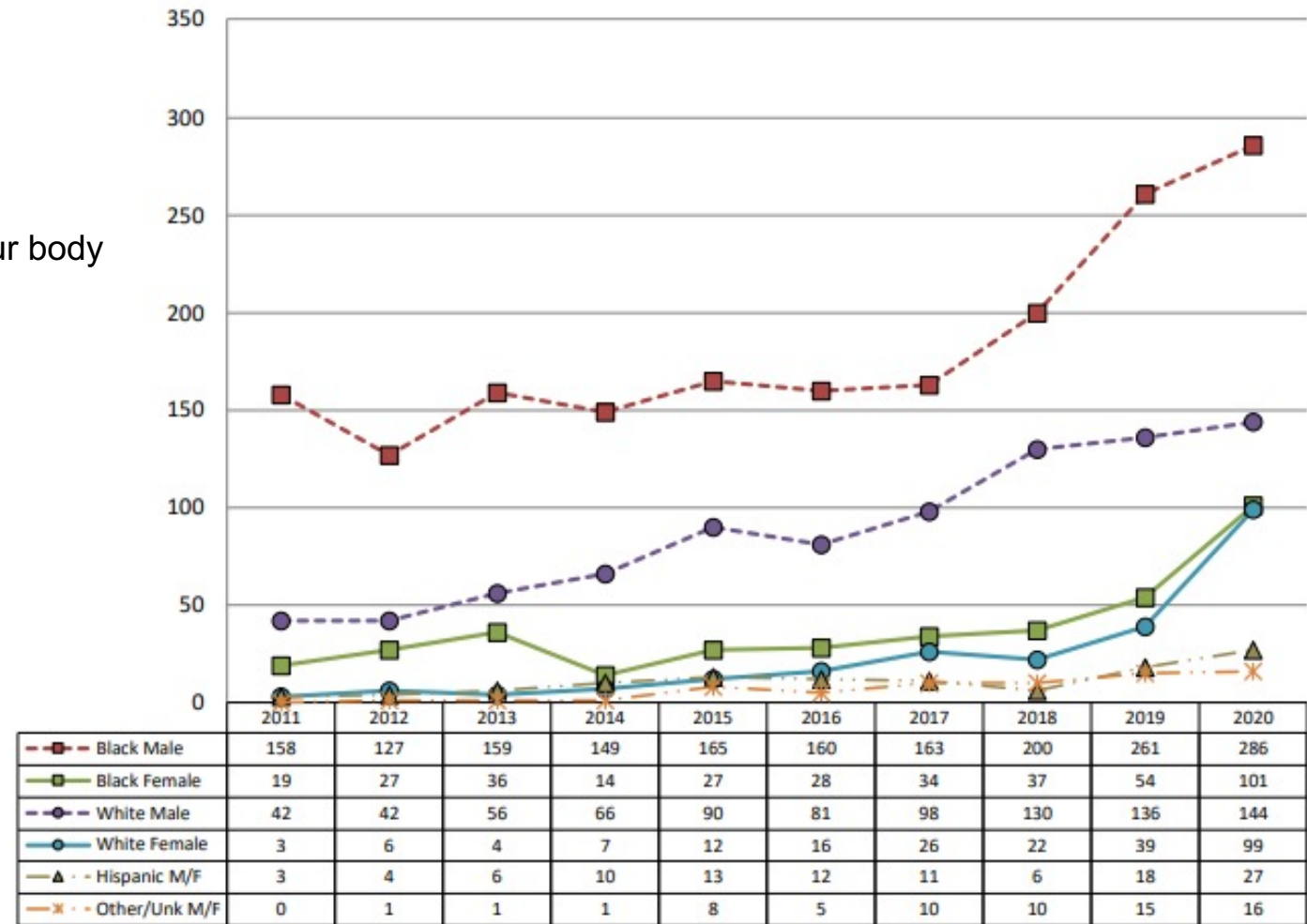


Image from <http://healthlifemedia.com/healthy/understanding-stds-syphilis/>

South Carolina Primary and Secondary Syphilis Cases by Diagnosis Year, Race and Sex



**So...what do we do?**





A dark, semi-transparent background image showing a group of people in a meeting. One person in the foreground is holding a white document or folder. The text is overlaid on this image.

# Use Effective Screening Practices

US Preventive Service Task Force and others have developed clear recommendations and resources for assessing risk and for screening for STI and HIV



# Become Familiar with Testing Guidelines

From the  
*Screening for Sexually Transmitted Infections*  
**PRACTICE MANUAL**  
 ---  
 American Academy of Family Physicians

**Table 1. Current Recommendations and Testing Methods for STIs\***

STI	Testing method	Population	Additional Considerations
<b>Gonorrhea</b>	Nucleic acid amplification test (NAAT) preferred from a urine sample or a vaginal/oropharyngeal/rectal swab	Women <25 years who are sexually active, older women at risk, pregnant women if at risk, men who have sex with men (MSM) if at risk, all HIV+ individuals*	Testing should be performed at each anatomic site where exposure may have occurred
<b>Chlamydia</b>	Nucleic acid amplification test (NAAT) preferred from a urine sample or a vaginal/oropharyngeal/rectal swab	Women <25 years who are sexually active, older women at risk, pregnant women if at risk, MSM if at risk, all HIV+ individuals*	Testing should be performed at each anatomic site where exposure may have occurred with the exception of oropharyngeal testing, which is not recommended for chlamydia <sup>6</sup>
<b>Syphilis</b>	Serum nontreponemal antibody test, such as the rapid plasma reagin (RPR) test, confirmed by serum fluorescent treponemal antibody (FTA) test	Nonpregnant adults and adolescents at increased risk, pregnant individuals, MSM if at risk, all HIV+ individuals*	
<b>Hepatitis B</b>	Serum hepatitis B surface antigen (HbsAg)	Individuals at increased risk, pregnant individuals, and annual screening in HIV+ individuals*	
<b>Hepatitis C</b>	Serum hepatitis C virus (HCV) antibody	Individuals at high risk for infection, annual screening in HIV+*	
<b>HIV**</b>	Serum HIV	Adolescents and adults ages 15 to 65 years for HIV infection; younger adolescents and older adults who are at increased risk should also be screened	
<b>HSV</b>	Type specific serum immunoglobulin G (IgG) antibody only if diagnosis uncertain, swab of lesion with polymerase chain reaction is more specific in patients with symptoms	Based on clinical history, routine screening of asymptomatic patients is not recommended	
<b>HPV</b>	Cytology, human papillomavirus (HPV) alone, or co-testing	Any patient with a cervix 21-29 years old - cytology; 30-65 years old cytology + HPV every 5 years or HPV alone every 5 years	Insufficient evidence to recommend for or against anal pap smears <sup>7</sup>

\* Guidelines for HIV+ and MSM are based on the CDC guideline (2015). All other recommendations are based on the United States Preventive Services Task Force (USPSTF)/ American Academy of Family Physicians (AAFP).

\*\* See additional considerations on screening age from the AAFP.

\*\* The AAFP guidelines differ from the USPSTF guidelines for screening age for HIV.<sup>7</sup>

# Consider Extragenital Testing for STIs in MSM

Extragenital testing for gonorrhea and chlamydia in men who have sex with men (MSM) is a **high priority** for curbing STI rates in the US

Extragenital testing =  
Nucleic acid amplification (NAAT) tests  
from throat and rectal sites

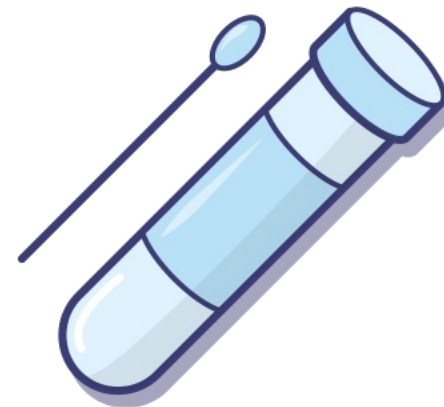
## Consider Extragenital STI Testing for MSM

For help with  
billing...

STD Technical  
Assistance Center  
has developed a  
[coding guide](#) for use  
of NAATs with  
extragenital  
specimens

### WHY is extragenital testing for men who have sex with men (MSM) needed?

- Chlamydia and gonorrhea are common in MSM and rates are increasing
- Urine-only screens for chlamydia and gonorrhea miss 70-88% of infections in MSM
- Rectal gonorrhea infections are asymptomatic 85% of the time
- MSM are more likely than other groups to demonstrate antimicrobial resistant gonorrhea



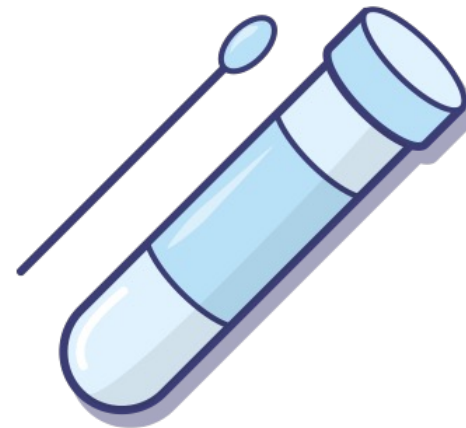
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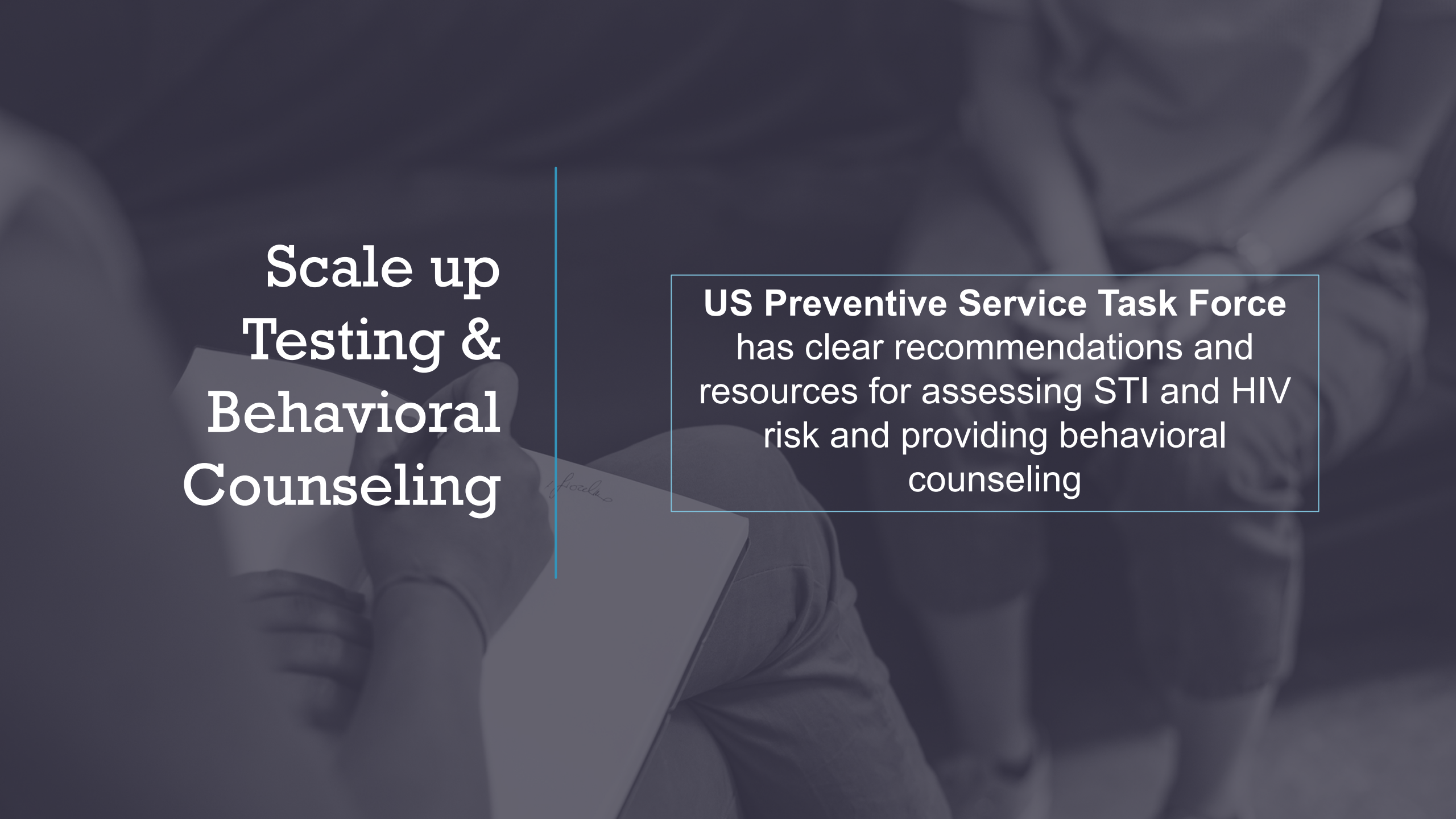
STD Technical  
Assistance Center  
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of NAATs with  
extragenital  
specimens

Regardless of condom use, CDC recommends use of Nucleic Acid Amplification Tests (NAATs) as the preferred test for MSM:

- Test for urethral chlamydia and gonorrhea infection in men who have had insertive intercourse in past year
- Test for rectal chlamydia and gonorrhea infection in men who have had receptive anal intercourse in past year
- Test for pharyngeal gonorrhea infection in men who have had receptive oral sex intercourse in past year





A dark, semi-transparent background image showing a group of people in a meeting. One person in the foreground is holding a white document or folder. The overall tone is professional and collaborative.

# Scale up Testing & Behavioral Counseling

**US Preventive Service Task Force**  
has clear recommendations and  
resources for assessing STI and HIV  
risk and providing behavioral  
counseling



# USPSTF Recommendations for Behavioral Counseling

- Providers should **offer counseling** to all sexually active adolescents and to adults who are at increased risk for STIs
- Grade B = moderate evidence

## HOW?

- **ASSESS** sexual behaviors and risk for STIs
- **PROVIDE** behavioral counseling

Review of evidence for behavioral counseling published in JAMA:

<https://jamanetwork.com/journals/jama/fullarticle/2769473>

Henderson, J. T., Senger, C. A., Henninger, M., Bean, S. I., Redmond, N., & O'Connor, E. A. (2020). Behavioral counseling interventions to prevent sexually transmitted infections: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*, 324(7), 682-699.

# USPSTF Recommendations for Behavioral Counseling

- **ASSESS** sexual behaviors and risk for STIs. Factors that increase risk:
  - Being diagnosed with an STI in past year
  - Inconsistent or no condom use
  - Multiple sex partners or high-risk partners
  - Belonging to a community with high STI prevalence (e.g., sexual and gender minority group, illicit drug use, recent incarceration, sex work, minoritized by race and/or ethnicity)



# USPSTF Recommendations for Behavioral Counseling

- **PROVIDE** behavioral counseling
  - Deliver counseling messages in person, refer to another source, or inform about media-based interventions
  - Range of interventions show promise (i.e., brief counseling interventions <30 minutes in single session to multiple session group interventions)
  - Educate on common STIs and STI transmission
    - Aim to increase motivation or commitment to safer sex practices
    - Provide training in condom use
    - Communicate about safer sex, problem solving, and other pertinent skills



Consider PrEP

PrEP reduces the risk of acquiring HIV through sex by ~99% if taken daily.







# Improving STI Prevention & Care through Partnerships

CDC Health Equity Initiative  
*Funded by the CDC Foundation*

**RURAL &  
MINORITY**  
Health Research Center



# Rationale

- South Carolina is a focus of the **Ending the HIV Epidemic (EHE)** Program because:
  - $\geq 10\%$  of new HIV diagnoses in 2016 & 2017 were in **rural areas** (<50,000 population);
  - At least 75 total new diagnoses statewide (**SC = 773 in 2017!**);
  - No priority county.
- New analysis by our team (*in preparation: Giannouchos et al., 2022*) has shown:

Chlamydia &  
Gonorrhea



More likely among  
rural Medicaid  
beneficiaries  
compared to urban  
Medicaid beneficiaries

# Rationale

- South Carolina is a focus of the **Ending the HIV Epidemic (EHE)** Program because:
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  - At least 75 total new diagnoses statewide (**SC = 773 in 2017!**);
  - No priority county.
- New analysis by our team (*in preparation: Giannouchos et al., 2022*) has shown:

Chlamydia,  
Gonorrhea,  
& HIV



More likely among racial  
and ethnic minority  
residents of South  
Carolina than those who  
are not minoritized by  
race or ethnicity

# Rationale

- Barriers in access to care for rural residents are exacerbated by **systemic factors**, including stigma (Harrison et al., 2022; Valentine et al, 2022)
- Recent study to better understand barriers to PrEP in rural communities in North Carolina and South Carolina was recently published in *AIDS Care*
- Used social determinants of health (SDOH) as a framework to identify rural barriers to PrEP scale-up
  - 14 Key Informant Interviews (KIIs)
  - 3 Focus Group Discussions (FGDs) with 23 young men who have sex with men and transgender women (YMSM/TGW)



# Rationale

- The South has a unique historical and socio-political context
- Structural challenges are complex and interconnected
- Persistent racism, racial discrimination, and segregation in the rural South continue to impact HIV and STI prevention

*"It's hard to tease out racism versus socio-economic differences that lead to less healthcare, less trust in the healthcare system, less access...It's hard to tease out ...what's pure racism versus a society that set up these over years and years of historical [discrimination]"*

## "Do I want PrEP or do I want a roof?": Social determinants of health and HIV prevention in the southern United States

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### ABSTRACT

Scaling up use of Pre-Exposure Prophylaxis (PrEP) among young men who have sex with men and transgender women (YMSM/TGW) is a critical part of the *Ending the HIV Epidemic* plan. This qualitative study contextualized the social determinants of health (SDOH) that can impede HIV prevention in rural North and South Carolina with 14 key informant interviews with stakeholders and 3 focus groups with YMSM/TGW ( $N=23$ ). A deductive-inductive approach with multiple coders was employed to identify themes related to SDOH in rural areas, including economic challenges (e.g., housing and food insecurity), neighborhood characteristics (e.g., lack of transportation), healthcare-related issues (e.g., provider shortages) and educational barriers (e.g., lack of comprehensive and inclusive sexual education). The socio-environmental context of the rural South and prioritization of local, community-based partnerships are necessary to reduce the burden of HIV.

### ARTICLE HISTORY

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### KEYWORDS

HIV; rural; social determinants; sexual and gender minority; youth

The United States (US) *Ending the HIV Epidemic* (EHE) initiative was launched in 2019 with the goal of reducing HIV infections by 90% by 2030 through a four-pronged approach (i.e., early diagnosis, rapid treatment, prevention scale-up, outbreak containment) (Fauci et al., 2019). Notably, EHE prioritizes socio-demographic groups disproportionately affected by HIV, including African-American and Hispanic/Latino men who have sex with men (MSM) and transgender women. Within these groups, youth have poorer outcomes across the HIV care continuum (e.g., linkage to/engagement in care, medication adherence) than other ages (Flenje et al., 2020; Gangamma et al., 2008). Therefore, expanding access to pre-exposure prophylaxis (PrEP) among young men who have sex with men/transgender women (YMSM/TGW) is a priority (Fauci et al., 2019).

The EHE initiative also targets a small number of geographic "hot spots", including 48 counties, seven states, Washington, DC, and San Juan, Puerto Rico – jurisdictions accounting for >50% of new HIV diagnoses in the US. These areas are disproportionately in the Southern US, with 42% of targeted jurisdictions located in six states (i.e., Texas, Louisiana, Tennessee, Georgia, North Carolina [NC], Florida). Seven

additional Southern states (i.e., Alabama, Arkansas, Kentucky, Mississippi, Missouri, Oklahoma, South Carolina [SC]) are targets of EHE due to their substantial burden of rural HIV. Both NC and SC fall in the "highest risk" category for lifetime HIV risk; 1 in 86 South Carolinians and 1 in 93 North Carolinians will acquire HIV within their lifetime (CDC, 2020a). In both states, people ages 20–29 years have the highest HIV incidence, African-Americans account for a majority of new infections (NC – 63%; SC – 61%), anal sex is the primary route of transmission, and rural HIV cases are prevalent (NC HIV/STD/Hepatitis Surveillance Unit, 2019; South Carolina Department of Health and Environmental Control, 2018, 2020; Ingram & Franco, 2014).

Social determinants of health (SDOH) are important – yet understudied – barriers to HIV prevention, especially in rural communities. SDOH are the physical conditions in which people grow and develop, as well as the interconnected social and economic systems that promote or inhibit positive health outcomes (CDC, 2010; US Department of Health and Human Services [DHHS], 2020). As part of the Healthy People 2030 initiative to achieve health equity, a place-based framework is utilized for addressing SDOH in five areas:





# Project Objectives



1

Reduce bacterial STI prevalence in rural South Carolina.

2

Through education and training, support providers in rural areas to conduct multi-site extragenital testing for patients taking PrEP.

3

Explore partnership with South Carolina Medicaid to adopt this method as a quality improvement initiative.

# Select Project Activities


- Identify rural “hotspot” areas for HIV and STIs
- Describe rural healthcare infrastructure for providing PrEP services
- Assess awareness of HIV/PrEP in rural areas
- Develop a quality improvement initiative that addresses prevention of STIs/HIV
  - Develop educational opportunities
  - Create a curriculum on multi-site extragenital STI testing for patients taking PrEP

# Defining rural South Carolina hotspots: Eligible Counties

Abbeville County  
Allendale County  
Bamberg County  
Barnwell County  
Cherokee County  
Chesterfield County  
Clarendon County  
Colleton County  
Dillon County  
Georgetown County

Greenwood County  
Hampton County  
Lee County  
Marion County  
Marlboro County  
McCormick County  
Newberry County  
Oconee County  
Orangeburg County  
Williamsburg County

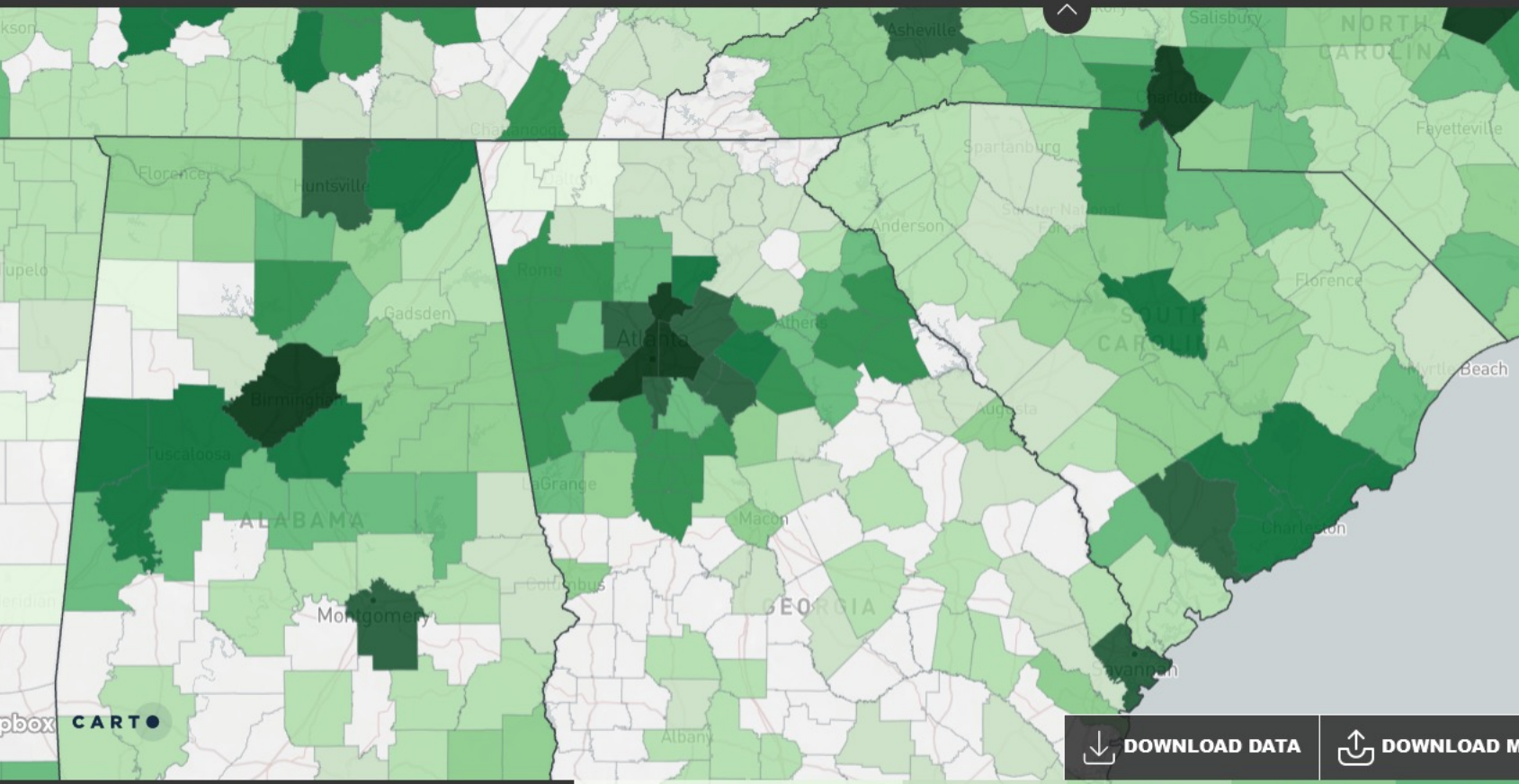
# PrEP Utilization Estimates (2018)

**AIDS Vu**  [VIEW THE MAP](#) • [LOCAL DATA](#) • [FIND SERVICES](#) • [NEWS & UPDATES](#) • [TOOLS & RESOURCES](#)

VIEW DATA BY: **CITY** COUNTY STATE

SELECT A DATASET: PrEP RATES USERS 2018

FILTERS Age Sex Data Comparison Overlays All Counties



Top 10 Counties	Rate Per 100,000
Colleton County	54
Georgetown County	38
Hampton County	35
Bamberg County	32
Chesterfield County	31
Marlboro County	30
Marion County	30
Williamsburg County	29
Abbeville County	28
Dillon County	28





# SC DHEC PrEP Utilization Data

- Agencies in South Carolina providing comprehensive PrEP Services:
  - AID Upstate (Greenville)
  - Affinity Health Center (Rock Hill)
  - CAN Community Health (Columbia)
  - Careteam+ (Myrtle Beach/Conway)
  - PALSS (Columbia)
  - Palmetto Community Care (Charleston)
- Counties **not** within reach of these agencies: Abbeville, Allendale, Barnwell, Cherokee, Chesterfield, Colleton, Dillon, Edgefield, Hampton, Laurens, McCormick, and Union

# Chlamydia prevalence (2018)

## NCHHSTP AtlasPlus

Explore CDC's  
**Atlas Plus**  HIV • Hepatitis • STD • TB  
• Social Determinants of Health Data

Due to the impact of the COVID-19 pandemic, data for 2020 and 2021 should be interpreted with caution

**GET STARTED!** Please select from both 1 and 2 to use HIV, Viral Hepatitis, STD, TB, and Social Determinants of Health data to create maps, charts, and tables, or to download data.

### Step **1** What data do you want to see?

HIV

Viral Hepatitis

STD

TB

Social Determinants of Health

Top 10 Counties	Rate Per 100,000
Allendale County	1434.3
Lee County	1156.5
Orangeburg County	1153.9
Dillon County	1091.1
McCormick County	1027.2
Bamberg County	1009
Marion County	985.1
Cherokee County	937.5
Newberry County	926
Clarendon County	841.7

# Gonorrhea prevalence (2018)

## NCHHSTP AtlasPlus

Explore CDC's  
**Atlas Plus**  HIV • Hepatitis • STD • TB  
• Social Determinants of Health Data

Due to the impact of the COVID-19 pandemic, data for 2020 and 2021 should be interpreted with caution

**GET STARTED!** Please select from both 1 and 2 to use HIV, Viral Hepatitis, STD, TB, and Social Determinants of Health data to create maps, charts, and tables, or to download data.

### Step **1** What data do you want to see?

HIV

Viral Hepatitis

STD

TB

Social Determinants of Health

### Top 10 Counties

### Rate Per 100,000

Marlboro County 606.8

Lee County 571.5

McCormick County 546.7

Williamsburg County 416.3

Greenwood County 380

Hampton County 375.1

Newberry County 346.3

Clarendon County 345.5

Chesterfield County 327.8

Oconee County 323.5

# Syphilis prevalence (2018)

## NCHHSTP AtlasPlus

Explore CDC's  
**Atlas Plus**  HIV • Hepatitis • STD • TB  
• Social Determinants of Health Data

Due to the impact of the COVID-19 pandemic, data for 2020 and 2021 should be interpreted with caution

**GET STARTED!** Please select from both 1 and 2 to use HIV, Viral Hepatitis, STD, TB, and Social Determinants of Health data to create maps, charts, and tables, or to download data.

### Step **1** What data do you want to see?

HIV

Viral Hepatitis

STD


TB

Social Determinants of Health

Top 10 Counties	Rate Per 100,000
Williamsburg County	16.3
Marion County	11.4
Greenwood County	9.9
Dillon County	9.8
McCormick County	9.7
Abbeville County	8.1
Colleton County	8
Bamberg County	7
Lee County	5.8
Georgetown County	4.8



# HIV Prevalence (2018)

**AIDS Vu** 

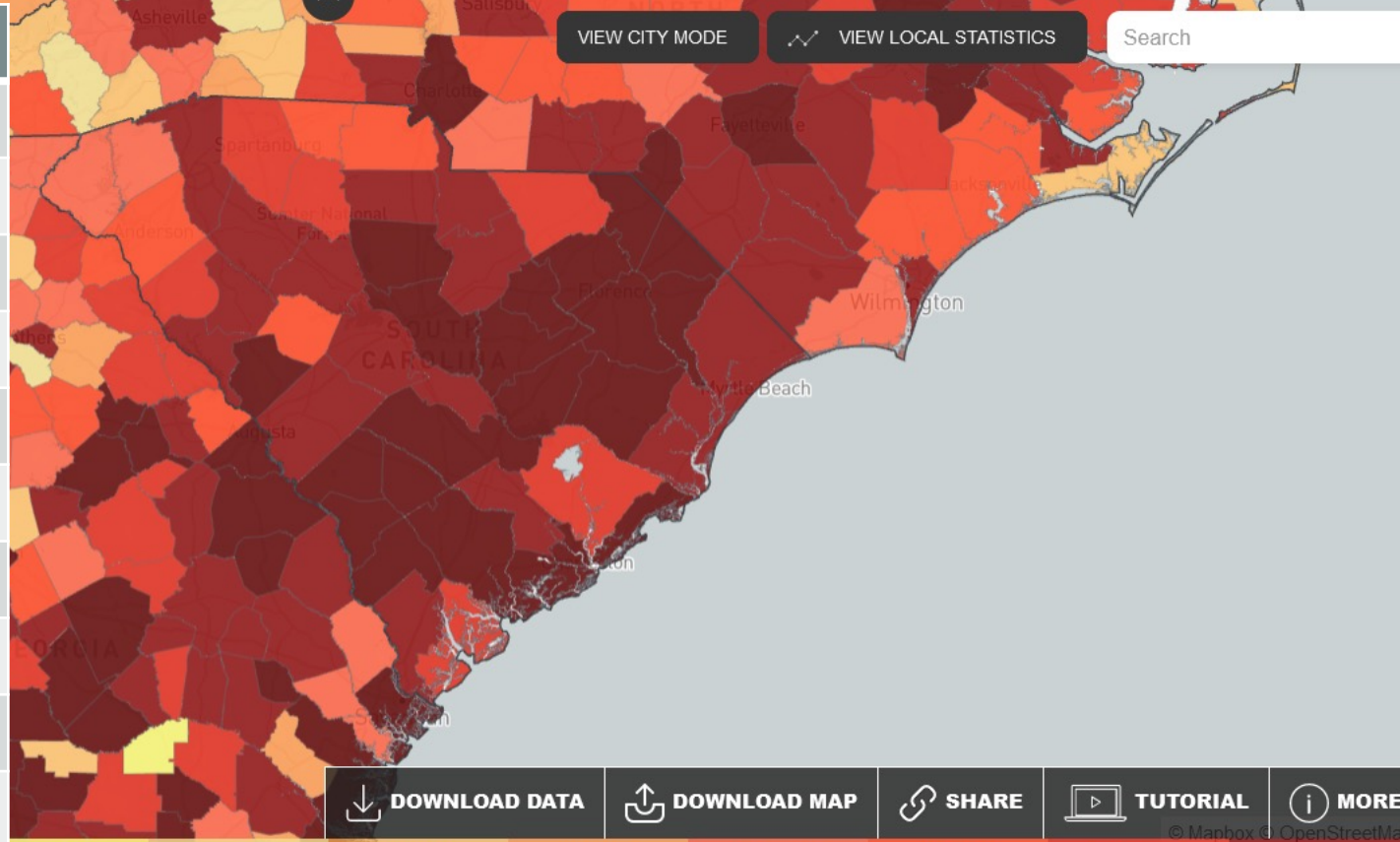
VIEW THE MAP • LOCAL DATA • FIND SERVICES • NEWS & UPDATES • TOOLS & RESOURCES

DATA BY: CITY COUNTY STATE

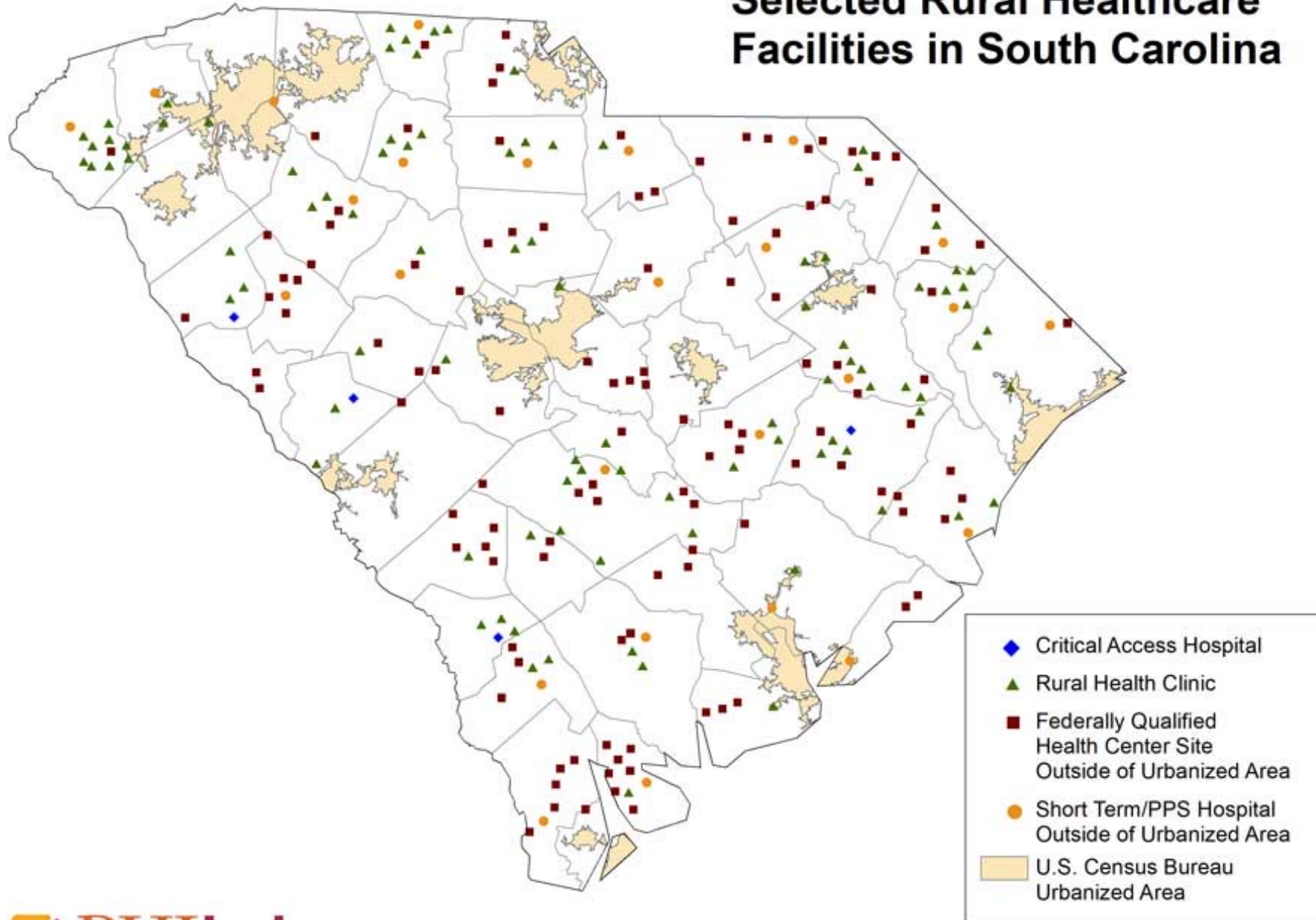
SELECT A DATASET: Prevalence RATES

Age Sex Race Transmission Data Comparison Overlays All Counties

Top 10 Counties	Rate Per 100,000
Lee County	760.8
Williamsburg County	703.4
Bamberg County	688.4
Allendale County	622.1
Orangeburg County	585.3
Marion County	559.2
Hampton County	545.9
Barnwell County	477.9
Marlboro County	466.0
Clarendon County	434.6



# Selected Rural Healthcare Facilities in South Carolina



# Identified Target Counties

Bamberg

Georgetown

Marion

Orangeburg

# Goal: Increase Provider Awareness

- Led by SCORH provider services team
- Technical assistance to improve provider awareness and knowledge about STIs (i.e., Gonorrhea, Syphilis, Chlamydia) and HIV, as well as encourage rural practices to implement strategies to increase STI testing and treatment
- Strategies will include the following:
  - Complete an assessment that describes their patient population and current STI screening and treatment practices, including PrEP prescription practices
  - View and complete a total of three (3) educational modules regarding STIs
  - Participate in post-learning discussions to develop and test an improvement strategy related to HIV and STI testing/treatment



# SC AHEC Educational Offerings: Topics



Addressing STI and HIV Prevention & Treatment for Rural Populations: A Call to Action

Clinical Guidelines – General STI and HIV Prevention & Treatment

Clinical Guidelines – PrEP Utilization

Clinical Guidelines – Extragenital STI Testing for PrEP Users

How to Talk to Patients about STIs and HIV

Practice Management for STI and HIV Prevention & Treatment

# Forthcoming Curriculum: Topics



PUBLIC HEALTH NEED  
– STIS IN SOUTH  
CAROLINA



CLINICAL GUIDELINES



BEST PRACTICES,  
CLINICAL TOOLS, AND  
RESOURCES FOR STI  
PREVENTION &  
TREATMENT



PRACTICE  
MANAGEMENT FOR  
STI PREVENTION &  
TREATMENT



QUALITY  
IMPROVEMENT  
INITIATIVES



ACTION PLAN  
DEVELOPMENT

# Other Educational Opportunities

SC HIV/AIDS Clinical Training Center  
at UofSC School of Medicine

<http://schivtc.med.sc.edu/>


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Part of the AIDS Education and  
Training Center (AETC) Program

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SCHOOL OF MEDICINE

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 SOUTH CAROLINA HIV/AIDS CLINICAL TRAINING CENTER

**BUILDING HIV/AIDS CAPACITY FOR HEALTH CARE PROVIDERS**  
Providing Health Care Professionals With Quality Education To Improve HIV Care

South Carolina HIV/AIDS Clinical Training Center

**South Carolina HIV/AIDS Clinical Training Center**

Welcome to the South Carolina HIV/AIDS Clinical Training Center website. Our goal is to improve the quality and access to care of patients living with HIV/AIDS through the provision of high quality professional education and training to health care providers in South Carolina.

**Home**

- Preceptorships
- Training Calendar
- Inter-Professional Education (IPE)
- Resources / Links
- Webinars and Presentations
- South Carolina Hepatitis C Telehealth Initiative (SCHTI)
- South Carolina HIV PrEP Initiative with (SCHPI)

**Contact Us**

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# Other Educational Opportunities

Many resources available from South Carolina Dept of Health & Environmental Control (DHEC), including annual **PrEP Week**, **PrEP 101**, **PrEP Provider Toolkit**, **PrEP Locator**, & **PrEP Patient Assistance**

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<https://scdhec.gov/infectious-diseases/hiv-std-viral-hepatitis/prep-awareness-week>



## PrEP Awareness Week

September 26–30, 2022

Earn up to 7 FREE CEUs during this week!

**Monday, September 26, 12-1pm EST**  
**PrEP Telemedicine**  
Marty Player, PMD, MSCR; Family Medicine, Medical University of South Carolina  
*At the conclusion of the activity, the participant will be able to:*

- Determine patients at risk for HIV infection based on comprehensive sexual history evaluations as well as USPSTF and CDC screening and practice guidelines.
- Explain how TelePrEP can expand the reach of HIV prevention and bring patients in for comprehensive primary and preventive care.
- Develop protocols to prescribe pre-exposure prophylaxis (PrEP) for uninfected patients at risk for HIV through in-person and telemedicine clinical visits.

**Tuesday, September 27, 12-1pm EST**  
**PrEP and Adolescents**  
Rebecca Widener, MD Pediatric Infectious Disease; Prisma Health  
*At the conclusion of the activity, the participant will be able to:*

- Become familiar with specific factors which make talking about sexual health with teens important.
- Identify indications for PrEP and HIV screening in adolescents.

**Wednesday, September 28, 12-1pm EST**  
**PrEP Disparities**  
Ada Stewart, MD; Family Medicine; Cooperative Health  
*At the conclusion of the activity, the participant will be able to:*

- Discuss disparities and barriers to Pre-Exposure Prophylaxis (PrEP) utilization.
- Discuss potential solutions to address the disparities and barriers to PrEP.

**Thursday, September 29, 12-1pm EST**  
**PrEP and LGBTQ Health**  
Kamla Sanasi-Bhola, MD; Clinical Assistant Professor of Internal Medicine, University of South Carolina  
*At the conclusion of the activity, the participant will be able to:*

- Understand the health care disparities faced by transgender people.
- Discuss PrEP options for Transgender people.
- Discuss how to ensure equitable delivery of PrEP

**Friday, September 30th, 12-1pm EST**  
**PrEP and Sexual Health**  
Sarah Wright, Psy.D, CST/S; Psychologist, Counseling and Psychiatry, University of South Carolina  
*At the conclusion of the activity, the participant will be able to:*

- Recognize the importance of understanding sexual health in clinical practice.
- Describe and discuss the PLISSIT model and its application in a medical setting.

Earn up to 7 CEUs during this week!



# Questions? Comments?



Sayward Harrison, PhD

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<http://www.healthyfutureslab.com>



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