



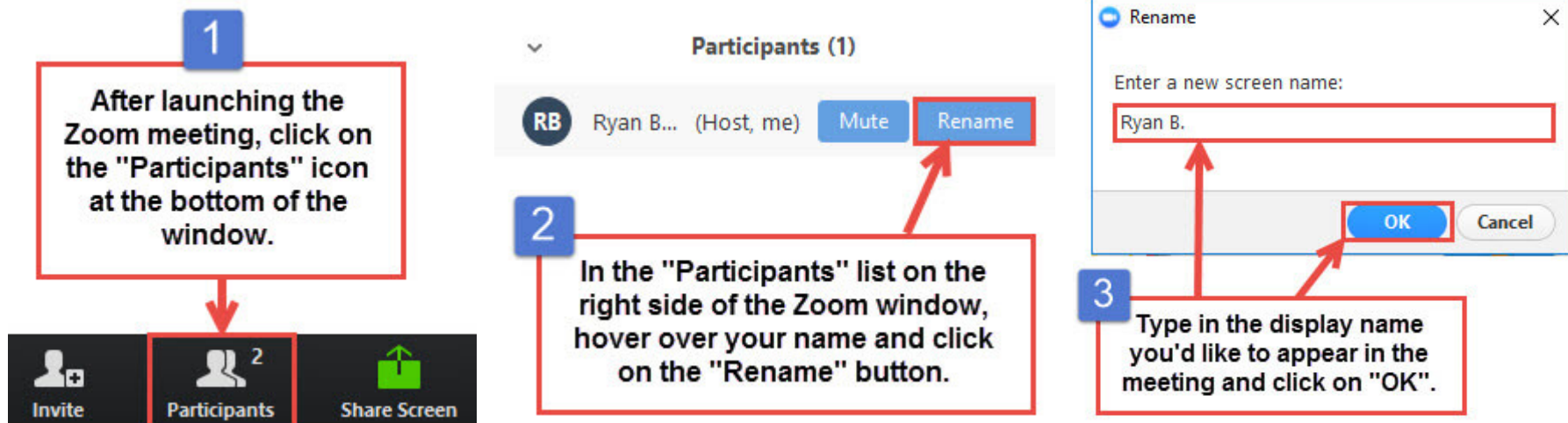
# HIV Prevention Learning Collaborative

Session Three: March 25<sup>th</sup>, 2024



# Get the Most Out of Your Zoom Experience

- Please keep yourself on MUTE to avoid background/distracting sounds
- Use the CHAT function or UNMUTE to ask questions or make comments
- Please change your participant name to your full name and organization
  - “Meaghan Angers CHCI”



**1**

After launching the Zoom meeting, click on the "Participants" icon at the bottom of the window.

**2**

In the "Participants" list on the right side of the Zoom window, hover over your name and click on the "Rename" button.

**3**

Type in the display name you'd like to appear in the meeting and click on "OK".

## Session 3 Agenda

1:00 – 1:05	Welcome
1:05 – 1:30	Ending the HIV Epidemic: Using Health IT to Support Primary Care HIV Prevention
1:30 – 1:50	HIV Screening and Diagnostic Testing
1:50 – 2:25	STI Testing and Screening
2:25 – 2:30	Q & A and Next Steps

# Learning Collaborative Structure

- Six 90-minute Learning Collaborative video conference sessions
- Bi-weekly calls between coach mentors and practice coach
- Internal team workgroup meetings
- Use the Weitzman Education Platform to access resources and receive CME credit

Learning Session Dates	
Learning Session 1	Monday January 29 <sup>th</sup>
Learning Session 2	Monday February 26 <sup>th</sup>
Learning Session 3	Monday March 25 <sup>th</sup>
Learning Session 4	Monday April 22 <sup>nd</sup>
Learning Session 5	Monday May 20 <sup>th</sup>
Learning Session 6	Monday June 10 <sup>th</sup>

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Health System

The **Center for Key Populations** is the first center of its kind that focuses on key groups who experience health disparities secondary to stigma and discrimination and who belong to communities that have suffered many barriers to healthcare.

The Center brings together healthcare, training, research, and advocacy for:

**People who use drugs, the LGB and Transgender populations, the homeless and those experiencing housing instability, the recently incarcerated, and sex workers.**



HIV Primary Care



Viral Hepatitis  
Screening and  
Treatment



Substance Use  
Health



Health Care for  
the Homeless



LGB Health and  
Gender Affirming  
Care



Migrant Farmer  
Health Program



HIV Prevention:  
Testing, PrEP,  
and PEP



Sexually  
Transmitted  
Infections





# 2024 Cohort

Affinia Healthcare	St. Louis, Missouri
Asian American Health Coalition dba HOPE Clinic	Houston, Texas
East Central Oklahoma Family Health Center	Wetumka, Oklahoma
FirstMed Health and Wellness	Las Vegas, Nevada
Hi-Desert Memorial Health Care District	California
International Community Health Services	Seattle, Washington
Jane Pauley Community Health Center	Indianapolis, Indiana
North County Health Project, Inc. DBA TrueCare	San Marcos, California
Promise Healthcare	Champaign, Illinois
The HealthCare Connection, Inc.	Cincinnati, Ohio
WellSpace Health	Sacramento, California





# ENDING THE HIV EPIDEMIC

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USING HEALTH IT TO SUPPORT PRIMARY CARE HIV  
PREVENTION



# About The HITEQ Center



The HITEQ Center is a HRSA-funded National Training and Technical Assistance Partner (NTTAPs) that supports health centers to become data-driven and equitable by providing training, technical assistance, and resources for effective use of data, health IT, and EHRs. This support aims to enhance the quality, security, and documentation of care while addressing barriers and maximizing value.

- A **national website** with health center-focused resources, toolkits, training, and a calendar of related events.
- **Learning collaboratives, trainings, and on-demand technical assistance** on key topic areas.

[The HITEQ Center](#) is a HRSA-funded National Training and Technical Assistance Partner operated by [JSI Research & Training, Inc.](#) and [Westat](#).

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of awards totaling \$693,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit [HRSA.gov](http://HRSA.gov).

## HITEQ Topic Areas

Virtual and digitally enabled care

Access to comprehensive care using health IT and telehealth

Privacy and security

Advancing interoperability and standards based exchange

Electronic patient engagement and digital health

Readiness for value based care

Using health IT and telehealth to improve documentation integrity and health equity

Using health IT or telehealth to address emerging issues: behavioral health, HIV prevention, and emergency preparedness

**Website:** [www.HITEQcenter.org](http://www.HITEQcenter.org) | **Email:** [hiteqinfo@jsi.com](mailto:hiteqinfo@jsi.com)

# THE ROLE OF **HEALTH IT** IN HIV PREVENTION

HITEQ focuses on the primary role and the value of using your EHR and broader health IT system in HIV screening and prevention. The primary role of health IT in this is in **standardizing, supporting decision making, and monitoring.**

There is also an important role for **digital patient engagement and digitally enabled care.**

[Access our EHE resources at this link.](#)



# HIV PREVENTION HEALTH IT FUNCTIONS



## STANDARDIZING

Once you have your plan for how HIV screening and prevention, such as PrEP services will be done at your clinic, the EHR can be used to standardize that approach with templates, order sets, alerts, etc.



## CLINICAL DECISION SUPPORT

Particularly in primary care, clinicians are not always familiar with the details of what, for example, is needed to initiate and sustain PrEP. Clinical decision support tools can take some of that burden off of clinicians, giving them recommendations when appropriate.



## MONITORING

With standardized, structured data within your health IT system, you are then able to use that information to build reports or dashboards that can monitor progress, outcomes, and even adherence to processes.



## DIGITAL PATIENT ENGAGEMENT

Digital tools, whether those built into our EHR or third party tools, support outreach and engagement with patients beyond the clinic visit.

# LET'S LOOK AT EACH

Following, we'll discuss a couple of examples for each of these key functions. These might serve as ideas or inspiration as to what you might do in your health center.





# STANDARDIZATION



## SETTING THE EXPECTATION

Using care guidelines, alerts, and pre-visit planning in your EHR can set the expectation as to when and how HIV screening should be done.

For example, adding HIV screening (defined by the eCQM as one HIV test between the patient's 15<sup>th</sup> and 66<sup>th</sup> birthday) can be added to pre-visit planning tools as a way to reinforce the expectation. Similarly, alerts can be used to notify care teams when a patient is in need of an HIV test, or when they may benefit from PrEP, based on established guidelines.



## SETTING DOCUMENTATION STANDARDS

Standardizing documentation is critically important for understanding the status of HIV prevention services in your health center. Using templates, favorites, smart phrases and other EHR tools can help ensure consistent documentation, when and where needed to use that information meaningfully for measurement, monitoring, and population health management.

Also consider the value of HIEs or other data exchange, where things like HIV test results from other providers may be available— thereby limiting duplication of services.

# CLINICAL DECISION SUPPORT

## TEMPLATES AND FLOWSHEETS



CDS systems help providers to interpret or determine next steps based clinical results, document patients' health status, and prescribe medications such as PrEP through the use of alerts, reminders, and customized data entry forms.

Data entry forms, such as templates and flowsheets can pull information in from different parts of the patient chart, and when used with clinical decision supports can prompt for appropriate action.

Algorithms can take into account test results, diagnoses, and other structured data fields to support decision making for clinicians. These can typically be as broad or narrow as needed.

For example, you health center may decide on an algorithm that looks at whether the patient has a documented HIV test result in their chart, and if not, prompts for a test. Or, you may create an algorithm that looks for a set of diagnoses, such as certain STIs and/ or OUD, and prompts for PrEP if those are identified in the chart.

Note that the success of algorithms relies on standardization.



## ALGORITHMS



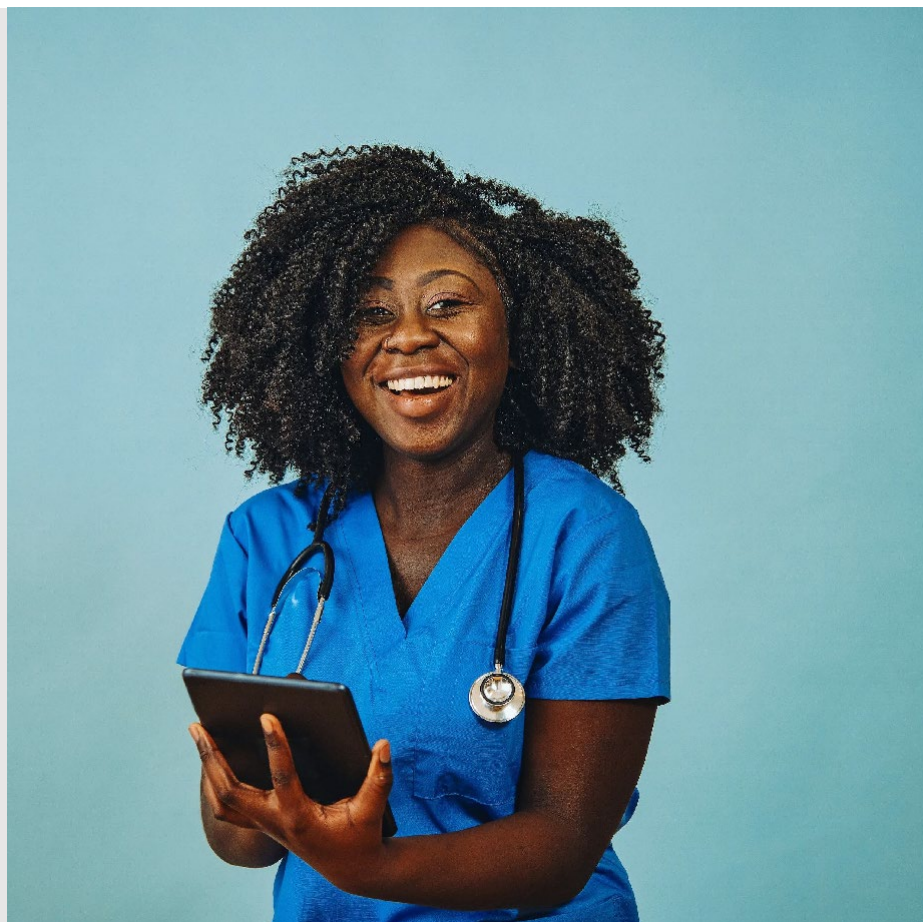
# MONITORING



## DASHBOARDS OR REPORTS

Standardized information and defined processes lend themselves to regular monitoring which is useful for performance and continuous quality improvement. It's also useful for monitoring changes to your processes to identify opportunities for retraining.

For example, you may use dashboards or reports to monitor performance on clinical quality measures like HIV screening and HIV linkage to care rates; but you may also create or use missed opportunity reports that identify patients who were seen but didn't receive and HIV screening (and didn't have opt-out documented).



## REGISTRIES OR WORK LISTS

Keeping patients engaged in their care, including maintaining them on PrEP typically involves outreach and follow-up. Using your health IT systems to create registries or worklists for these purposes can be useful in taking the burden off teams to track outside of the system.

For example, a health center can use their analytics tools to generate a weekly list of patients who are in their last week of their PrEP prescription (according to the rx order date if you don't have information about when the rx was filled). Then someone from the care team can reach out to these patients to bring them in.

# DIGITAL PATIENT ENGAGEMENT

Digital patient engagement encompasses direct-to-consumer telehealth (meaning, between a provider at your health center and the patient somewhere else), facilitating patient access to providers through originating site telehealth, direct messaging, etc. and automated outreach such as through EHR driven SMS/ email campaigns.

These tools can open a whole new world of services for patients, increase retention, and increase adherence.





# THANK YOU!



[HITEQINFO@JSI.COM](mailto:HITEQINFO@JSI.COM)



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



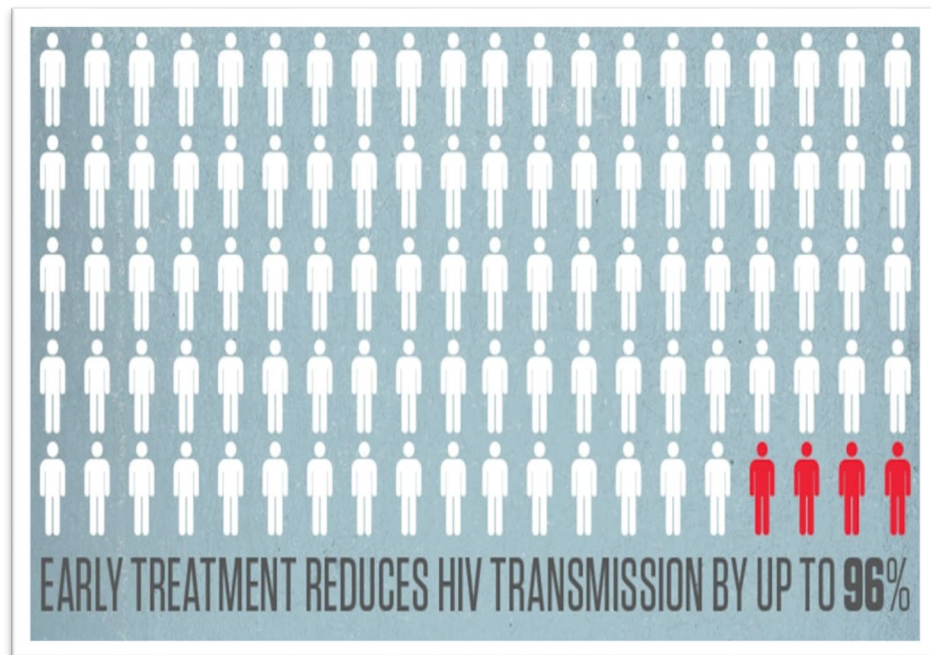
# HIV Screening and Diagnostic Testing







# Routine HIV Testing Recommendations



Test every patient between the ages of 13 – 64 at least once.

Test every patient who has risk factors at least annually.

Confirm immediate linkage to care for every patient who tests positive.





## OPT-OUT TESTING:

- Part of consent to routine medical care
- Opportunity to ask questions
- Option to decline
- Separate written/oral consent not required
- Prevention counseling not required in conjunction with testing.

**STATUS NEUTRAL APPROACH:** promoting support and engagement in care regardless of test result.

- People with HIV who are aware of status can get HIV treatment
- Promote individual health
- Prevent transmission
- People who don't have HIV and are at-risk can make decisions about their health, including PrEP.







## Risk-Based Screening

- ❖ Any patient suspected of acute HIV infection
- ❖ Patients seeking STI treatment
- ❖ Pregnant women
- ❖ Patients with TB
- ❖ Patients with viral hepatitis (HBV/HCV)
- ❖ Patients starting new sexual relationships
- ❖ Occupationally exposed individuals





## PATIENTS WITH ONGOING RISK - at least annually

- People who inject drugs and their sex partners
- Persons who exchange sex for money or drugs
- Sex partners of persons with HIV who are not virally suppressed.
- MSM or heterosexual persons who themselves or their partners have had more than one sexual partner since their last HIV test\*

\*Should include transgender individuals, bisexual women.





# Types of HIV Tests

## 4th generation Ab/Ag test

- Venous blood draw; checks HIV Abs and P24 antigen (a viral protein)
- Results available in 1-2 weeks
- Can detect HIV as early as 2 weeks after exposure
- Sensitivity >99.7%, Specificity 100%

## Rapid Tests\*

### INSTI HIV ½ Ab IgM/IgG (3<sup>rd</sup> gen)

- Finger stick blood test with results in 1 min.
- Sensitivity >99.8%, specificity >99.5%
- Picks up infections by 3 weeks after exposure

### Alere Determine HIV1/2 (4th gen) used at CHCI

- Finger stick blood test with results in 15 mins.
- Sensitivity 100%, specificity 99.8%
- Picks up infections as early as 2 weeks after exposure

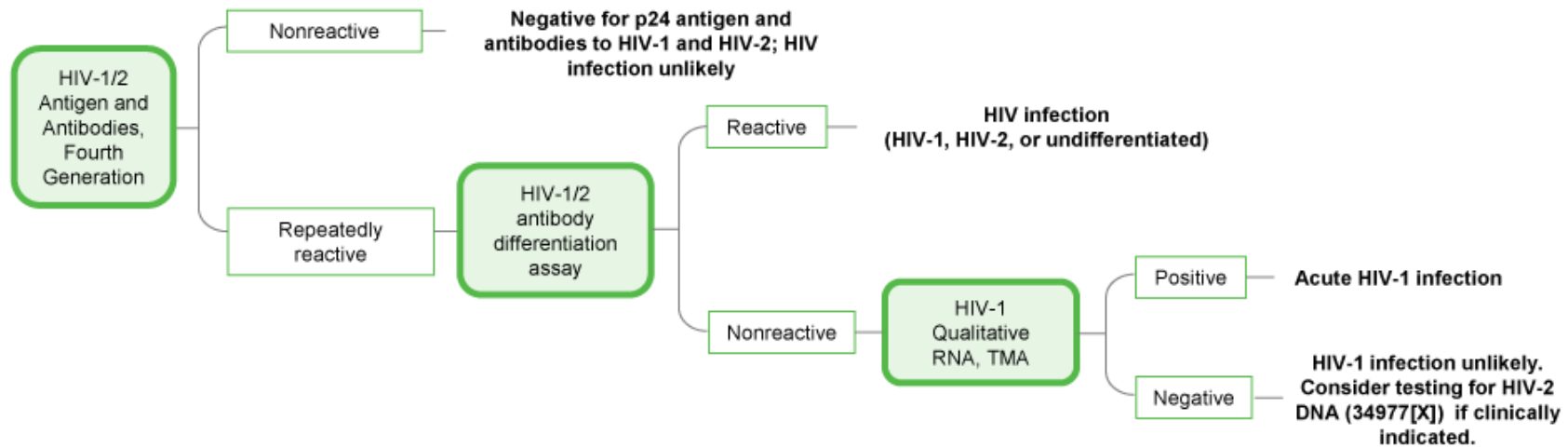


\* Positive results require confirmation



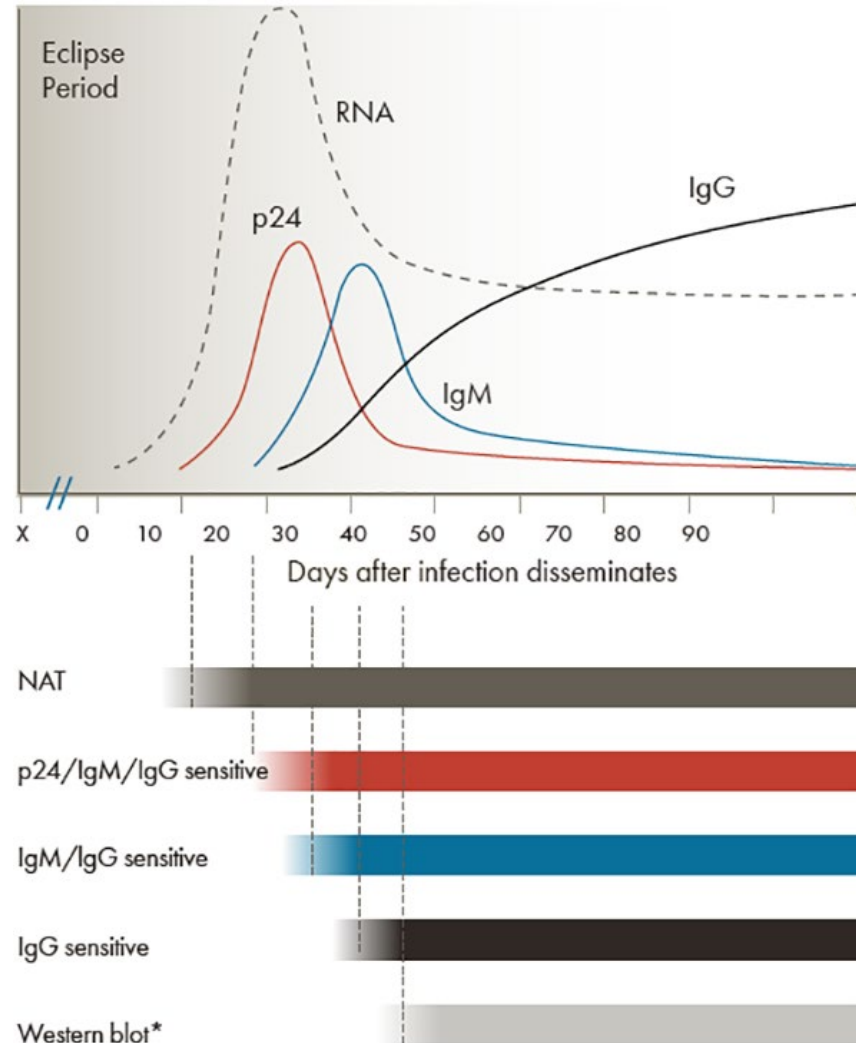


**Figure.** Reflex Pathway for the "HIV-1/2 Antigen and Antibodies, Fourth Generation, with Reflexes" Assay (91431)



This algorithm depicts the testing pathway of the "HIV-1/2 Antigen and Antibodies, Fourth Generation, with Reflexes" test, which is consistent with [reference 4](#). Although nonreactive results on the fourth generation screening test and negative results on the HIV-1/HIV-2 differentiation test are consistent with absence of infection, they may also represent samples that were collected before development of detectable p24 antigen and HIV antibodies. Individual risk assessments may be helpful to determine the need for, and the frequency of, re-screening for patients with nonreactive/negative results.<sup>3</sup>

The algorithm is provided for informational purposes only and is not intended as medical advice. A physician's test selection and interpretation, diagnosis, and patient management decisions should be based on his/her education, clinical expertise, and assessment of the patient. TMA indicates transcription-mediated amplification.



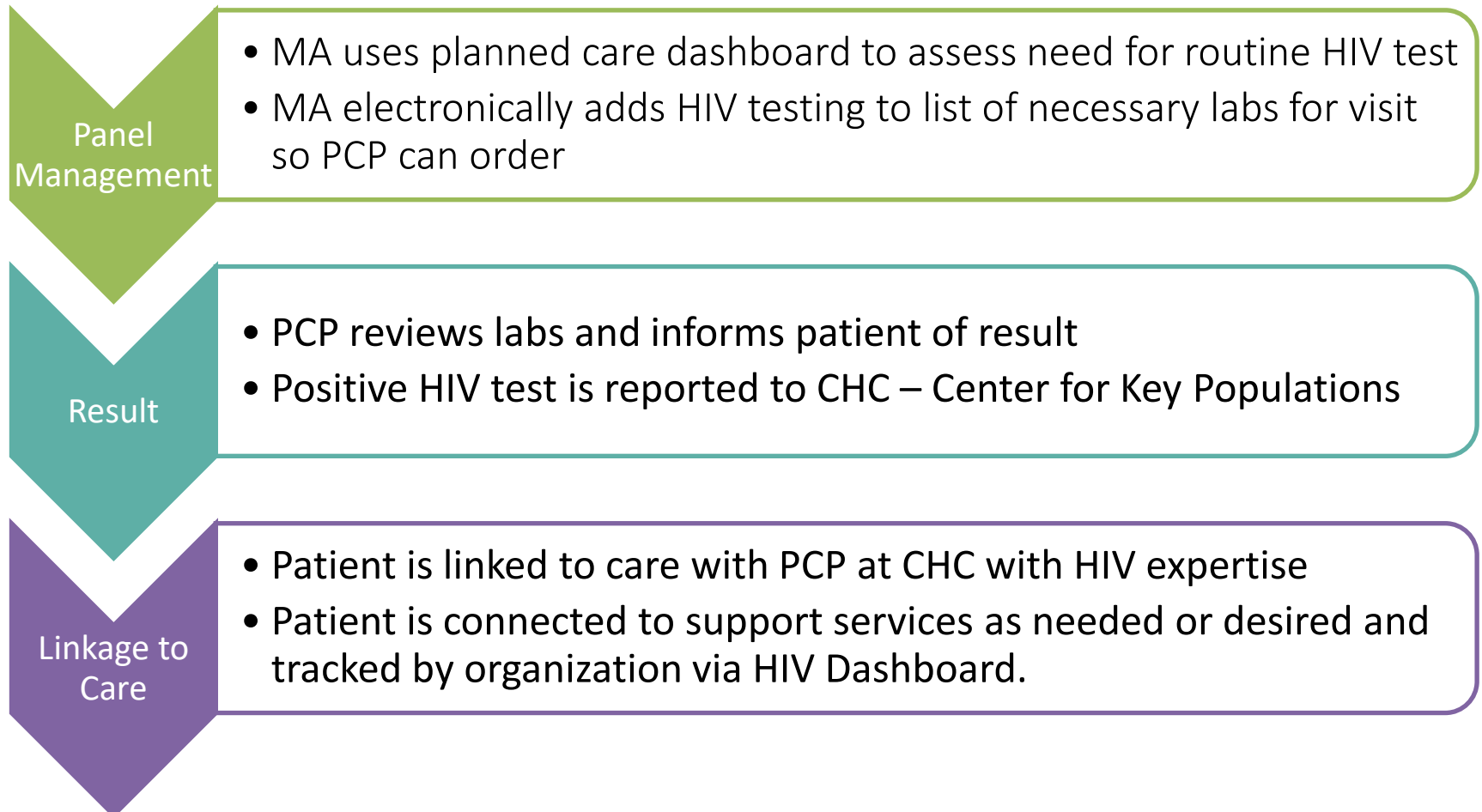
<https://www.cdc.gov/hiv/clinicians/screening/diagnostic-tests.html>

\* Western blot is no longer used for HIV.





## CHCI Operations: Implementing an HIV Screening Policy and Workflow







# Planned Care Dashboard & Clinical Expectation: Universal HIV Screening

ALERTS	Last Date	Due Date	Value	Notes
Needs Flu Vaccine 2016-2017				
DM Retinopathy	4/14/2015	4/14/2016		
Body Mass Index	5/16/2016		34.41	Needs Education
HIV Screen Needed				Once, 13-64 yrs old

**Policy:** Clinical Expectations for Medical Providers  
**Location:** Provision of Care, Treatment, and Services  
**Department:** Medical

Persons at high risk  
of HIV acquisition  
(USPSTF)

- Offer preexposure prophylaxis (PrEP) with effective antiretroviral therapy





# Community Health Center Data

Measure	Year	Data	Explanation/Comment
Number of patients between 13-64 with at least one HIV test result	2018	64%	CHC continued to experience difficulty with adolescent HIV testing. The rate of routine HIV testing rose to 81% when we excluded 13-17 year old patients.
Number of patients between 13-64 with at least one HIV test result	2021	75%	Although Covid created challenges training and education geared directly toward pediatric providers and pediatric focused sites increased the routine HIV testing numbers dramatically.
Number of high risk patients with annual HIV test. (Previous 3 years)	2018	41%	High risk is patient with one confirmed positive STI test – provider education was lacking and planned care dashboard was not populating
Number of high risk patients with annual HIV test (Previous 3 years)	2021	62%	Change to planned care dashboard, increased provider education, monitoring by PrEP and outreach team.



# Plans for the Future of Routine HIV Testing

## Data Analysis

# of eligible patients with no HIV test ordered.

# of eligible patients with HIV tests ordered but not obtained.

# of eligible pediatric/adolescent patients with HIV test ordered/obtained

## Training/Education

Annual Clinical grand rounds

Organization Training – Town Hall

Data Dissemination by site/provider

Pediatric/Adolescent Specific Training

Competition/Recognition

Routine HIV Testing Quality Improvement Plan

## Communication/QI

Monthly Meetings with Outreach/Prevention Team to work on QI

QI input from Champions

CKP Team feedback

## Meaningful Use

PrEP

Target high risk populations with outreach

Disseminate information widely

Patient Education





# Questions?





# STI Testing and Screening



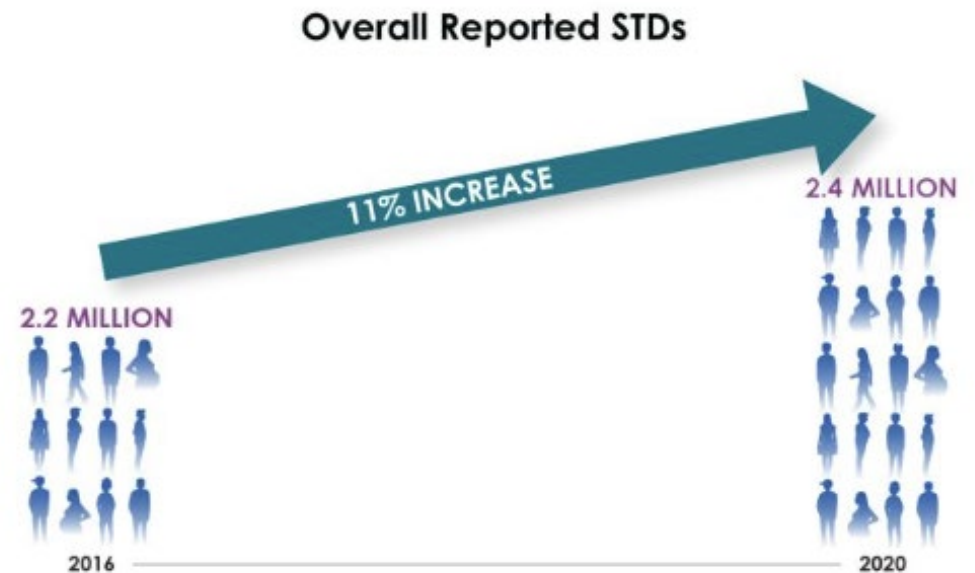


# Rising STI Rates in the U.S.

- Disproportionately affecting young people under 25, racial and ethnic minority groups, and gay and bisexual men.

Record-high STDs threaten millions of Americans. From 2016 to 2020: Overall reported STDs have increased 11%

- Chlamydia has decreased 1.2%
- Gonorrhea has increased 45%
- Total syphilis has increased 52%
- Congenital syphilis (syphilis among newborns) has increased 235%





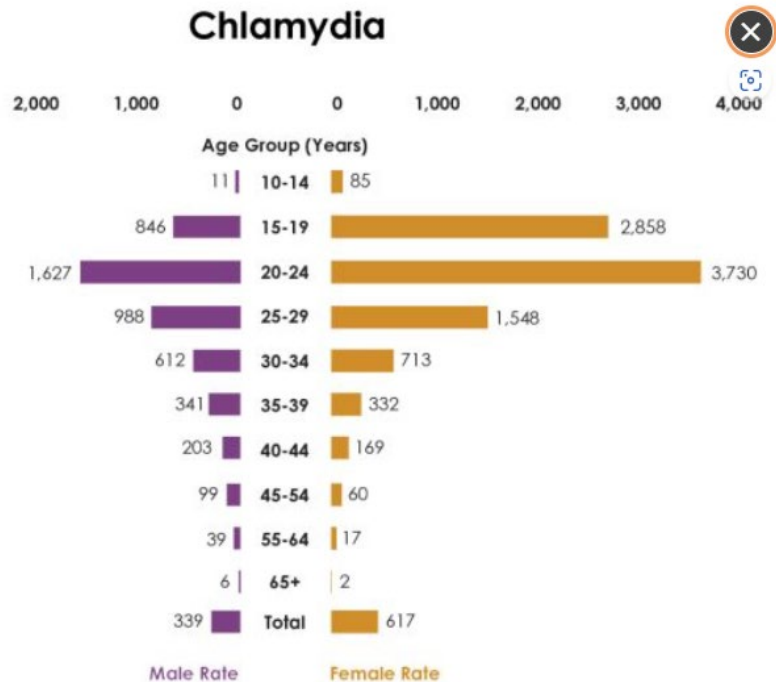
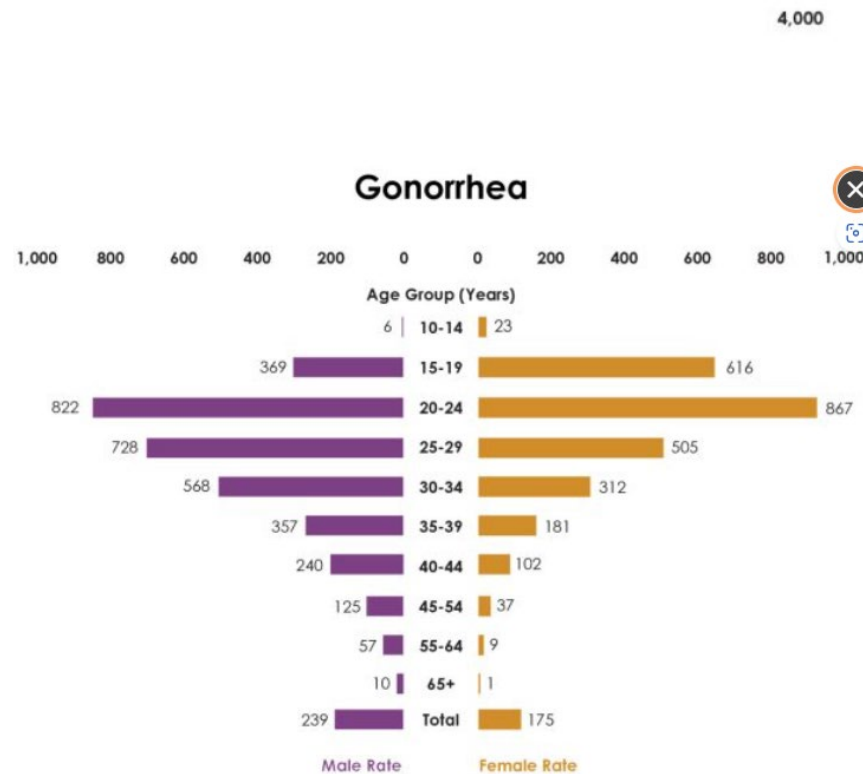
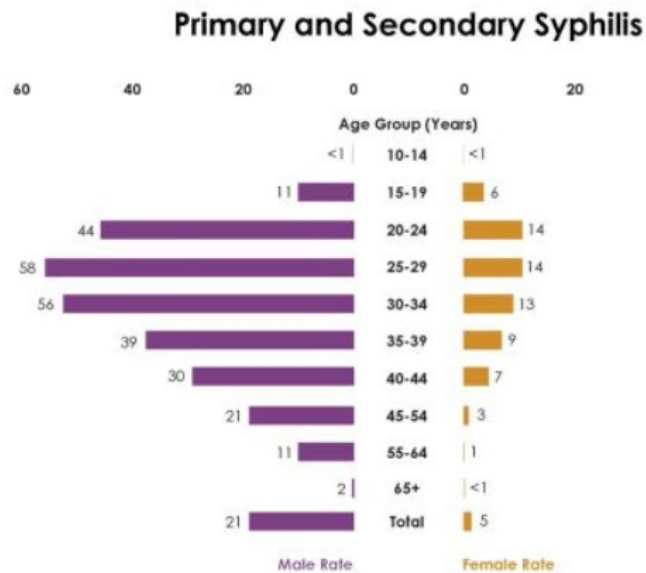
# Young people

- In 2020, over half (53%) of reported cases of chlamydia, gonorrhea, and primary and secondary syphilis were among young people (ages 15–24)



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Health System

Rates per 100,000 of Reported Cases by Age Group and Sex in the U.S., 2020



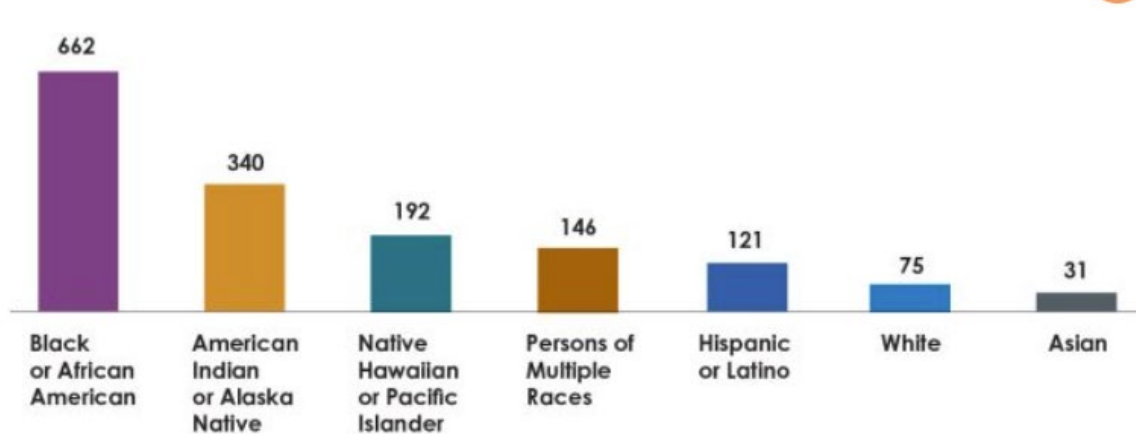
[Reported STDs in the United States, 2020 \(cdc.gov\)](https://www.cdc.gov)

Rates per 100,000 of Reported Cases by Race/Hispanic Ethnicity in the U.S., 2020

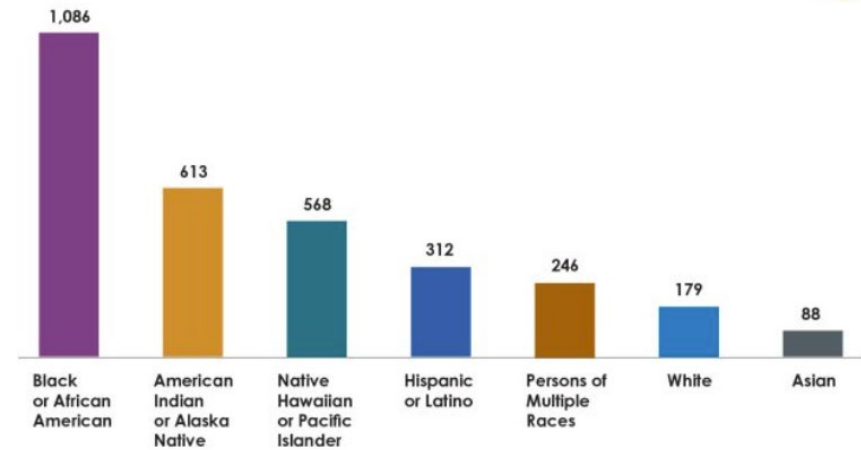


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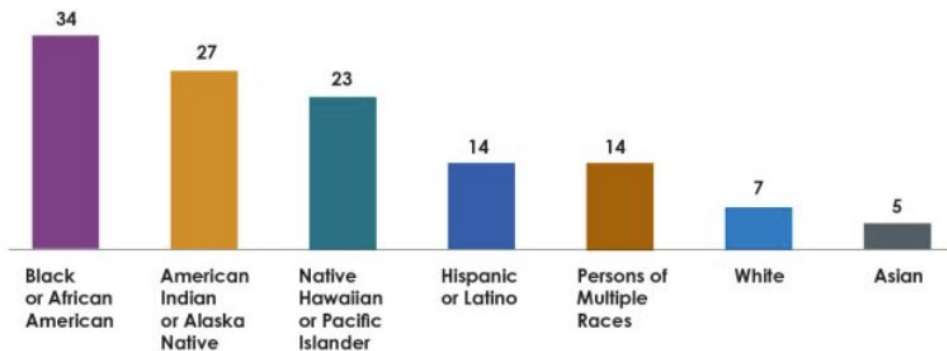
**Gonorrhea: Reported rates among people by race/ethnicity**



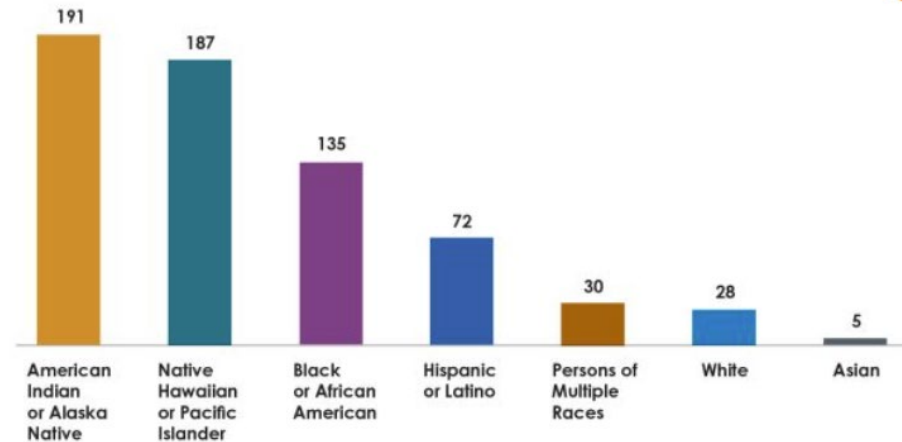
**Chlamydia: Reported rates among people by race/ethnicity**



**Primary and Secondary Syphilis: Reported rates among people by race/ethnicity**

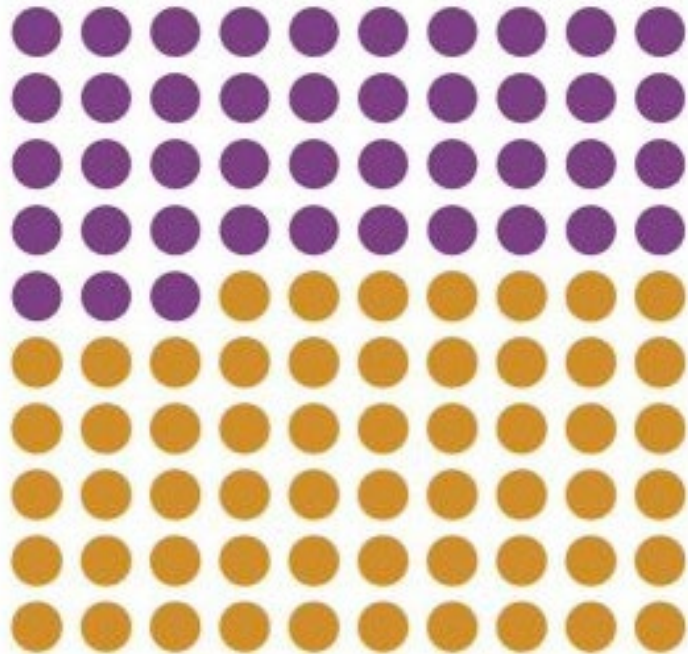


**Congenital Syphilis: Reported rates among people by race/ethnicity**





- Gay and Bisexual men also experienced disproportionate rates of some STDs in 2020



43%

of primary and secondary  
syphilis cases were among gay  
and bisexual men in 2020



Extra-genital gonorrhea (GC) and chlamydia (CT) infections are common among MSM:

Estimated prevalence of extra-genital GC/CT in MSM (CDC, 2015)

STI	Pharyngeal	Rectal
Gonorrhea	7.3%	5.4%
Chlamydia	2.3%	8.9%

2017 systematic review of 115 studies:

Prevalence of rectal CT (9%) > prevalence of rectal GC (4.7%)

Centers for Disease Control and Prevention, 2015. Sexually transmitted diseases treatment guidelines, 2015. *Annals of Emergency Medicine*, 66(5), pp.526-528.

<https://www.cdc.gov/std/tg2015/specialpops.htm#msm>

CDC. [Clinic-based testing for rectal and pharyngeal \*Neisseria gonorrhoeae\* and \*Chlamydia trachomatis\* infections by community-based organizations—five cities, United States, 2007](#). MMWR Morb Mortal Wkly Rep 2009;58:716–19.

Dewart, C.M., Bernstein, K.T., DeGroot, N.P., Romaguera, R. and Turner, A.N., 2018. Prevalence of rectal chlamydial and gonococcal infections: a systematic review. *Sexually transmitted diseases*, 45(5), p.287.





## STI rates in transgender and gender non-conforming persons:

- Data is more limited but GC/CT rates among trans women appear similar to those of cisgender MSM
- HIV prevalence of 14% among trans women in US (44% in Black transwomen, 26% in Hispanic trans women)
- Neovaginal STI infections can occur s/p vaginoplasty
- Very limited data on STIs in trans men and non-binary individuals.
- Trans men may be at increased risk for delayed cervical cancer diagnosis due to avoidance (or difficulty accessing) pap smears – consider HPV self-swab as alternative?







# STI Screenings: Background

- CDC recommends that basic STI care services should be available in all primary care settings.<sup>7</sup>
- Screenings should include (at a minimum) gonorrhea, chlamydia, syphilis, HIV, viral hepatitis, cervical cancer
- Clinical laboratory services to include:
  - Urogenital nucleic acid amplification test (NAAT) for GC and CT
  - Extra-genital (pharyngeal and rectal) NAAT for GC and CT
  - Treponemal and nontreponemal serologic tests for syphilis
  - Fourth-generation HIV test





Recommendations and Reports

## Sexually Transmitted Infections Treatment Guidelines, 2021

See:

Kimberly A. Workowski, MD<sup>1,2</sup>; Laura H. Bachmann, MD<sup>1</sup>; Philip A. Chan, MD<sup>1,3</sup>; Christine M. Johnston, MD<sup>1,4</sup>; Christina A. Muzny, MD<sup>1,5</sup>; Ina Park, MD<sup>1,6</sup>; Hilary Reno, MD<sup>1,7</sup>; Jonathan M. Zenilman, MD<sup>1,8</sup>; Gail A. Bolan, MD<sup>1</sup>

<sup>1</sup>Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC, Atlanta, Georgia; <sup>2</sup>Emory University, Atlanta, Georgia;

<sup>3</sup>Brown University, Providence, Rhode Island; <sup>4</sup>University of Washington, Seattle, Washington; <sup>5</sup>University of Alabama at Birmingham, Birmingham, Alabama;

<sup>6</sup>University of California San Francisco, San Francisco, California; <sup>7</sup>Washington University, St. Louis, Missouri; <sup>8</sup>Johns Hopkins University, Baltimore, Maryland

### Summary

*These guidelines for the treatment of persons who have or are at risk for sexually transmitted infections (STIs) were updated by CDC after consultation with professionals knowledgeable in the field of STIs who met in Atlanta, Georgia, June 11–14, 2019. The information in this report updates the 2015 guidelines. These guidelines discuss 1) updated recommendations for treatment of *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, and *Trichomonas vaginalis*; 2) addition of metronidazole to the recommended treatment regimen for pelvic inflammatory disease; 3) alternative treatment options for bacterial vaginosis; 4) management of *Mycoplasma genitalium*; 5) human papillomavirus vaccine recommendations and counseling messages; 6) expanded risk factors for syphilis testing among pregnant women; 7) one-time testing for hepatitis C infection; 8) evaluation of men who have sex with men after sexual assault; and 9) two-step testing for serologic diagnosis of genital herpes simplex virus. Physicians and other health care providers can use these guidelines to assist in prevention and treatment of STIs.*

# Summary of Asymptomatic STI Screening Recommendations



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Health System

Asymptomatic Screening	STI s	Frequency
Sexually active <25: women, pregnant women, transmen/gender diverse with cervix	Chlamydia, Gonorrhea	Annual More frequent based on risk (e.g. 3-6 months)
Sexually active MSM	Chlamydia/Gonorrhea (3-sites), Syphilis, HIV, HBV	Annual More frequent based on risk (e.g. 3-6 months)
Persons with HIV	Chlamydia, Gonorrhea, Syphilis, HBV, Trichomonas (women), HCV (MSM)	Annual More frequent based on risk (e.g. 3-6 months)
All: 13-64 year olds	HIV	At least once
All: 18+ year olds	HCV	At least once
All pregnant individuals	HIV, Syphilis, HBV, HCV	At least once



# Summary of At-Exposure Risk STI Screening Recommendations



MOSES/WEITZMAN  
Health System

At-Exposure Risk Based on Sexual History	STIs	Frequency
All at exposure risk	Chlamydia/Gonorrhea (3-site testing where appropriate), Syphilis, HIV, HBV, HCV	Annual More frequent based on risk (e.g. 3-6 months)
Women at exposure risk	Trichomonas	Annual More frequent based on risk (e.g. 3-6 months)



# CDC STI Treatment Guidelines 2021: Asymptomatic Screenings



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- Cis-Women:
  - Chlamydia/Gonorrhea
    - All sexually active <25
    - Sexually active 25+ if at increased risk
      - New sex partner, >1 partner, a partner with other partners, sex partner with a STI
    - If positive, test after 3 months to rule out reinfection
    - Consider rectal chlamydia and pharyngeal/rectal gonorrhea screening based on sexual exposures and shared decision making.
  - Syphilis:
    - If at risk of exposure
      - History of incarceration or transactional sex, geography, race/ethnicity.







## HERPES:

- Type-specific HSV serologic testing to be considered if presenting for STI evaluation, esp. if more than one partner.

## TRICHOMONAS:

- Consider in high prevalence settings, e.g. STI clinics, correctional facilities and in asymptomatic at high risk (multiple partners, transactional sex, drug misuse, history of STI or incarceration).

## HIV:

- All 13-64 (opt out); all who seek STI evaluation/treatment.

## HBV:

- At risk (more than one partner in last 6 months, STI evaluation/treatment, past or current IDU, HBV+ sex partner)
- HCV:
- All 18+ (unless positivity rate <0.1%)



# CDC STI Treatment Guidelines 2021: Asymptomatic Screenings



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Health System

## ○ Pregnancy:

### ○ Chlamydia/Gonorrhea

- All <25
- 25+ if at increased risk
  - New sex partner, more than one partner, a partner with other partners, sex partner with a STI
- Rescreen during third trimester
- Test of cure for chlamydia 4 weeks after treatment
- Retest within 3 months for reinfection

### ○ Syphilis:

- All at first prenatal visit
- Retest at 28 weeks and at delivery if at risk of exposure
  - Lives in community with high syphilis morbidity; drug use, STI in pregnancy, >1 partner, new partner, partner with STIs



# CDC STI Treatment Guidelines 2021: Asymptomatic Screenings

## ⦿ Pregnant Women:

### ⦿ Herpes:

- Not routinely.
- Consider type-specific HSV serologic testing if at risk.

### ⦿ HIV:

- All at first prenatal visit
- Retest in 3<sup>rd</sup> trimester if at risk of exposure
  - Drug use, STI in pregnancy, >1 partner, new sex partner, lives in high HIV prevalence area, partners with HIV
- Rapid testing at delivery if not previously screened

### ⦿ HBV:

- All at first prenatal visit; retest if at risk.

### ⦿ HCV:

- All



# CDC STI Treatment Guidelines 2021: Asymptomatic Screenings



MOSES/WEITZMAN  
Health System

- ⦿ Men who have sex with women:
  - ⦿ Chlamydia/Gonorrhea
    - Insufficient evidence for screening low risk
    - Could consider screening for chlamydia in young men in high prevalence settings
      - Adolescent clinics, correctional facilities, STI/sexual health clinics
  - ⦿ Syphilis
    - Consider in younger than 29 years in high prevalence settings
    - Any at risk of exposure
      - History of incarceration or transactional sex, geography, race/ethnicity
  - ⦿ Herpes
    - Type-specific HSV serologic testing to consider if presenting for STI evaluation, esp if >1 partner
  - ⦿ HIV
    - All 13-64 (at least once)
    - All who seek STI evaluation/treatment
  - ⦿ HBV
    - At risk e.g. sexual or percutaneous exposure
  - ⦿ HCV
    - All 18+ (at least once)



# CDC STI Treatment Guidelines 2021: Asymptomatic Screenings



MOSES/WEITZMAN  
Health System

- Men who have sex with men:
  - Chlamydia/Gonorrhea
    - At least annually at sites of contact regardless of condom use
      - Chlamydia: urethra, rectum
      - Gonorrhea: urethra, rectum, pharynx
    - Every 3-6 months if at continued risk of exposure
      - On PrEP
      - If they or their sex partners have other partners
  - Syphilis
    - At least annually
    - Every 3-6 months if at continued risk of exposure





# CDC STI Treatment Guidelines 2021: Asymptomatic Screenings



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## Men who have sex with men:

### Herpes:

- Type-specific HSV serologic testing to consider if infection status is unknown with previously undiagnosed genital tract infection.

### HIV:

- At least annually if HIV status unknown/negative and patient or partners have had >1 partner since last HIV test.
- More frequent (e.g. every 3-6 months) if at continued risk of exposure

### HBV:

- All should be tested for HBsAg, HBVcAb, HBVsAb

### HCV:

- All (at least once)



# CDC STI Treatment Guidelines 2021: Asymptomatic Screenings



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## ● Transgender and Gender Diverse Persons:

### ● Chlamydia/Gonorrhea

- Screening recommendations should be adapted based on anatomy.
  - E.g. persons with cervix annual routine screening if < 25.
- Consider screening at rectal site (chlamydia) and pharyngeal/rectal sites (gonorrhea) based on sexual exposure.

### ● Syphilis

- Consider at least annually based on sexual exposure

### ● HIV

- Discuss and offer to all.
- Frequency based on level of exposure risk.



# CDC STI Treatment Guidelines 2021: Asymptomatic Screenings



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Health System

- Persons with HIV:
  - Chlamydia/Gonorrhea/Syphilis
    - At first evaluation after HIV diagnosis and at least annually after that.
    - More frequent screening based on risk.
  - Herpes:
    - Type-specific HSV serologic testing considered for persons presenting for STI evaluation.
  - Trichomonas:
    - For women at entry to care and at least annually thereafter.
  - HBV:
    - All should be tested for HBsAg, HBVcAb, HBVsAb
  - HCV:
    - All at initial evaluation
    - Annual in MSM with HIV





# STI Screening on Planned Care Dashboard

- Routine annual STI Screening for specific groups:
  - Women 13-24 (chlamydia/gonorrhea)
  - MSM/Transfeminine individuals (3-site testing chlamydia/gonorrhea, syphilis)
  - PrEP patients (3-site testing chlamydia/gonorrhea, syphilis)

ALERTS	Last Date	Due Date	Value	Notes
Dental Exam				
Needs Flu Vaccine 2017-2018				
Body Mass Index	2/23/2018		58.89	Needs Education if BMI is under 19 OR over 25
HIV Screen Needed				Once, 13-64 yrs old
SBIRT	10/4/2016			Yearly, 18+ yrs old
HTN	2/23/2018		140/87	
STI Screening: Chlamydia. Gonorrhea. Syphilis.				MSM and Trans - STI screening recommended annually.





# Clinical Expectations for Medical Providers

<p>STD Screening (USPSTF/CDC)</p>	<ul style="list-style-type: none"><li>• <b>Gonorrhea &amp; Chlamydia:</b> Screen sexually active women age 24 years and younger and in older women who are at increased risk for infection. Retest approximately 3 months after treatment (CDC).</li><li>• <b>Syphilis:</b> Screen non-pregnant adults and adolescents who are at increased risk for syphilis (MSM, positive HIV) and (Male under age 29, race/ethnicity, geography, incarceration, and sex work)</li></ul>
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# Evidence: Benefits of Rectal Swab Self-Collection

- A 2016 study in a cohort of MSM over 1 year found:
  - Without extra-genital testing, >70% of CT and >80% of GC would have been missed.<sup>10</sup>
- A 2019 meta-analysis showed self-collection increased uptake of STI testing services relative to clinician-collection.<sup>11</sup>
- Self-collection:
  - Helps overcome barriers associated with stigmatization of MSM and transwomen.<sup>9,12</sup>
  - Is preferred by patients vs. invasive nature of clinician-collection.<sup>13,14</sup>
  - Has been shown to be equally or more effective than clinician-collection.<sup>15,16</sup>

9. Reisner et al. 2017. Comparing self-and provider-collected swabbing for HPV DNA testing in female-to-male transgender adult patients: a mixed-methods biobehavioral study protocol. *BMC infectious diseases*, 17(1), p.444.

10. Anschuetz et al (2016). Extragenital screening in men who have sex with men diagnoses more chlamydia and gonorrhea cases than urine testing alone. *Sexually Transmitted Diseases*, 43(5), 299–301. <https://doi.org/10.1097/OLQ.0000000000000435>

11. Ogale et al. 2019. Self-collection of samples as an additional approach to deliver testing services for sexually transmitted infections: a systematic review and meta-analysis. *BMJ global health*, 4(2), p.e001349.

12. Rosenberger et al. 2011. Reactions to self-sampling for ano-rectal sexually transmitted infections among men who have sex with men: A qualitative study. *Archives of sexual behavior*, 40(2), pp.281-288.

13. Paudyal et al. 2015. Obtaining self-samples to diagnose curable sexually transmitted infections: a systematic review of patients' experiences. *PLoS one*, 10(4), p.e0124310.

14. Yared et al. 2017. Optimizing Screening for Sexually Transmitted Infections in Men Using Self-Collected Swabs—A Systematic Review. In *Open Forum Infectious Diseases* (Vol. 4, No. Suppl 1, p. S104). Oxford University Press.

15. Lunny et al. 2015. Self-collected versus clinician-collected sampling for chlamydia and gonorrhea screening: a systemic review and meta-analysis. *PLoS One*, 10(7), p.e0132776.

16. Sexton et al. (2013). *How reliable is self-testing for gonorrhea and chlamydia among men who have sex with men?* (Vol. 62).







# CHC Rectal Self-Collection Study

- ❖ 33 MSM and Transwomen due for STI screening
  - ❖ Mean age 40, range 19-59
  - ❖ 39% White, 18% Black, 39% Hispanic, 3% Other
  - ❖ 70% Gay/Lesbian, 6% Bisexual, 6% Straight, 9% Other, 9% Chose Not to Disclose
  - ❖ 79% Male, 15% Transfemale, 6% Chose Not to Disclose
- ❖ Offered rectal self-collection or clinician-collection.
- ❖ Informed consent obtained.
- ❖ Written instructions given and reviewed.
- ❖ Survey questionnaire filled out after collection.

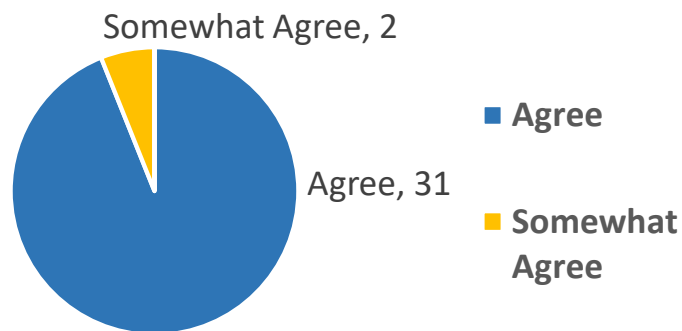


# Aggregate Data

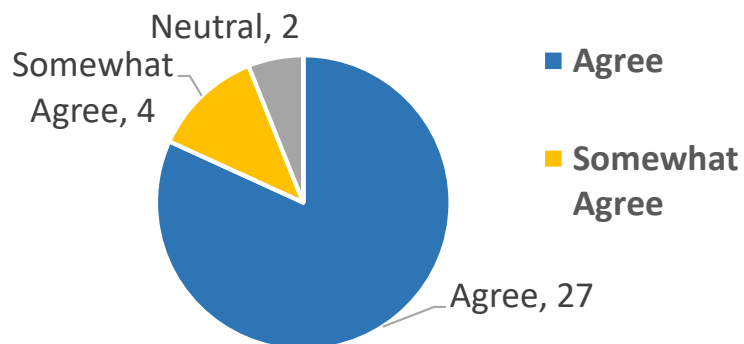


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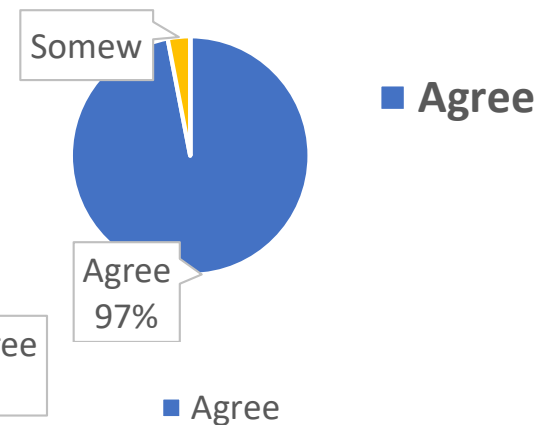
The instructions were easy to follow (n=33)



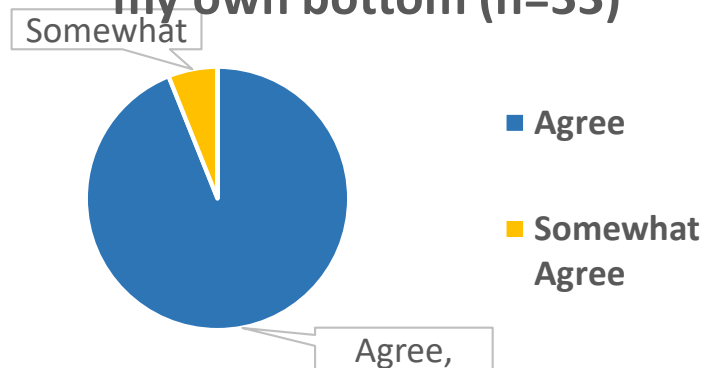
It was easy to swab my own bottom (n=33)



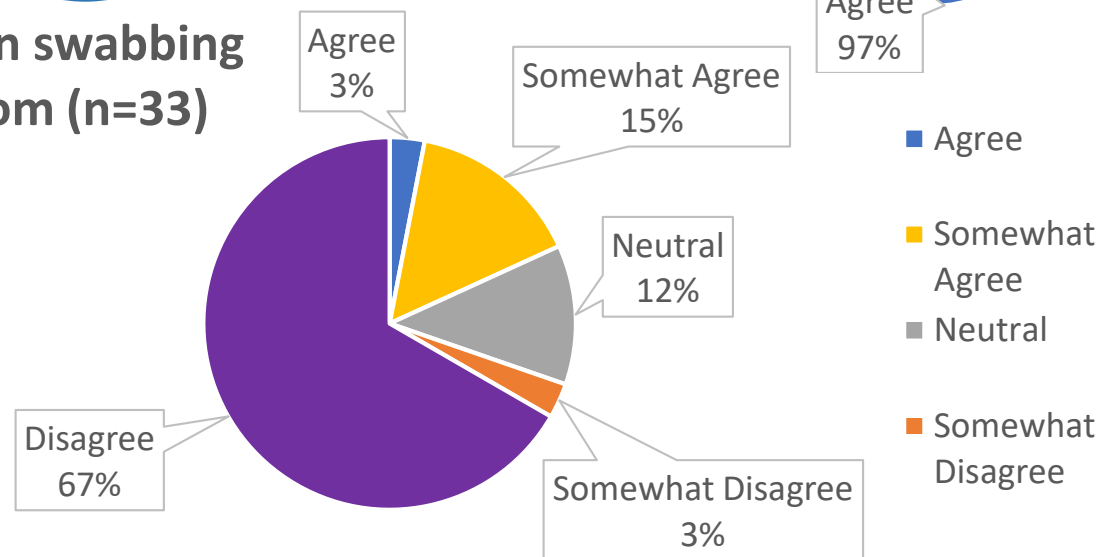
I felt I was able to ask questions about swabbing my own bottom (n=33)



I felt comfortable swabbing my own bottom (n=33)

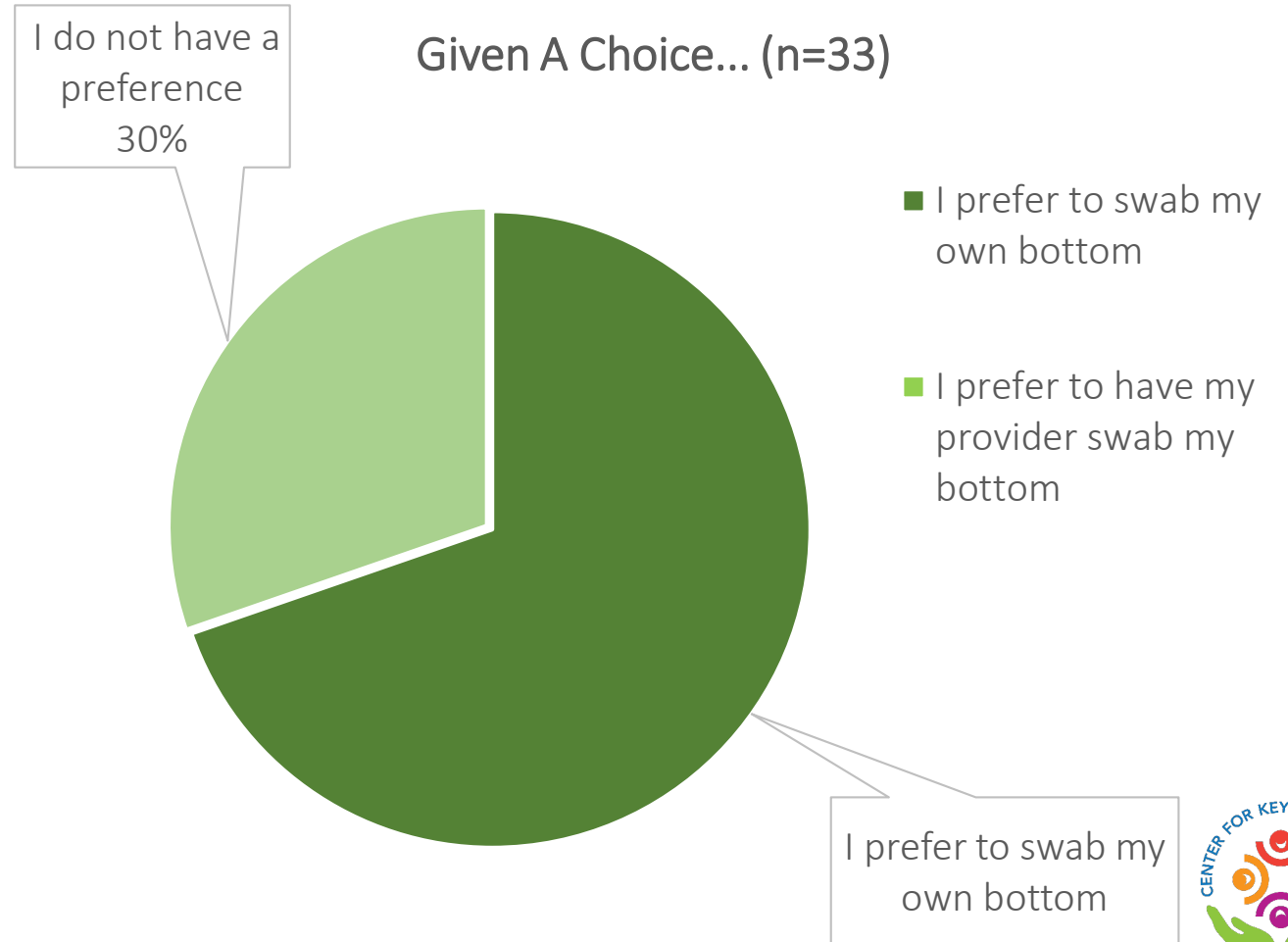


I felt pain when swabbing my own bottom (n=33)





Given a choice...	n
I prefer to swab my own bottom	23
I prefer to have my provider swab my bottom	0
I do not have a preference	10
TOTAL	33





# Evidence: Nurse-based, Self-Collection in Community Health Settings

- A nurse-led screening program for CT and GC at an HIV center conducted 976 screens and detected 143 infections that would otherwise have been missed.<sup>17</sup>
  - 17.4% prevalence of GC/CT in MSM screened (n=571)
    - Rectal CT 9.8% (n=56) and GC 4.2% (n=24)
    - Pharyngeal CT 1.7% (n=10) and GC 3.9% (n=23)
    - Urethral CT 2.6% (n=16) and GC 1.3% (n=8)
  - All MSM found self-collection acceptable

17. Soni, S. and White, J.A., 2011. Self-screening for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* in the human immunodeficiency virus clinic—high yields and high acceptability. *Sexually transmitted diseases*, 38(12), pp.1107-1109.





# STI Nursing Visit – Nuts and Bolts

- Provider-directed visit
- Standing order for patient-directed visit (near future)
- History including 5 P's
  - Anatomical inventory
  - Sexual History
  - STI History
  - Sexual Health and Family Planning
- Testing:
  - Urine and pharyngeal swab collection
  - Self collection of rectal/vaginal swabs
  - HIV rapid test
- Lab orders for blood draw (HIV, syphilis, HCV, HBV)
- Vaccinations (e.g. HAV, HBV, HPV)
- Patient education/counseling (PrEP, condom distribution)

Social History (Test, Daisy - 05/29/2020 11:00 AM, EstVideoMD) \*

Pt. Info Encounter Physical Hub

**Social History** Copy/Merge  Social History Verified

Social Info	Options	Details
S Anatomical Inventory:		
S Sexual History:		
S STI History:		
S Sexual Health and Family F		



# CDC STI TREATMENT WALL CHART:

## [wall-chart.pdf \(cdc.gov\)](https://www.cdc.gov/sti/treatment/wall-chart.pdf)



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### Summary of CDC STI Treatment Guidelines, 2021

This wall chart reflects recommended regimens found in CDC's Sexually Transmitted Infections Treatment Guidelines, 2021. This summary is intended as a source of clinical guidance. When more than one therapeutic regimen is recommended, the sequence is in alphabetical order unless the choices for therapy are prioritized based on efficacy, cost, or convenience. The recommended regimens should be used primarily; alternative regimens can be considered in instances of substantial drug allergy or other contraindications. An important component of STI treatment is partner management. Providers can arrange for the evaluation and treatment of sex partners either directly or with assistance from state and local health departments. Complete guidelines can be found online at [www.cdc.gov/std/treatment](https://www.cdc.gov/std/treatment).

DISEASE	RECOMMENDED REGIMEN	ALTERNATIVE REGIMEN
<b>Bacterial Vaginosis</b>	metronidazole 500 mg orally 2x/day for 7 days <b>OR</b> metronidazole gel 0.75%, one 5 gm applicator intravaginally, 1x/day for 5 days <b>OR</b> clindamycin cream 2%, one 5 gm applicator intravaginally, at bedtime for 7 days	clindamycin 300 mg orally 2x/day for 7 days <b>OR</b> clindamycin ovules 100 mg intravaginally at bedtime for 3 days <sup>1</sup> <b>OR</b> secnidazole 2 gm orally in a single dose <sup>2</sup> <b>OR</b> tinidazole 2 gm orally 1x/day for 2 days <b>OR</b> tinidazole 1 gm orally 1x/day for 5 days
<b>Cervicitis<sup>3</sup></b>	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose
<b>Chlamydial Infections</b>		
Adults and adolescents	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose <b>OR</b> levofloxacin 500 mg orally 1x/day for 7 days
Pregnancy	azithromycin 1 gm orally in a single dose	amoxicillin 500 mg orally 3x/day for 7 days
Infant and children <45 kg <sup>4</sup> (nasopharynx, urogenital, and rectal)	erythromycin base, 50 mg/kg body weight/day orally, divided into 4 doses daily for 14 days <b>OR</b> ethylsuccinate, 50 mg/kg body weight/day orally, divided into 4 doses daily for 14 days	
Children who weigh ≥45 kg, but who are aged <8 years (nasopharynx, urogenital, and rectal)	azithromycin 1 gm orally in a single dose	
Children aged ≥8 years (nasopharynx, urogenital, and rectal)	azithromycin 1 gm orally in a single dose <b>OR</b> doxycycline 100 mg orally 2x/day for 7 days	
Neonates: <sup>5</sup> ophthalmia and pneumonia	erythromycin base, 50 mg/kg body weight/day orally, divided into 4 doses daily for 14 days <b>OR</b> ethylsuccinate, 50 mg/kg body weight/day orally, divided into 4 doses daily for 14 days	azithromycin suspension 20 mg/kg body weight/day orally, 1x/day for 3 days

DISEASE	RECOMMENDED REGIMEN	ALTERNATIVE REGIMEN
<b>Lymphogranuloma Venereum</b>	doxycycline 100 mg orally 2x/day for 21 days	azithromycin 1 gm orally 1x/week for 3 weeks <sup>2a</sup> <b>OR</b> erythromycin base 500 mg orally 4x/day for 21 days
<b>Nongonococcal Urethritis (NGU)</b>	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose <b>OR</b> azithromycin 500 mg orally in a single dose, <b>THEN</b> 250 mg 1x/day for 4 days
Persistent or Recurrent NGU: test for <i>Mycoplasma genitalium</i> :		
If <i>M. genitalium</i> resistance testing is unavailable but <i>M. genitalium</i> is detected by an FDA-cleared NAAT	doxycycline 100 mg orally 2x/day for 7 days, <b>FOLLOWED BY</b> moxifloxacin 400 mg 1x/day for 7 days	For settings without resistance testing and when moxifloxacin cannot be used: doxycycline 100 mg orally 2x/day for 7 days, <b>FOLLOWED BY</b> azithromycin 1 gm orally on first day, <b>FOLLOWED BY</b> azithromycin 500 mg orally 1x/day for 3 days and a test-of-cure 21 days after completion of therapy
If resistance testing is available, use resistance-guided therapy	<b>Macrolide sensitive</b> doxycycline 100 mg orally 2x/day for 7 days, <b>FOLLOWED BY</b> azithromycin 1 gm orally initial dose, <b>FOLLOWED BY</b> azithromycin 500 mg orally 1x/day for 3 additional days (2.5 gm total) <b>Macrolide resistance</b> doxycycline 100 mg orally 2x/day for 7 days, <b>FOLLOWED BY</b> moxifloxacin 400 mg orally 1x/day for 7 days	
Test for <i>Trichomonas vaginalis</i> in heterosexual men in areas where infection is prevalent	metronidazole 2 gm orally in a single dose <b>OR</b> tinidazole 2 gm orally in a single dose	
<b>Pediculosis Pubis</b>	permethrin 1% cream rinse applied to affected areas, wash after 10 minutes	malathion 0.5% lotion applied to affected areas, wash after 8–12 hours





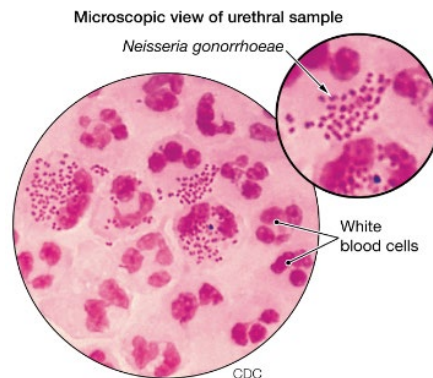
## Gonococcal Infections

Risk Category	Recommended Regimen	Alternatives
Uncomplicated infections of the cervix, urethra, and rectum: adults and adolescents <150 kg <sup>6</sup>	ceftriaxone 500 mg IM in a single dose <sup>17</sup>	If cephalosporin allergy: gentamicin 240 mg IM in a single dose <b>PLUS</b> azithromycin 2 gm orally in a single dose  If ceftriaxone administration is not available or not feasible: cefixime 800 mg orally in a single dose <sup>17</sup>
Uncomplicated infections of the pharynx: adults and adolescents <150 kg <sup>6</sup>	ceftriaxone 500 mg IM in a single dose <sup>17</sup>	
Pregnancy	ceftriaxone 500 mg IM in a single dose <sup>17</sup>	



# CDC STI Treatment Guidelines 2021: Gonorrhea Treatment

- Treat gonorrhea infections with a single 500 mg IM injection of ceftriaxone.
  - For persons weighing  $\geq 150$  kg (300 lb), use 1 g of IM ceftriaxone.
- If chlamydia not excluded, also treat with doxycycline 100 mg orally twice daily for 7 days.
  - During pregnancy, azithromycin 1 g as a single dose recommended.
- For Expedited Partner Therapy (EPT), partner may be treated with a single 800 mg oral dose of cefixime.
  - If chlamydia not excluded, add doxycycline 100 mg twice daily for 7 days.



Gram stain of male urethral discharge with polymorphonuclear leukocytes with intracellular gram-negative diplococci

# CDC STI Treatment Guidelines 2021: Gonorrhea Treatment



- Test-of-cure not needed if uncomplicated urogenital or rectal gonorrhea unless symptoms persist.
- If pharyngeal gonorrhea, test-of-cure (NAAT or culture) is recommended 7-14 days after initial treatment, regardless of regimen used.
  - Be mindful can have high potential for false positive with NAAT.
- Patients treated for gonorrhea should be retested three months after treatment to ensure there is no reinfection.



## Chlamydial Infections

Risk Category	Recommended Regimen	Alternatives
Adults and adolescents	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose <b>OR</b> levofloxacin 500 mg orally 1x/day for 7 days
Pregnancy	azithromycin 1 gm orally in a single dose	amoxicillin 500 mg orally 3x/day for 7 days

# Lymphogranuloma Venereum (LGV)

- ⦿ Due to *Chlamydia trachomatis* serovars L1, L2, or L3.
  - ⦿ Different than serovars A-K that cause typical chlamydia infection which presents with relatively mild or asymptomatic infection.
- ⦿ Symptoms and Signs:
  - ⦿ Can cause genital ulcers, typically self limited at site of inoculation; lymphadenopathy, usually inguinal/femoral and unilateral; or proctocolitis
  - ⦿ Can cause severe inflammation and invasive infection
    - Can lead to chronic colorectal fistulas and strictures
    - Reactive arthropathy
  - ⦿ Can be asymptomatic



# Lymphogranuloma Venereum (LGV)

- Proctocolitis is most common presentation among MSM and women.
  - Can mimic IBD– mucoid or hemorrhagic rectal discharge, anal pain, constipation, fever, or tenesmus.
  - Has been seen in outbreaks among MSM with HIV
- LGV-associated lymphadenopathy can be severe with bubo formation
  - Fluctuant or suppurative inguinal or femoral lymphadenopathy.
  - Oral ulceration and cervical lymphadenopathy can also occur.
- Can have secondary bacterial infection or other sexually and non sexually transmitted pathogens.



# Diagnosis

DIAGNOSIS



- Definitive diagnosis made with LGV-specific molecular testing (PCR-based genotyping).
  - Can differentiate LGV from non-LGV *C. trachomatis* in rectal specimens .
  - Not widely available and results can take time.
- Otherwise, diagnosis made with positive chlamydia NAAT at symptomatic anatomic site, a clinical suspicion, and local epidemiology, along with exclusion of other etiologies for signs and symptoms.
  - Severe symptoms of proctocolitis, e.g. bloody discharge, tenesmus, and rectal ulcers can indicate LGV.
- LGV chlamydia serology should not be used routinely as a diagnostic tool for LGV because utility has not been established and interpretation has not been standardized.
  - Might support LGV diagnosis in cases of isolated lymphadenopathy for which diagnostic material for NAAT cannot be obtained.

# Treatment

- ⦿ If clinical syndrome consistent with LGV, presumptively treat.
  - ⦿ Severe proctocolitis with bloody discharge, tenesmus, and ulceration.
  - ⦿ In cases of severe inguinal lymphadenopathy with bubo formation, esp if recent history of genital ulcer.
  - ⦿ Bubo might require aspiration through intact skin or incision and drainage to prevent formation of inguinal or femoral ulcerations

## Recommended Regimen for Lymphogranuloma Venereum

**Doxycycline** 100 mg orally 2 times/day for 21 days

## Alternative Regimens

**Azithromycin** 1 gm orally once weekly for 3 weeks\*

OR

**Erythromycin** base 500 mg orally 4 times/day for 21 days

\* Because this regimen has not been validated, a test of cure with *C. trachomatis* NAAT 4 weeks after completion of treatment can be considered.

# Treatment Duration

- Optimal treatment duration for symptomatic LGV has not been studied.
- 21-days is based on long standing clinical practice and is highly effective with cure rates >98.5%.
- Shorter courses might be effective on basis of small retrospective study in MSM with rectal LGV, half were symptomatic, who received 7-14 day course and had 97% cure rate.
- Longer courses of therapy might be required in setting of fistulas, buboes, and other forms of severe disease.
- Asymptomatic LGV is effectively treated with 7 day course of doxycycline.

# Follow up

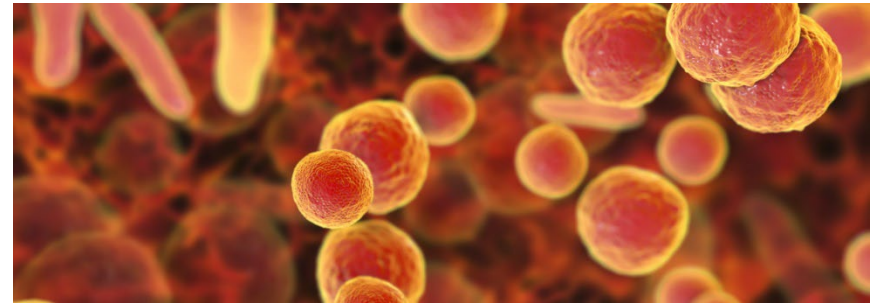
- Follow until signs and symptoms resolve.
- Retest for chlamydia 3 months after treatment.
- Sex partners within 60 days of diagnosis/symptoms should be evaluated and tested for chlamydial infection.
  - Asymptomatic partners can be presumptively treated with a chlamydia regimen such as doxycycline 100 mg 2 times a day for 7 days.



## Nongonococcal Urethritis (NGU)

Risk Category	Recommended Regimen	Alternatives
	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose <b>OR</b> azithromycin 500 mg orally in a single dose, <b>THEN</b> 250 mg daily for 4 days
Persistent and recurrent NGU: test for <i>Mycoplasma genitalium</i> :		
If <i>M. genitalium</i> resistance testing is unavailable but <i>M. genitalium</i> is detected by an FDA-cleared NAAT	doxycycline 100 mg orally 2x/day for 7 days, <b>FOLLOWED BY</b> moxifloxacin 400 mg 1x/day for 7 days	For settings without resistance testing and when moxifloxacin cannot be used:  doxycycline 100 mg 2x/day for 7 days, <b>FOLLOWED BY</b> azithromycin 1 gm orally on first day, <b>FOLLOWED BY</b> azithromycin 500 mg orally 1x/day for 3 days and a test-of-cure 21 days after completion of therapy
Persistent and recurrent NGU: test for <i>M. genitalium</i> :		
If resistance testing is available, use resistance-guided therapy	<p><b>Macrolide sensitive</b></p> <p>doxycycline 100 mg orally 2x/day for 7 days, <b>FOLLOWED BY</b> azithromycin 1 gm orally initial dose, <b>FOLLOWED BY</b> azithromycin 500 mg orally 1x/day for 3 additional days (2.5 gm total)</p> <hr/> <p><b>Macrolide resistance</b></p> <p>doxycycline 100 mg orally 2x/day for 7 days, <b>FOLLOWED BY</b> moxifloxacin 400 mg orally 1x/day for 7 days</p>	
Test for <i>Trichomonas vaginalis</i> in heterosexual men in areas where infection is prevalent	metronidazole 2 gm orally in a single dose <b>OR</b> tinidazole 2 gm orally in a single dose	

# Prevalence of Mycoplasma genitalium



## Men

- ⊙ Causes symptomatic and asymptomatic urethritis
  - ~ 15-20% of NGU, ~20-25% of non-chlamydial NGU, ~40% of persistent or recurrent urethritis
  - Infection with Chlamydia trachomatis common in certain geographic areas but M genitalium is often only pathogen found.
- ⊙ Insufficient data to implicate in epididymitis or prostatitis
- ⊙ Rectal infection has been reported in 1-26% of MSM

## Women

- ⊙ Associated with cervicitis, PID, preterm delivery, spontaneous abortion, and infertility
  - Detected in 10-30% of cervicitis; 4-22% in PID; one study found 60% prevalence in post-abortal PID; rectal infection among 3% of women.
- ⊙ Frequently asymptomatic
- ⊙ Consequences of asymptomatic infection unknown in men and women.
- ⊙ Most data available are from cross sectional or observational studies.



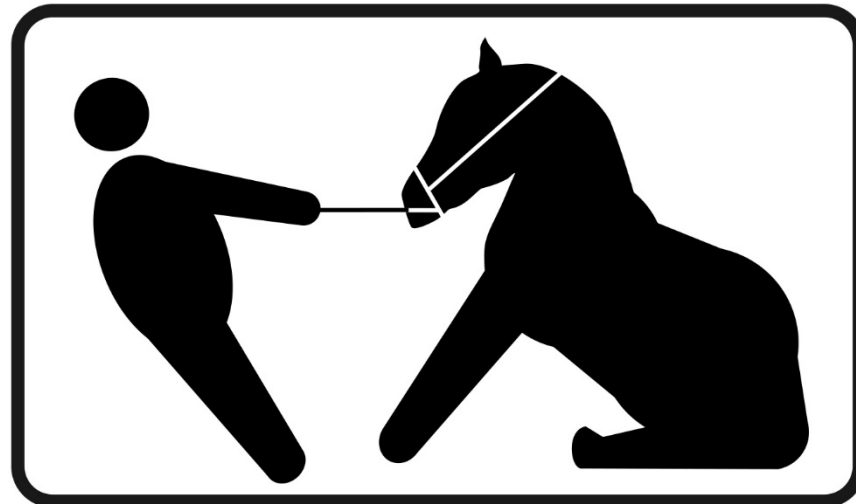
# Diagnosis

- NAAT is FDA cleared for use with urine and urethral, penile, endocervical, and vaginal swab samples.
  - If resistance testing is available (very limited availability), it should be performed.
- Culture can take up to 6 months and is limited to research settings.
- Who should be tested?
  - Men with recurrent NGU.
  - Women with recurrent cervicitis.
  - Consider in women with PID.
- When should testing NOT be performed?
  - If asymptomatic
  - If extra-genital
- If testing not available, suspect infection in cases of persistent or recurrent urethritis or cervicitis and for PID.



# Mycoplasma genitalium Resistance

- Resistance to azithromycin rapidly increasing.
- Macrolide resistance correlated with treatment failure ranges from 44-90% in US, Canada, Western Europe and Australia.
- Treating macrolide-susceptible infections with azithromycin 1 g dose resulted in resistance in 10-12% of cases.
- Prevalence of quinolone resistance much lower.



# Treatment

## Recommended Regimens if *M. genitalium* Resistance Testing is Available

If *macrolide sensitive*: Doxycycline 100 mg orally 2 times/day for 7 days, followed by azithromycin 1 g orally initial dose, followed by 500 mg orally once daily for 3 additional days (2.5 g total)

If *macrolide resistant*: Doxycycline 100 mg orally 2 times/day for 7 days followed by moxifloxacin 400 mg orally once daily for 7 days

## Recommended Regimens if *M. genitalium* Resistance Testing is Not Available

If *M. genitalium* is detected by an FDA-cleared NAAT: Doxycycline 100 mg orally 2 times/day for 7 days, followed by moxifloxacin 400 mg orally once daily for 7 days

- 2-stage approach, ideally using resistance-guided therapy
- First step is doxycycline (reduces organism load and facilitates organism clearance)
- PID treatment less clear: initial empiric therapy is doxycycline for 14 days; if tested and detected, then follow with moxifloxacin 400 mg daily for 14 days.

# Follow Up and Treatment of Partners

- Test of cure is not recommended for asymptomatic infections.
- Persons with persistent symptoms can get tested and if present, treat with moxifloxacin.
- Sex partners can be tested and treated if positive. If unable to test the partner, same regimen given to patient can be provided to partner.



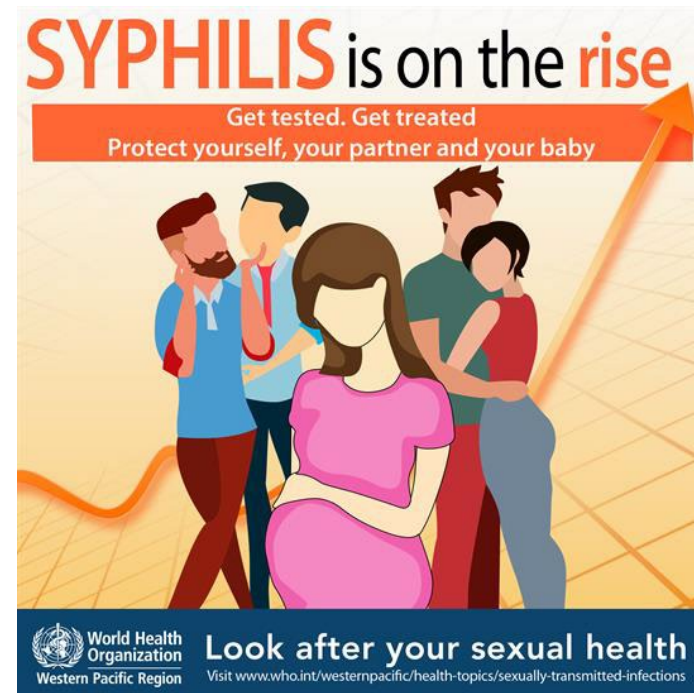
## Syphilis<sup>24</sup>

Risk Category	Recommended Regimen	Alternatives
Primary, secondary, and early latent: adults (including pregnant women and people with HIV infection)	benzathine penicillin G 2.4 million units IM in a single dose	
Late latent adults (including pregnant women and people with HIV infection)	benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals	
Neurosyphilis, ocular syphilis, and otosyphilis	aqueous crystalline penicillin G 18–24 million units per day, administered as 3–4 million units by IV every 4 hours or continuous infusion, for 10–14 days	procaine penicillin G 2.4 million units IM 1x/day <b>PLUS</b> probenecid 500 mg orally 4x/day, both for 10–14 days
For children or congenital syphilis	See Sexually Transmitted Infections Treatment Guidelines, 2021.	

24 The complete list of recommendations on treating syphilis among people with HIV infection and pregnant women, as well as discussion of alternative therapy in people with penicillin allergy, can be found in Sexually Transmitted Infections Treatment Guidelines, 2021.

# Alternative Syphilis Treatment

- Doxycycline 100 mg twice a day for all except in pregnancy.
  - Primary or Secondary: treat for 14 days
  - Late latent or unknown duration: treat for 28 days
- If penicillin allergic and have bicillin available, consider desensitization.





# Bacterial Vaginosis

Risk Category	Recommended Regimen	Alternatives
	metronidazole oral 500 mg orally 2x/day for 7 days	clindamycin 300 mg orally 2x/day for 7 days
	<b>OR</b> metronidazole gel 0.75%, one 5 gm applicator intravaginally, 1x/day for 5 days	<b>OR</b> clindamycin ovules 100 mg intravaginally at bedtime for 3 days <sup>1</sup>
	<b>OR</b> clindamycin cream 2%, one 5 gm applicator intravaginally, at bedtime for 7 days	<b>OR</b> secnidazole 2 gm oral granules in a single dose <sup>2</sup>
		<b>OR</b> tinidazole 2 gm orally 1x/day for 2 days
		<b>OR</b> tinidazole 1 gm orally 1x/day for 5 days

- 1 Clindamycin ovules use an oleaginous base that might weaken latex or rubber products (e.g., condoms and diaphragms). Use of such products within 72 hours following treatment with clindamycin ovules is not recommended.
- 2 Oral granules should be sprinkled onto unsweetened applesauce, yogurt, or pudding before ingestion. A glass of water can be taken after administration to aid in swallowing.

## Trichomoniasis<sup>25</sup>

Risk Category	Recommended Regimen	Alternatives
Women	metronidazole 500 mg 2x/day for 7 days	tinidazole 2 gm orally in a single dose
Men	metronidazole 2 gm orally in a single dose	tinidazole 2 gm orally in a single dose

## Cervicitis<sup>3</sup>

Risk Category	Recommended Regimen	Alternatives
	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose

- 3 Consider concurrent treatment for gonococcal infection if the patient is at risk for gonorrhea or lives in a community where the prevalence of gonorrhea is high (see Gonorrhea section).



## Other STI Treatments on Summary Chart

- ❖ Epididymitis
- ❖ Pelvic Inflammatory Disease
- ❖ Genital Warts (HPV)
- ❖ Pediculosis Pubis
- ❖ Scabies





# Potential Barriers to Screening

- ❖ Provider and clinical team discomfort
- ❖ Lack of rectal screening in MSM may be due to multiple barriers, including access to care, stigma, and discrimination.
- ❖ With decreased funding to STI clinics across the nation, primary care clinics like community health centers will need to provide the access to STI screening and treatment.





# Summary

- ❖ STI rates continue to rise and infections are rates are disproportionately high in certain population subsets.
- ❖ Primary care clinics need to scale up screening and education to stem the rise.
- ❖ Implementing best practice guidelines, collecting and analyzing QI data, and streamlining clinic workflow around sexual history taking and STI screening are key to this process.
- ❖ Focusing on extra-genital testing
  - ❖ Adoption of self collection testing
- ❖ Nurse-led screening and testing
- ❖ Other innovations– same-day access, home-testing, telehealth
- ❖ We need to acknowledge and address racial and ethnic disparities in STI rates





# Questions?





# Next Steps

## Agenda items for your meetings during this action period

- If you do not have protocols for routine HIV and STI testing/screening, discuss how to develop them.

## Assignments

- Review or develop current protocols for routine HIV and STI testing/screening
- Review or develop a draft workflow for routine HIV and STI testing/screening, including universal testing
- Review or develop a draft workflow for identifying at-risk patients and directing them to the appropriate providers for treatment

CME and Resource Page  
Access Code: HIV2024



<https://education.weitzmaninstitute.org/content/nttap-hiv-prevention-learning-collaborative-2024>

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**REMINDER: Complete evaluation in the poll!**

Upcoming Coach Calls: Monday April 1<sup>st</sup> & 15<sup>th</sup>

Next Learning Session is **Monday April 22<sup>nd</sup>!**



# Explore more resources!

## National Learning Library: Resources for Clinical Workforce Development

National Learning Library



CHC has curated a series of resources, including webinars to support your health center through education, assistance and training.

[Learn More](#)



The National Training and Technical Assistance Cooperative Agreements (NCAs) provide free training and technical assistance that is data driven, cutting edge and focused on quality and operational improvement to support health centers and look-alikes. Community Health Center, Inc. (CHC, Inc.) and its Weitzman Institute specialize in providing education and training to interested health centers in Transforming Teams and Training the Next Generation through:

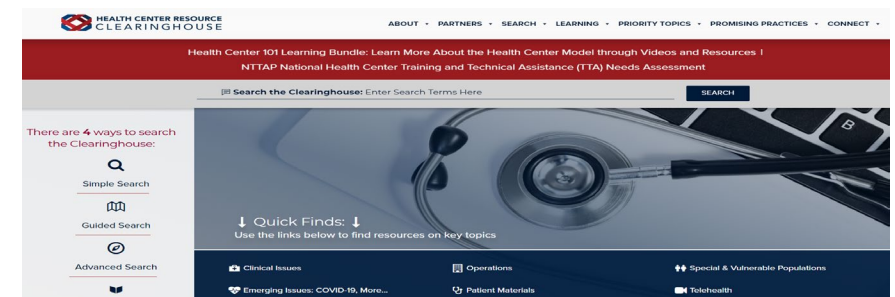
**National Webinars** on advancing team based care, implementing post-graduate residency training programs, and health professions student training in FQHCs.

**Invited participation in Learning Collaboratives** to advance team based care or implement a post-graduate residency training program at your health center.

Please keep watching this space for information on future sessions. To request technical assistance from our NCA, please email [NCA@chc1.com](mailto:NCA@chc1.com) for more information.

<https://www.weitzmaninstitute.org/ncaresources>

## Health Center Resource Clearinghouse



<https://www.healthcenterinfo.org/>