

Improving STD Screening in HIV Care

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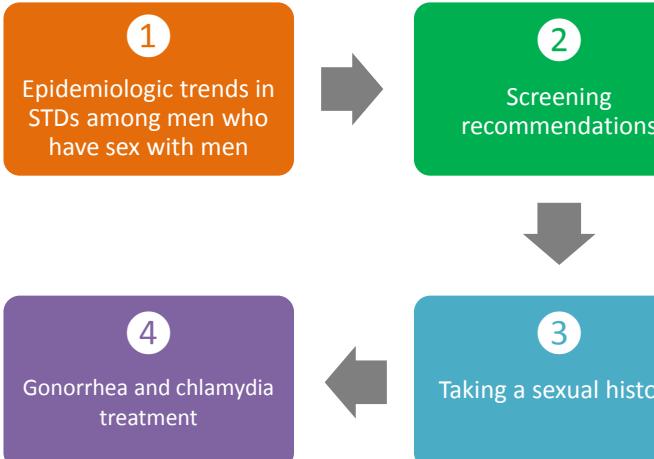


Webinar

May 16, 2017



What are we going to cover today?

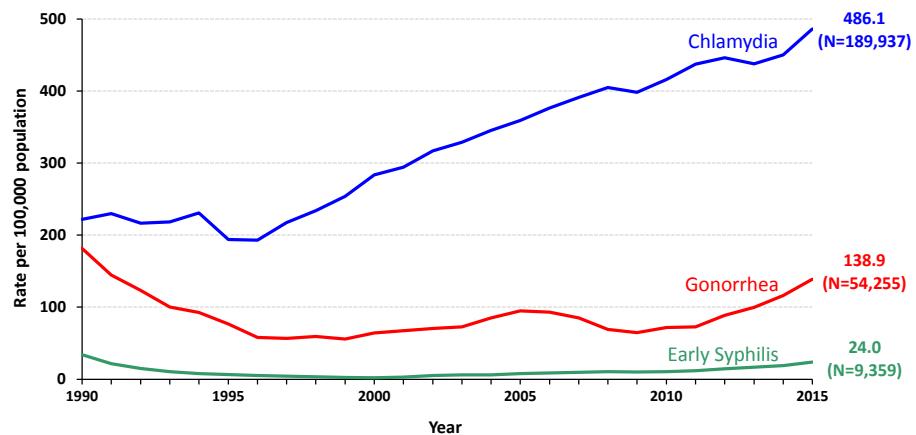


Let's take a look at the data...



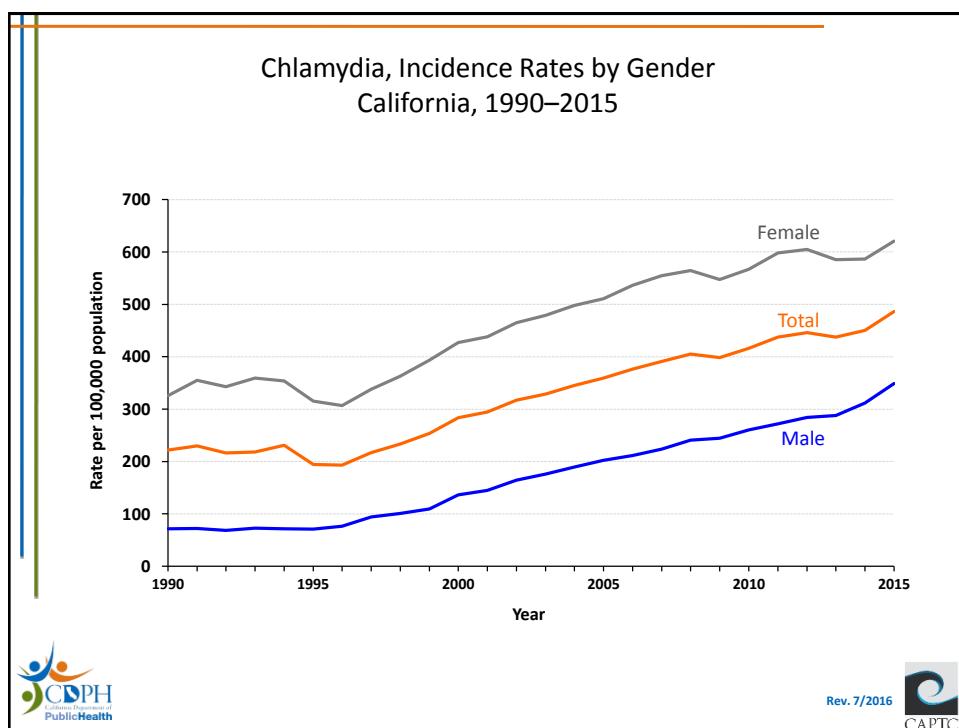
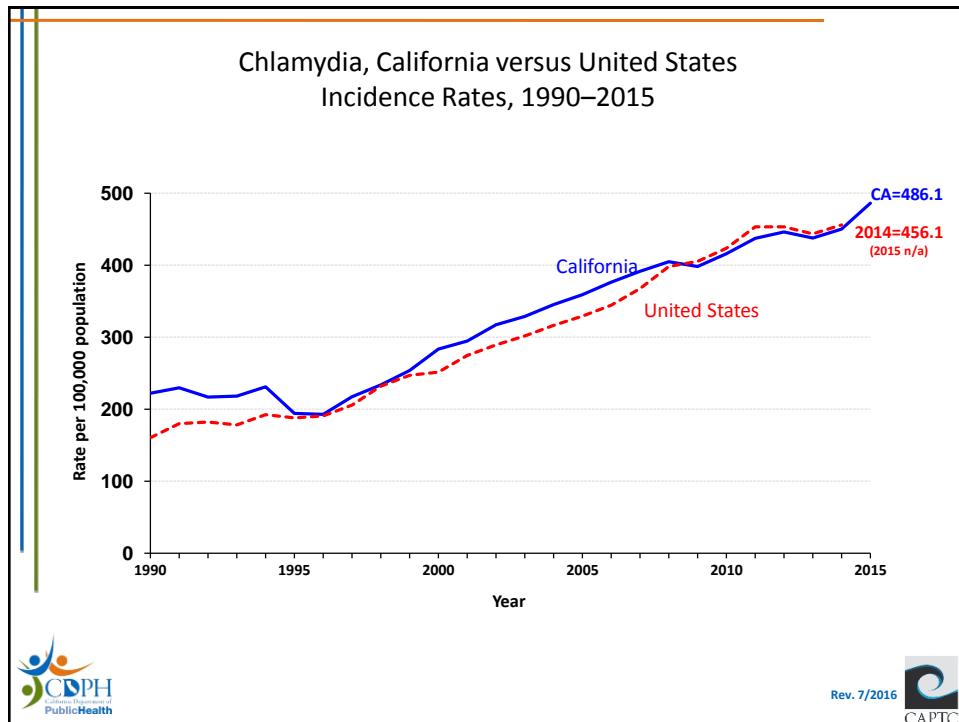
STD Control Branch

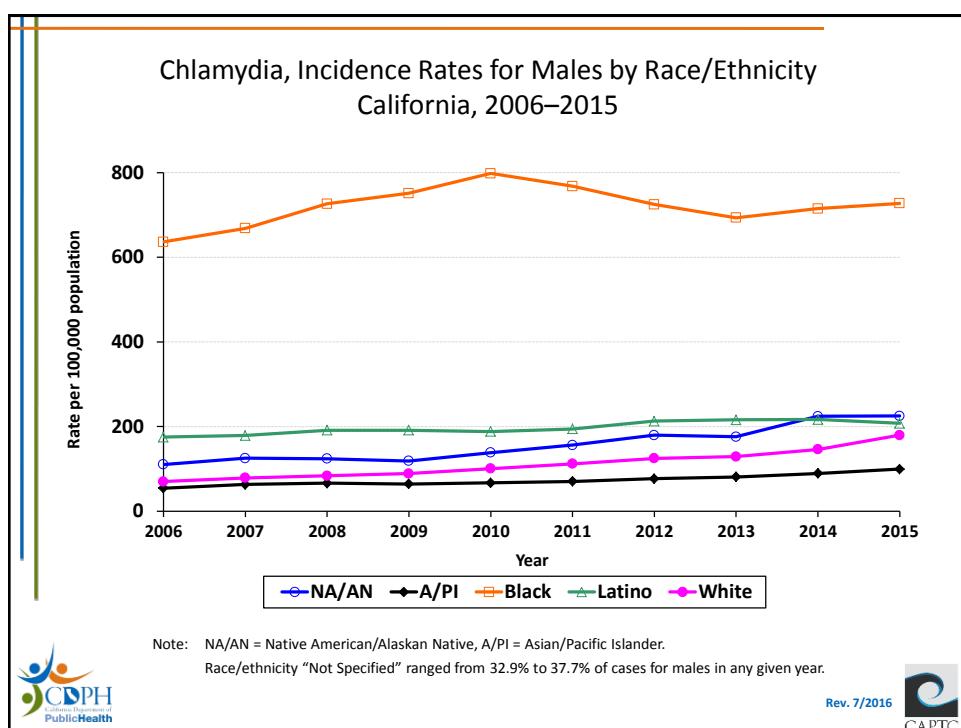
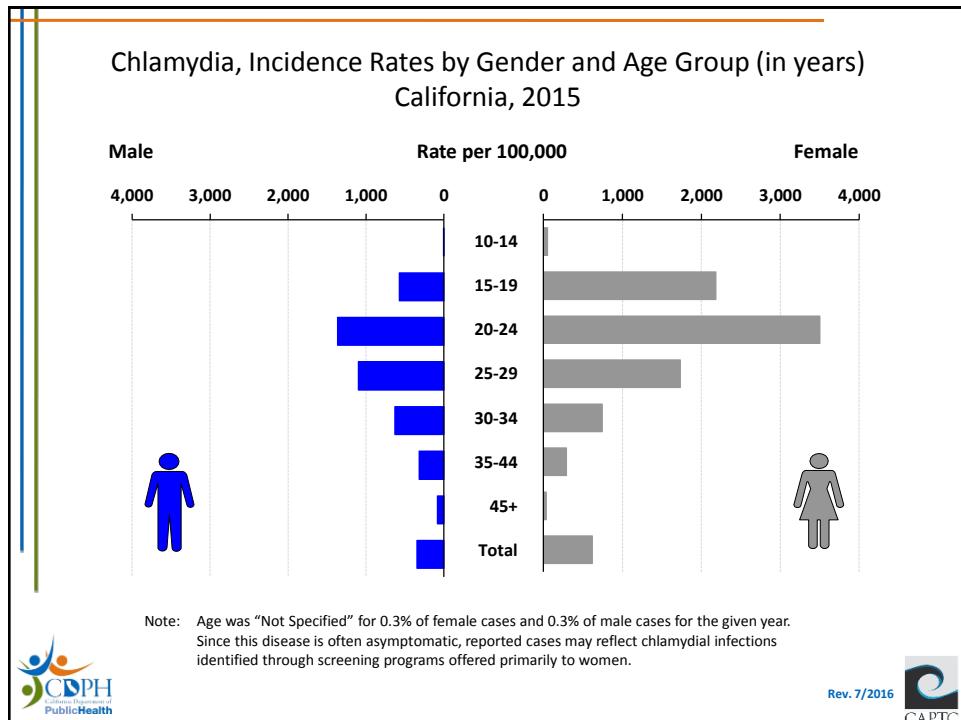
Chlamydia, Gonorrhea, and Early Syphilis California Incidence Rates, 1990–2015

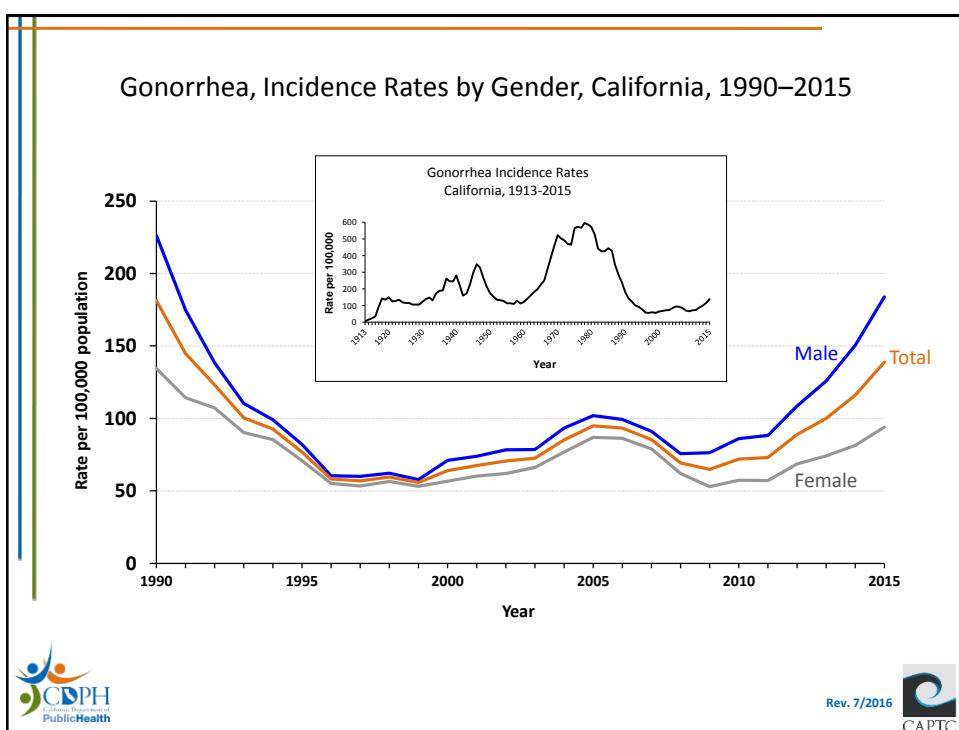
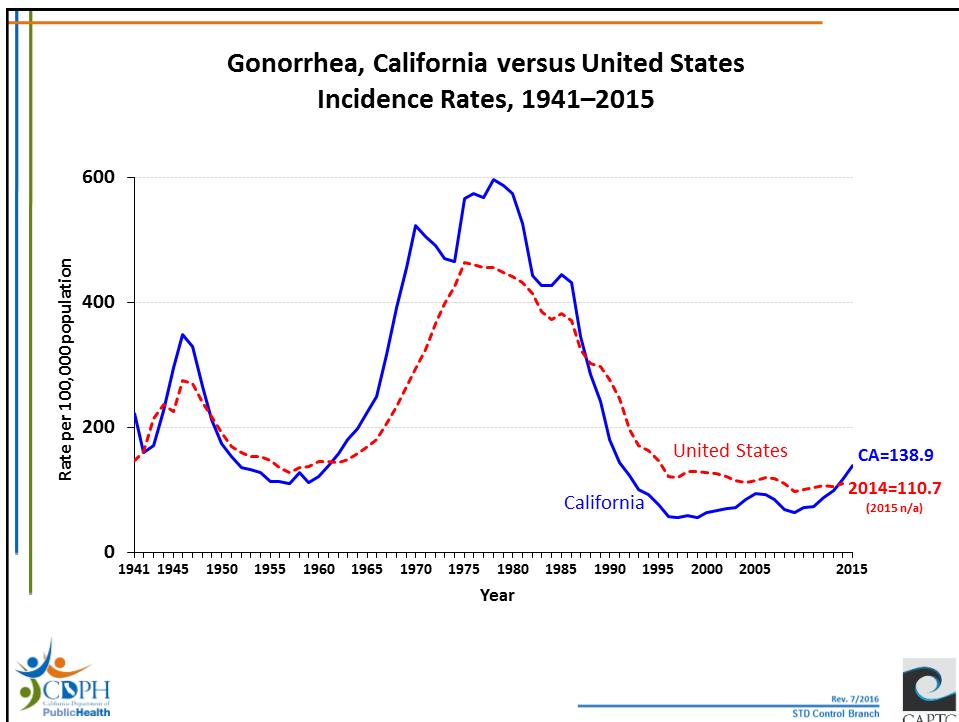


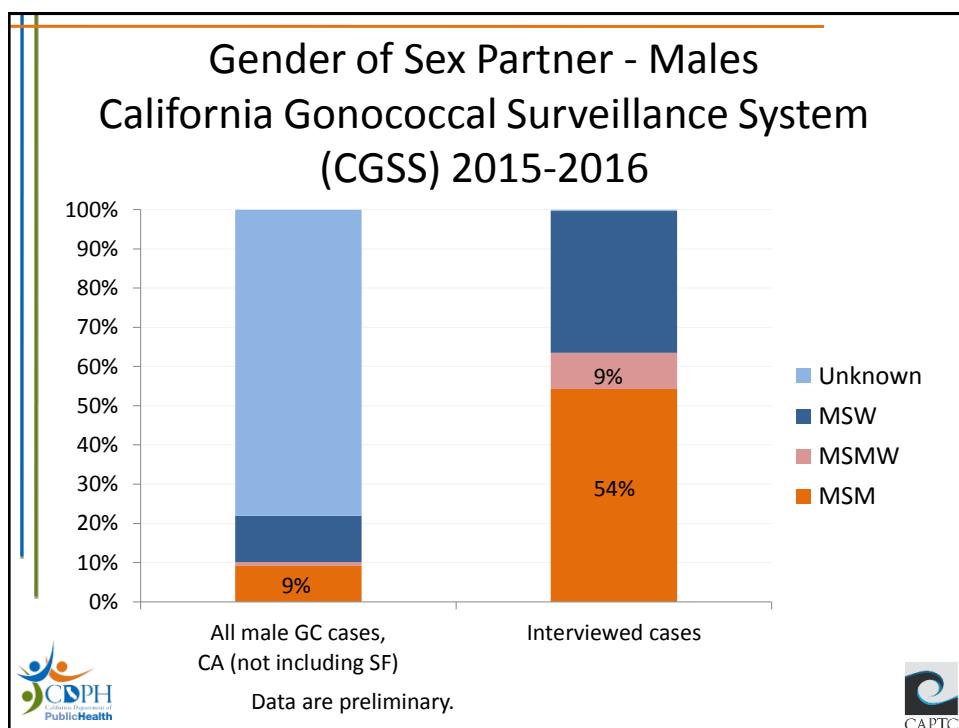
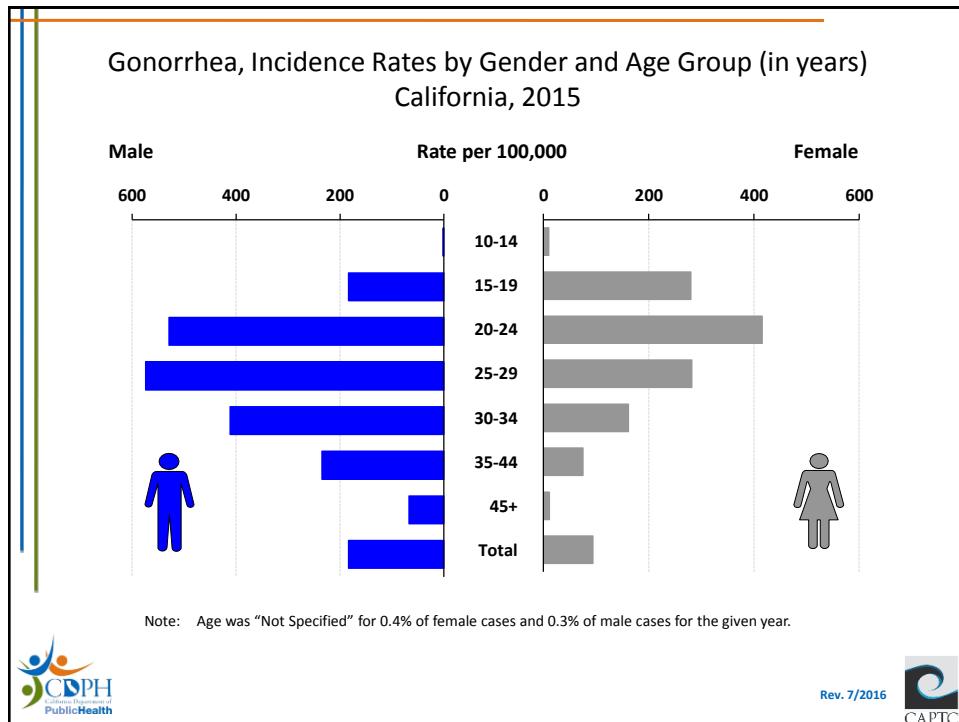
Rev. 7/2016





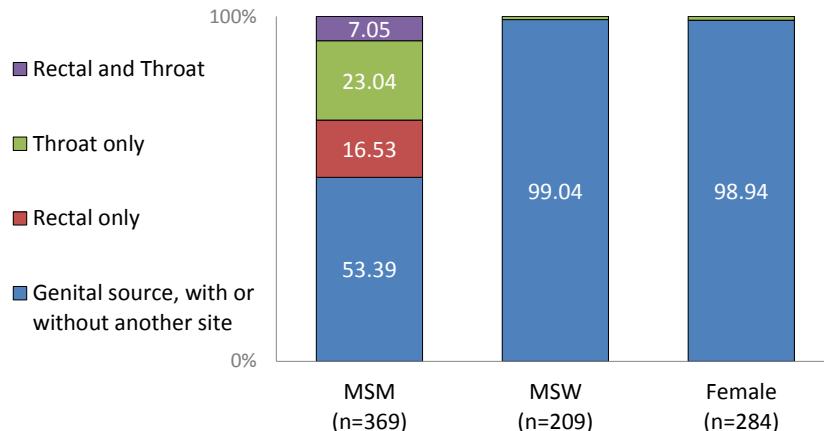






Site of Infection by Sexual Orientation, Sampled and Interviewed CGSS Cases, 2015-2016

Almost half of positive GC tests from MSM were from extragenital sites.

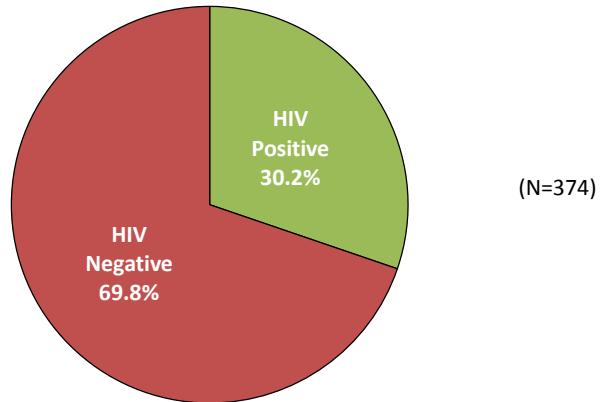


Genital includes urine, urethral, and other unspecified "genital" sites.
Data are preliminary.



HIV Status Among MSM with Gonorrhea, 2015-2016 (Sampled and Interviewed California Gonococcal Surveillance System Cases)

30% of MSM with known HIV status were HIV+ at the time of their GC diagnosis

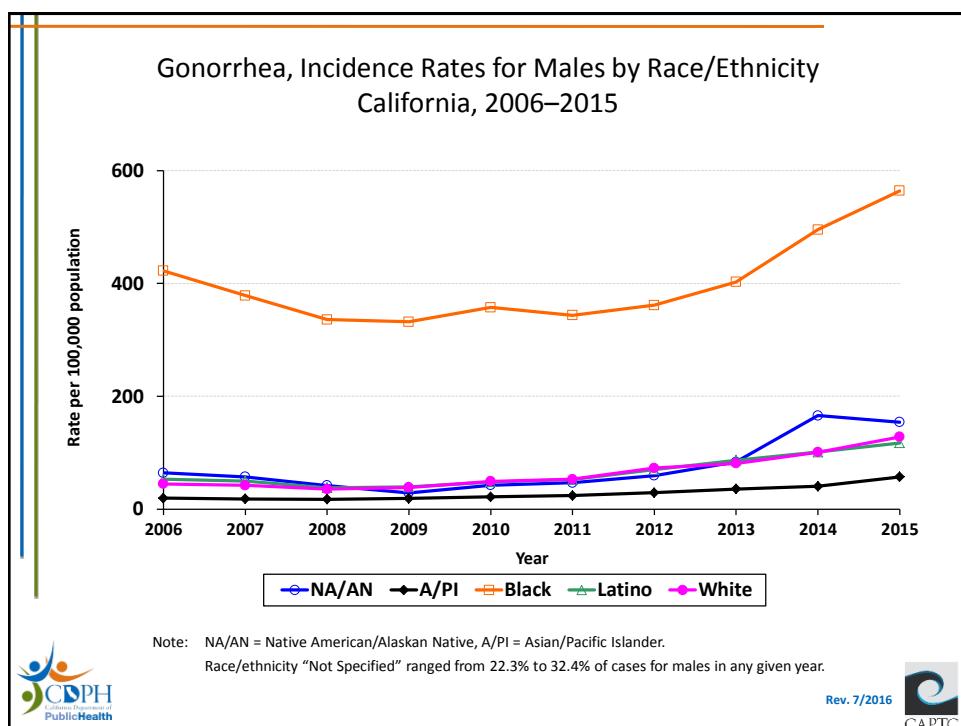
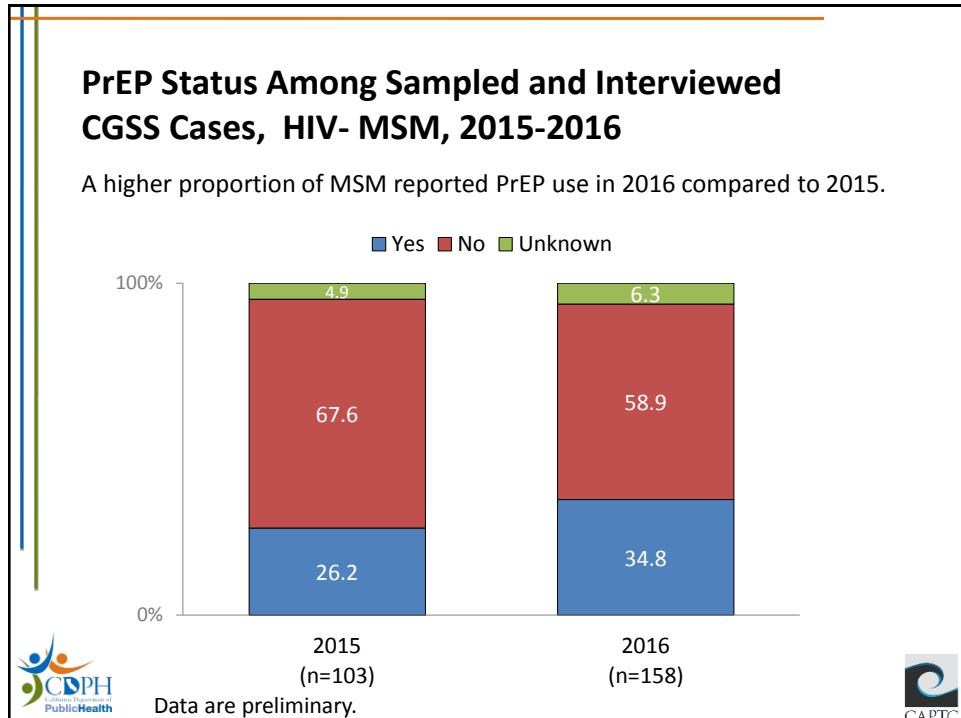


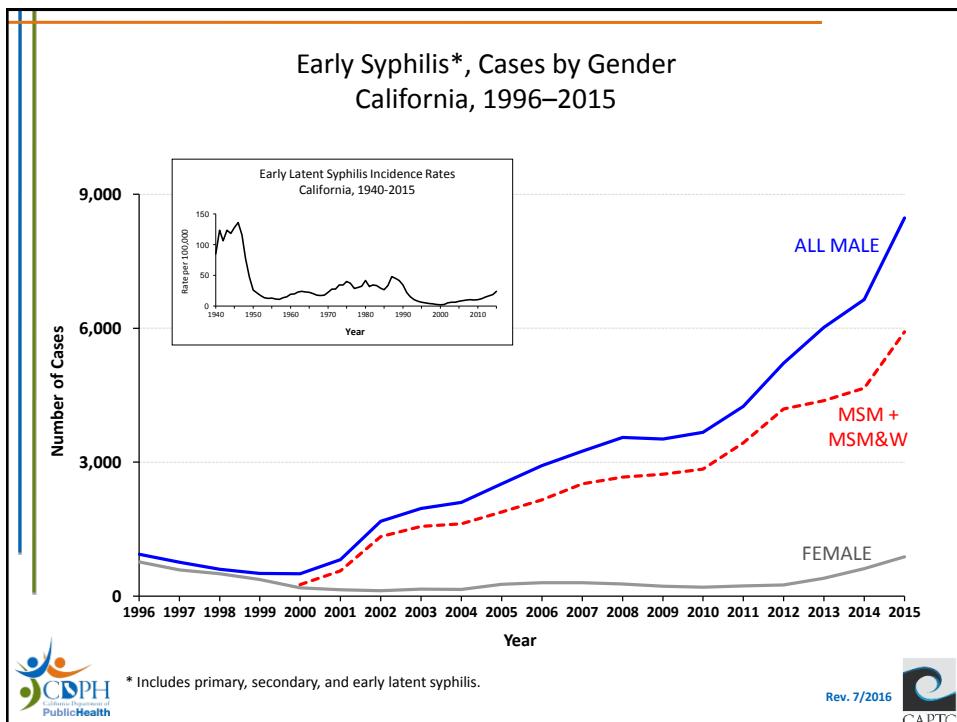
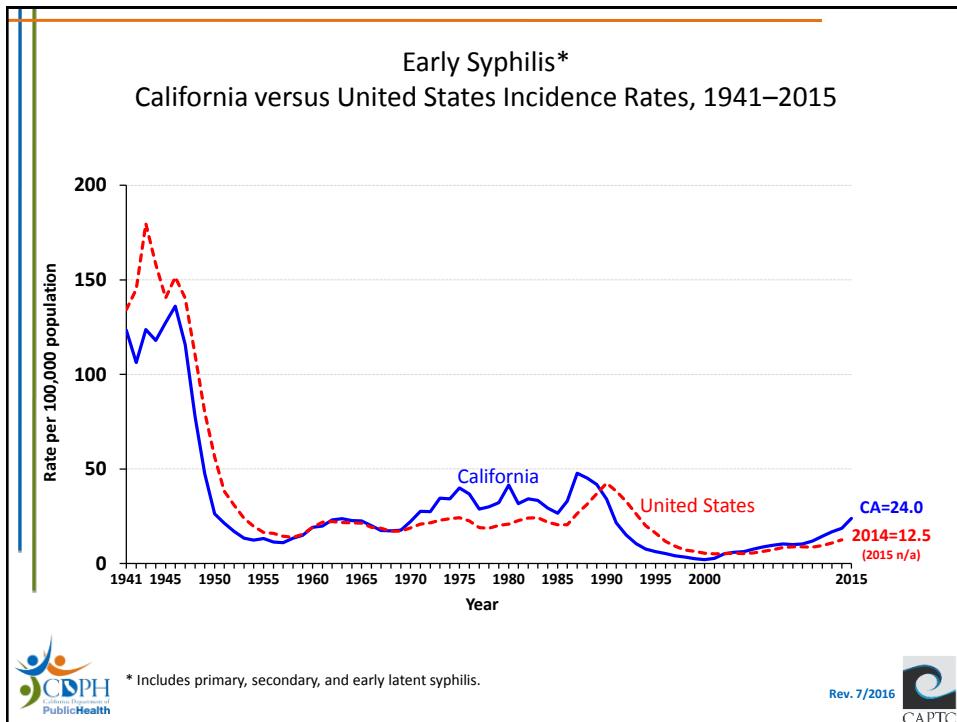
Note: N does not include HIV status unknown or refused to state:

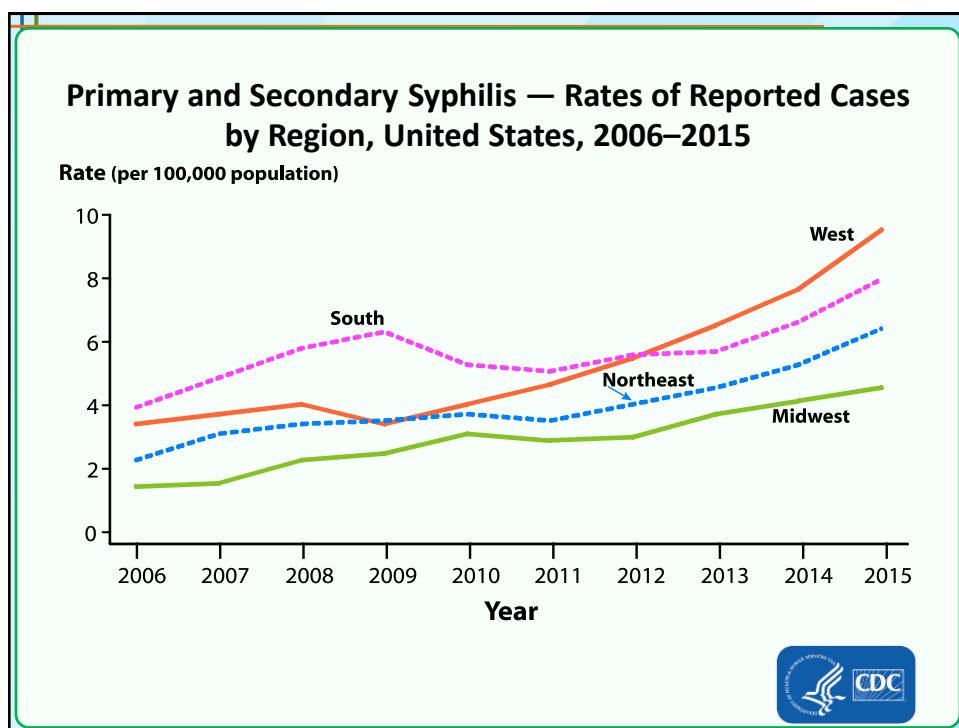
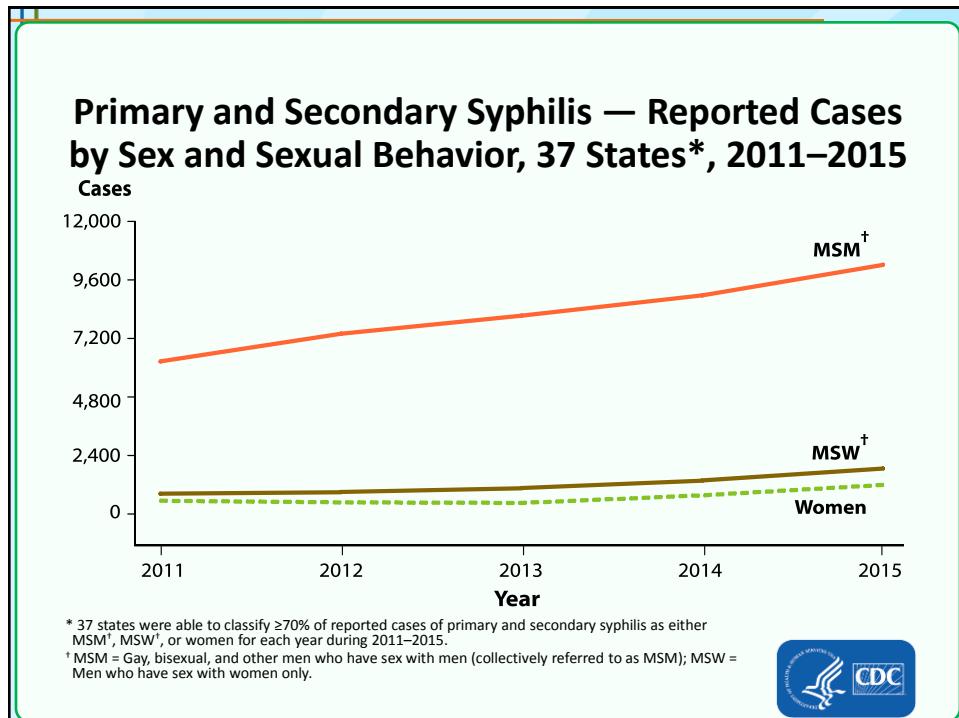
39 cases in 2015-2016.

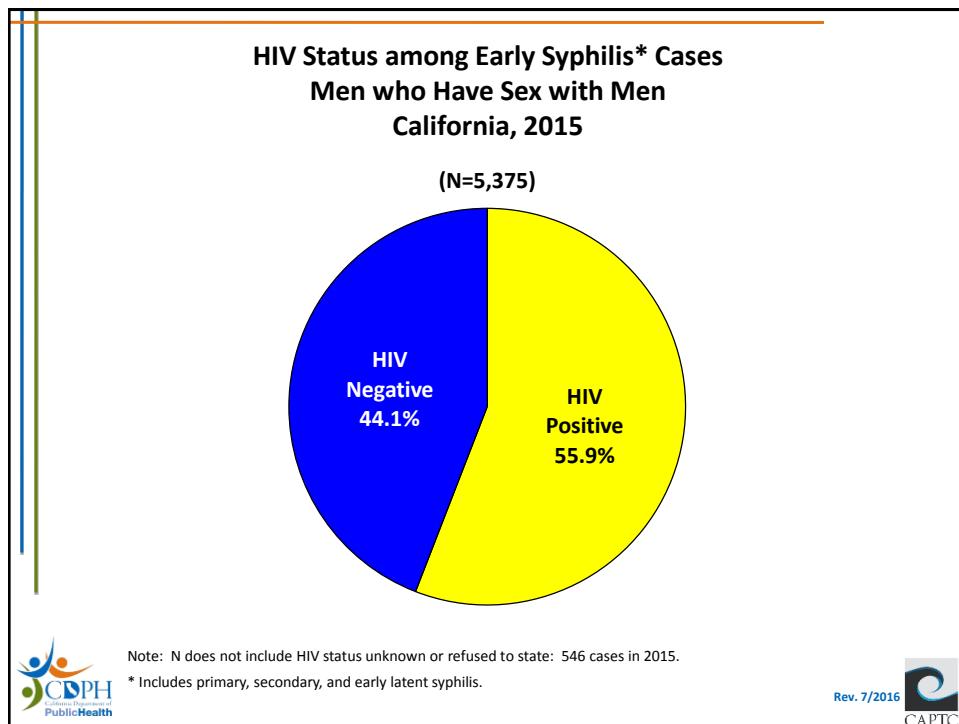
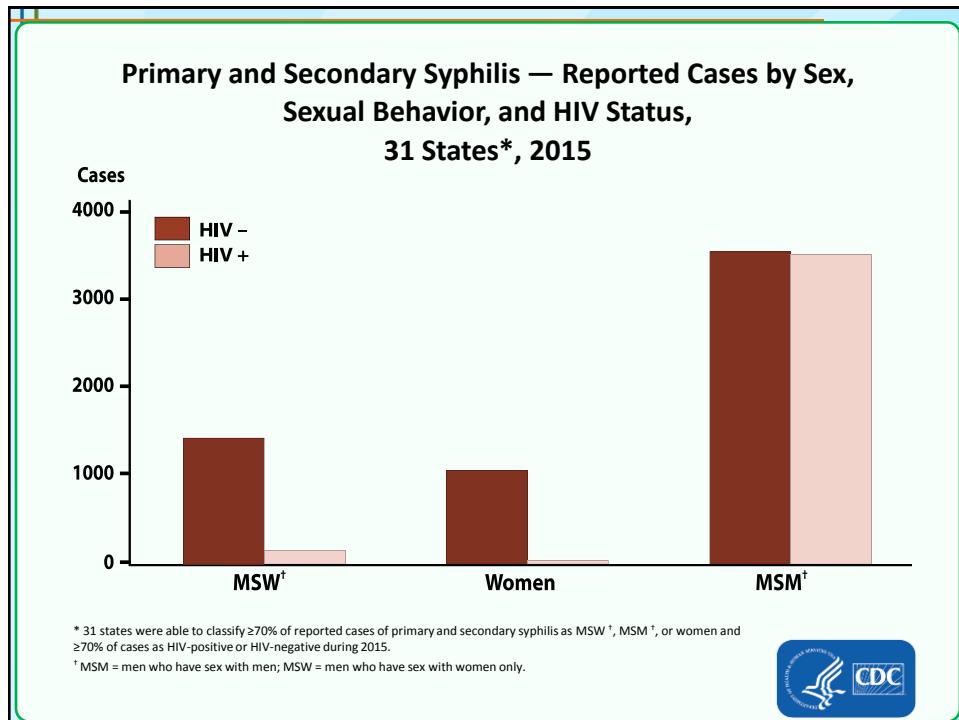
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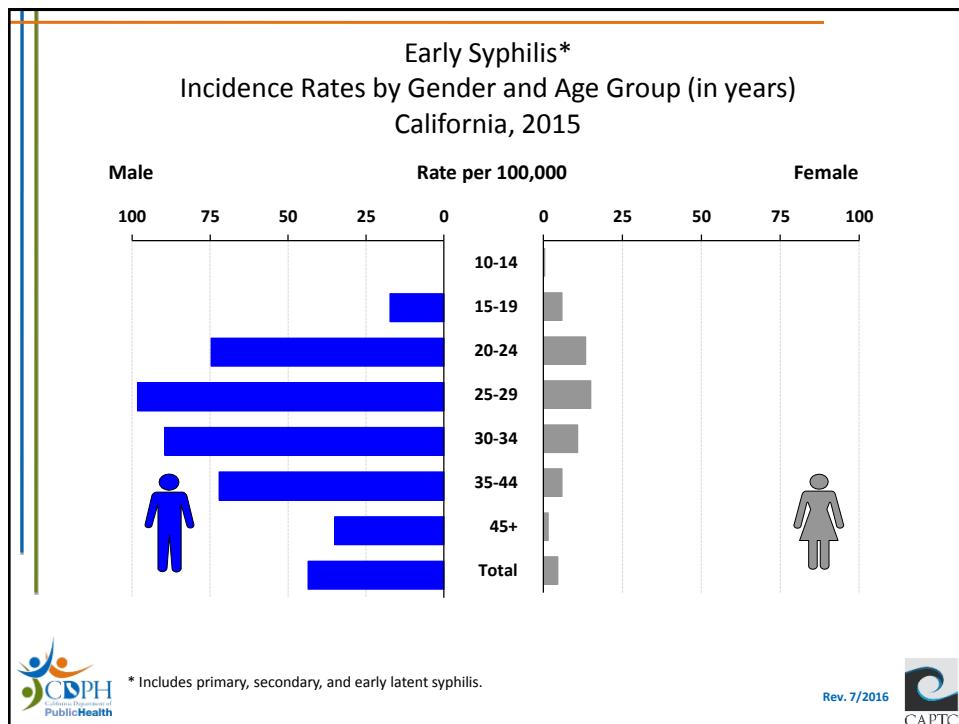
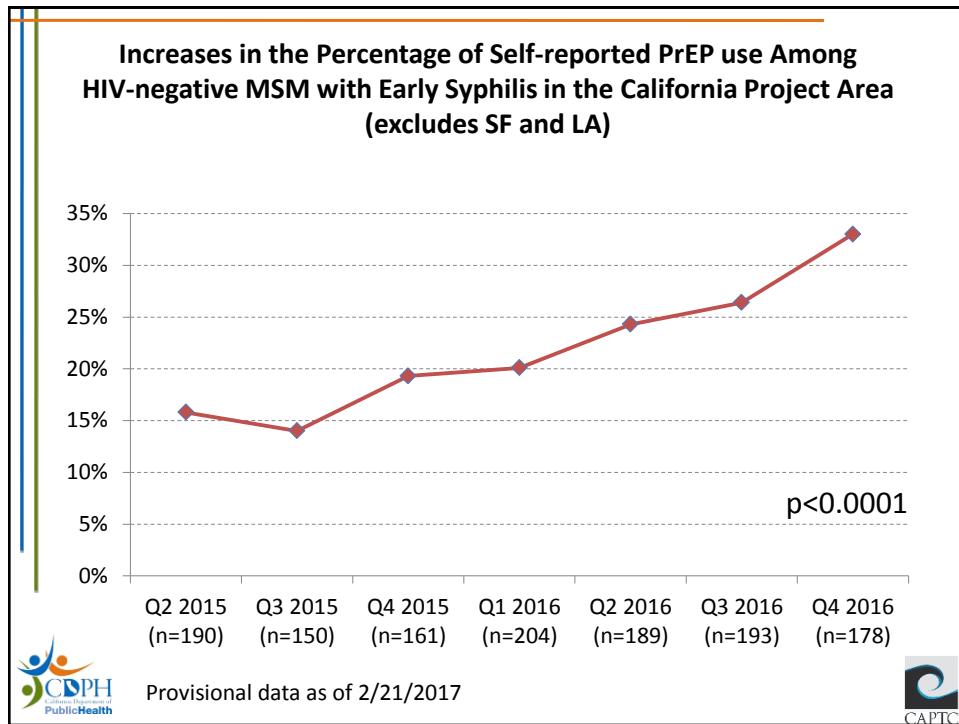


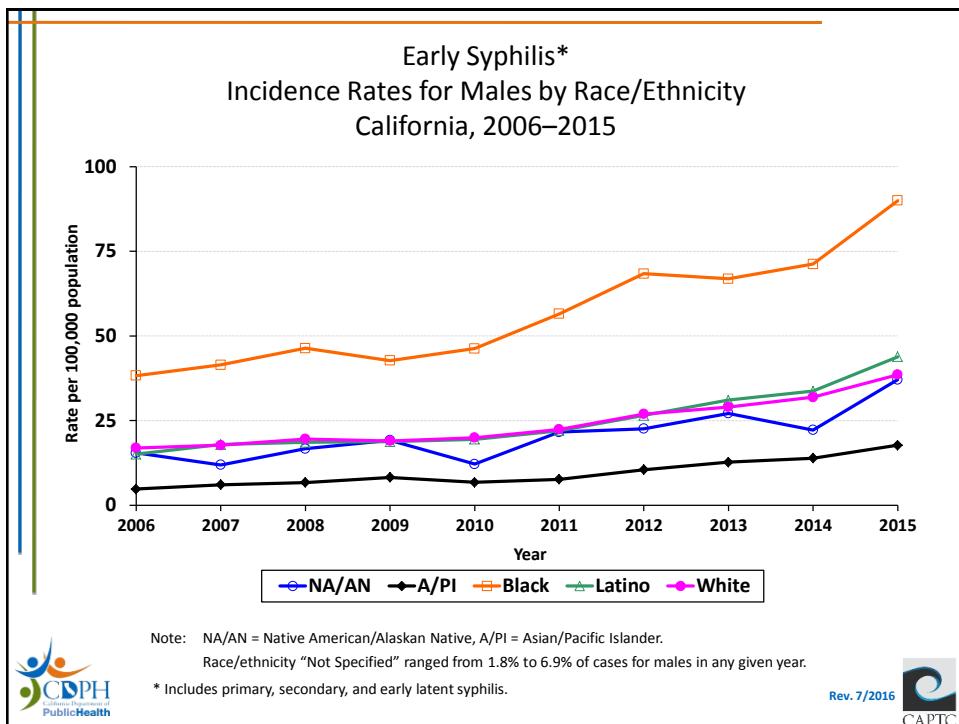












Key Points

- STDs are increasing in California
- **In 2015, men who have sex with men made up 70% of MALE early syphilis cases and 63% of MALE gonorrhea cases in California**
- A high proportion of the reported STD cases are in MSM who are HIV positive
- Increasing percentages of HIV negative MSM with STDs are reporting PrEP use
- Therefore, HIV care settings and clinics that prescribe PrEP provide opportunities to improve STD screening among populations at risk for STDs



Screening Recommendations, Including Rectal and Pharyngeal STDs



Graphic created by : Aha-Soft from Noun Project

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STDs and HIV



STDs increase risk of HIV acquisition and transmission

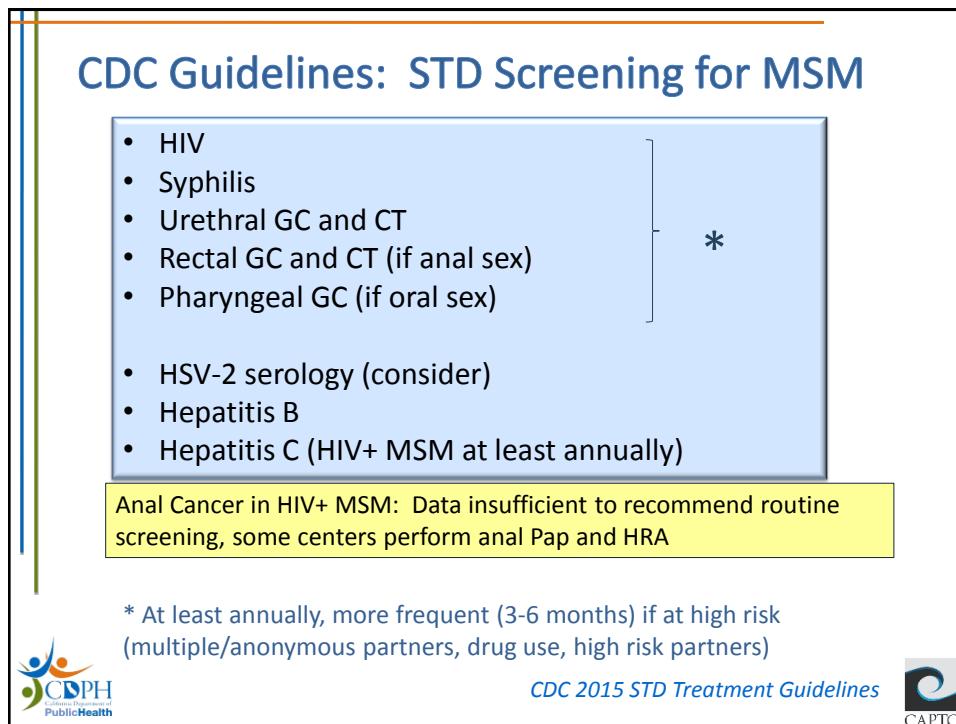
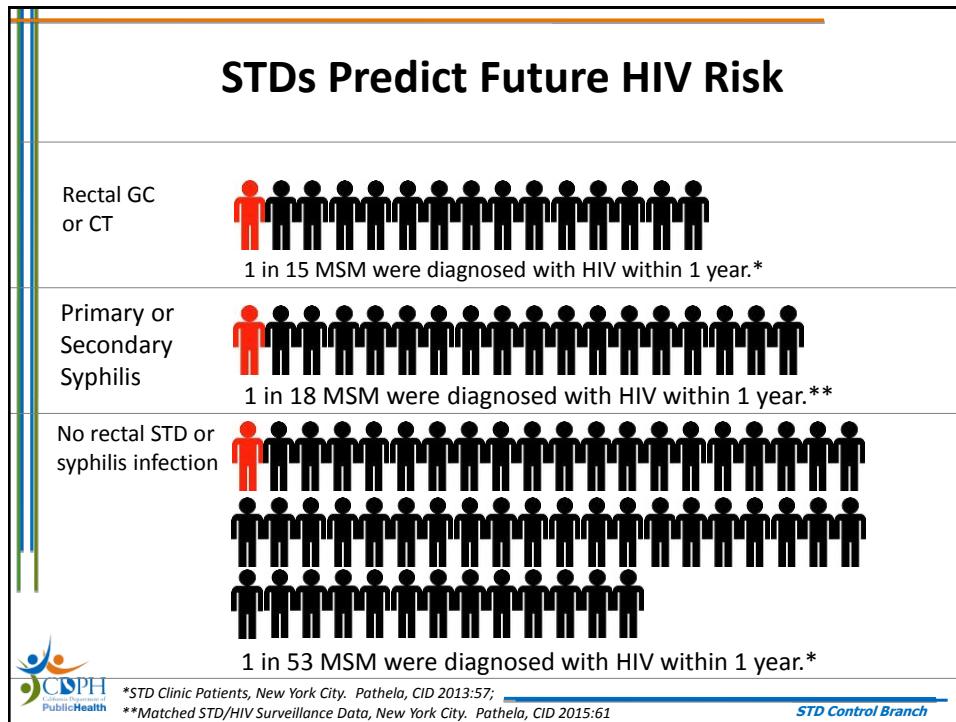
- Reduce barriers to viral entry
- Increase number and density of HIV-1 receptor-positive cells via inflammation
- Contribute to an imbalance of protective vaginal flora
- Increase HIV concentrations in plasma, genital lesions or secretions



Wasserheit JN STD 1992; Hayes RJ
AIDS 2010; Sexton STD 2005

Slide adapted from Dr. Stephanie Cohen

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STD Screening Recommendations: HIV-positive Men & Women

STD	Testing site or test type
Chlamydia	Genital, rectal if exposed
Gonorrhea	Genital, rectal & pharyngeal if exposed
Syphilis	Serology
Trichomoniasis	Vaginal
Hep B (HBsAg, HBsAb, HBcAb)	Serology
Hep C	Serology
HPV-related cancer	Cervical cytology for women Anal cytology for MSM is controversial, digital anorectal exam may be useful for early detection

* Screen at least annually; repeat screening every 3-6 months as indicated by risk.



Primary Care Guidelines for the Management of Persons Infected with HIV: 2013 Update by the HIVMA of the IDSA.
Clin Infect Dis 2014;58(1):e1-e34. DHHS Guidelines for the prevention and treatment of OIs in HIV-infected adults
and adolescents: recommendations from the CDC, NIH, HIVMA. http://aidsinfo.nih.gov/contentfiles/adult_ois.pdf



Syphilis Screening Recommendations for Non-Pregnant Adults and Adolescents, 2016



Recommendation Summary

Population	Recommendation	Grade (What's This?)
Asymptomatic, nonpregnant adults and adolescents who are at increased risk for syphilis infection	The USPSTF recommends screening for syphilis infection in persons who are at increased risk for infection.	A

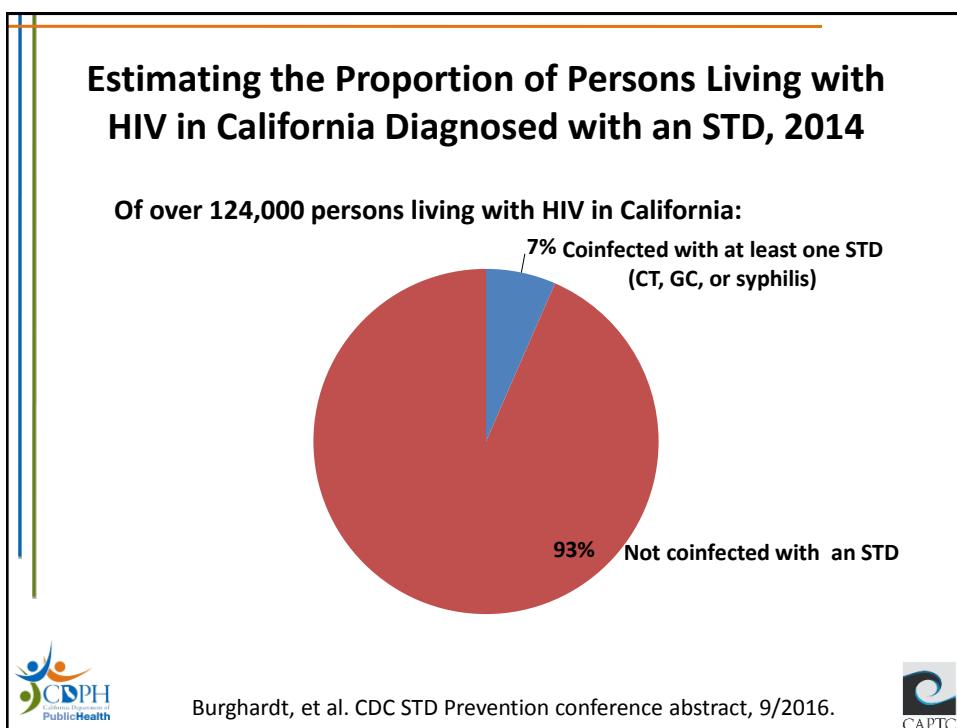
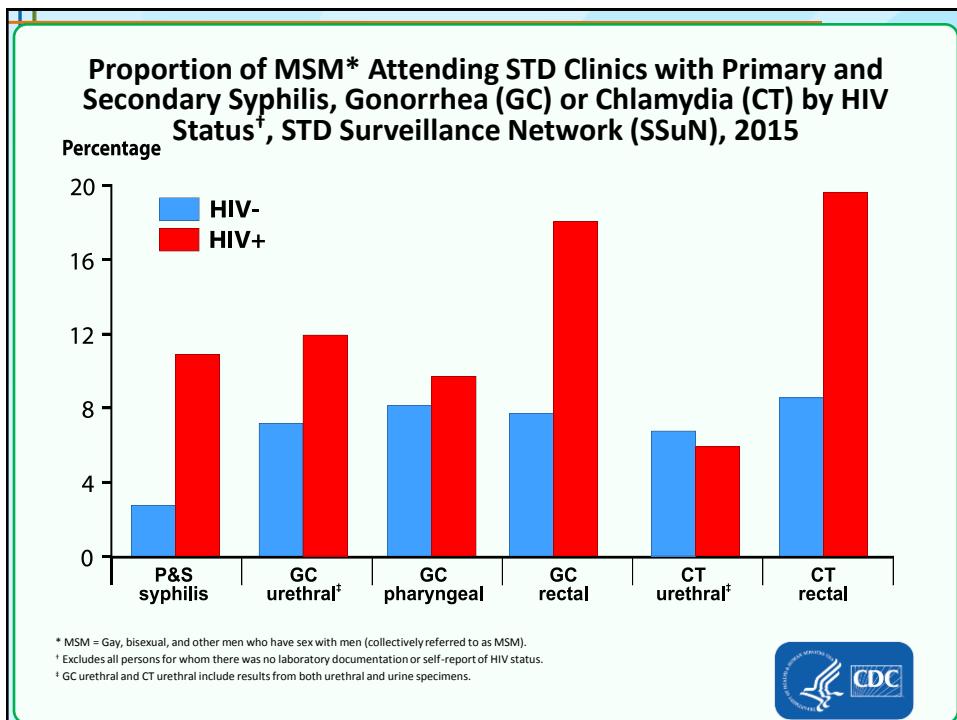
Strongest recommendations :
Men who have sex with men
HIV-infected individuals

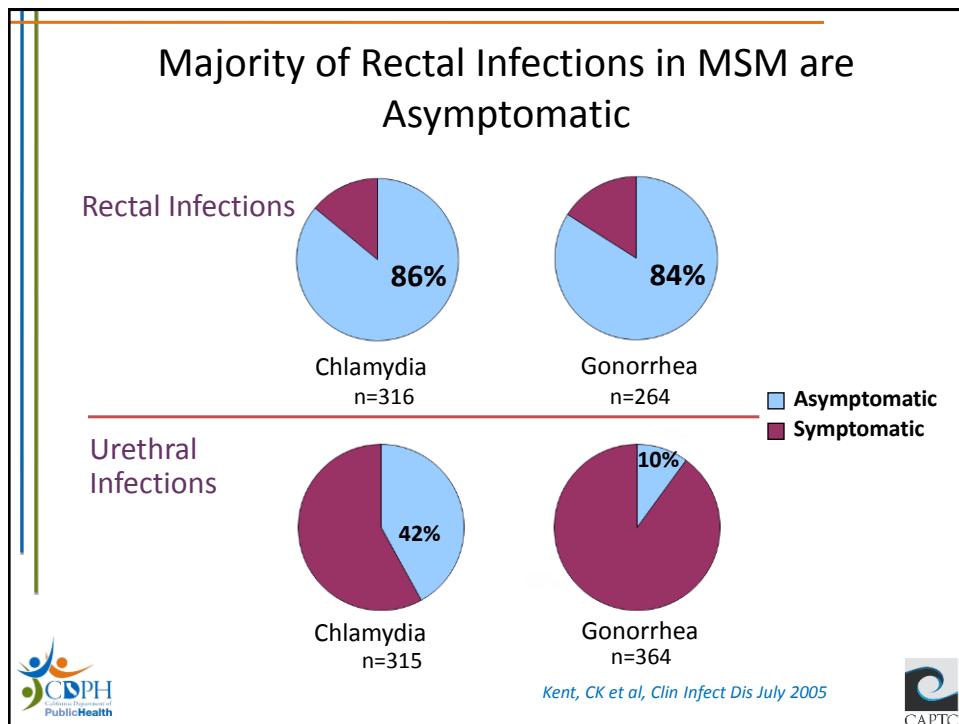
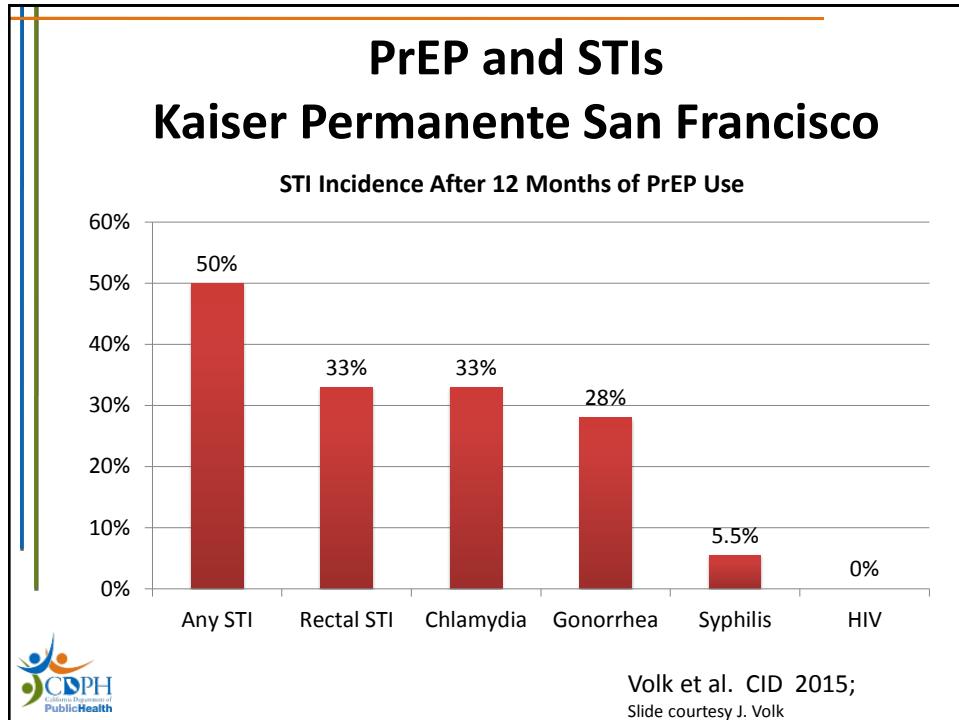
Screening others was to be informed by national and local epi,
hx incarceration, sex work

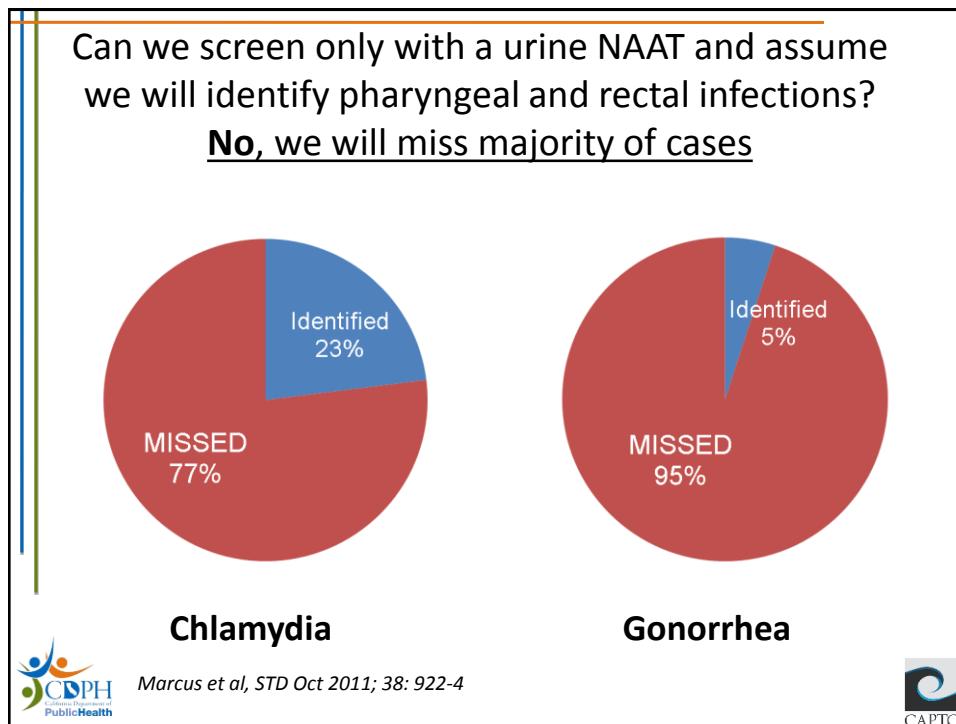
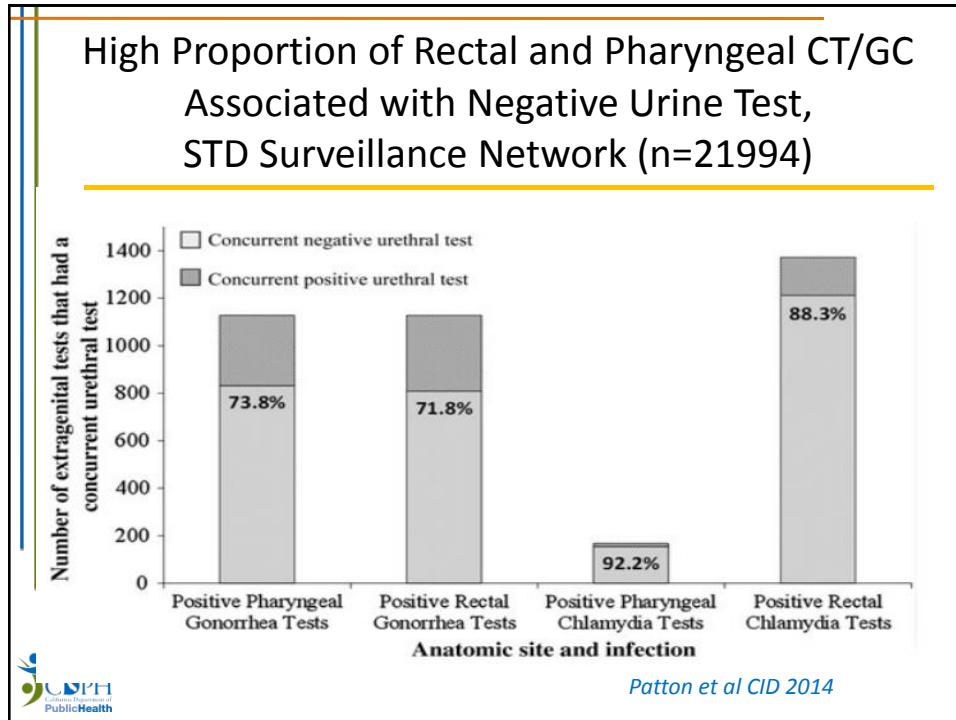


Screening for Syphilis Infection in Non-pregnant Adults and Adolescents. US Preventive Services Task Force Recommendation Statement JAMA 2016









Centers for Disease Control and Prevention

MMWR

Recommendations and Reports / Vol. 63 / No. 2

Morbidity and Mortality Weekly Report

March 14, 2014

Recommendations for the Laboratory-Based Detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* — 2014

Major conclusions

NAATs recommended for detection of genital tract infections in men and women – with and without symptoms

Optimal specimen types are:

First catch **urine** for men
Self collected **vaginal** swabs from women

NAATs recommended for: detection of **rectal** and **oropharyngeal** infections

- not FDA-approved for rectal or pharyngeal specimens but remain the preferred testing method over culture



Chlamydia and Gonorrhea NAATs: Rectal and Pharyngeal Sites

- NAATs have not been cleared by FDA for these indications
- NAATs can be used by laboratories that have undergone validation procedures and met all regulatory requirements for an off-label procedure
- Large commercial labs accept these specimens
- Opportunity for self-collection (which may also require validation)
- CDPH can assist with lab protocols, billing codes

<https://archive.cdph.ca.gov/programs/std/Pages/MSMToolkit.aspx>



*CDC. MMWR 2014 / 63(RR02);1-19
Van der helm, 2009, STD; Sexton, 2013 J Fam Pract; Dodge, 2012 Sex Health
Freeman 2011, STD; Alexander 2008, STI; Moncada 2009, STD*



NAAT Laboratory Ordering and Billing Codes

	Company-Specific Ordering Codes for Combined GC/CT Nucleic Acid Amplified Tests (NAATs)		Company-Specific Ordering Codes for CT test only
	LabCorp*	Quest*	LabCorp
Rectal	188672	16506	188706
Pharyngeal	188698	70051	188714

NAATs are offered at (or from) any location in the country with these two codes.

For information on specimen collection and transportation, clinicians should contact the local reference laboratory representative.

CPT Billing Codes	
CT detection by NAAT	87491
GC detection by NAAT	87591

*CDC does not endorse these laboratories, however, they represent the largest laboratories nationally. There may be other private laboratories that have verified rectal and pharyngeal testing with NAATs. Many PHLs have also verified rectal and pharyngeal testing.



Bolan, CDC webinar March 2011

Self-collected Rectal/Pharyngeal STI Testing

- Highly acceptable, similar performance compared to clinician-collected specimens
- Self-collection can be performed at laboratory along with blood draw/urine collection or in the exam room before/after the provider visit
- May save patient an office visit
- May save the provider time
- Standing orders in EMRs may facilitate patient-collected testing

Van der helm, 2009, STD; Sexton, 2013 J Fam Pract; Dodge, 2012 Sex Health Freeman 2011, STD; Alexander 2008, STI; Moncada 2009, STD



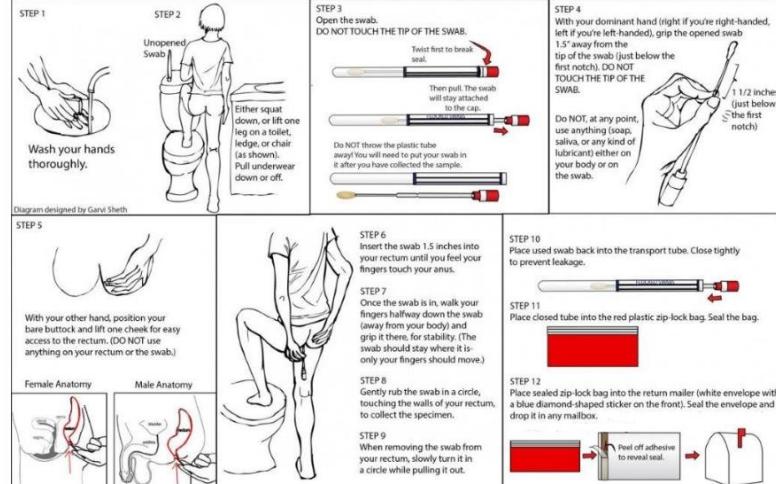
IWTK I WANT THE KIT

READ ALL INSTRUCTIONS BEFORE YOU START.

If you are requesting a rectal test kit, follow the step-by-step instructions below.

Self-Collection of Rectal Swab

ATTENTION: Read ALL instructions before you begin!



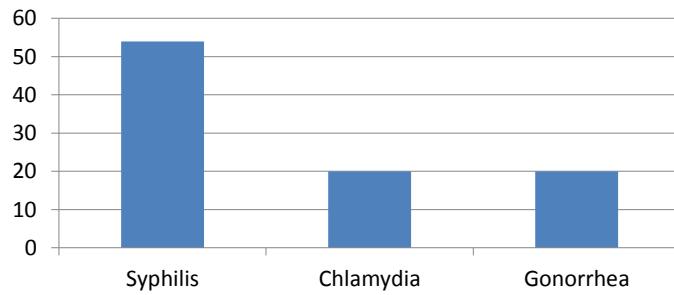
<https://www.iwantthekit.org/testing/rectal-testing/>



Suboptimal STD Screening among MSM in HIV Care

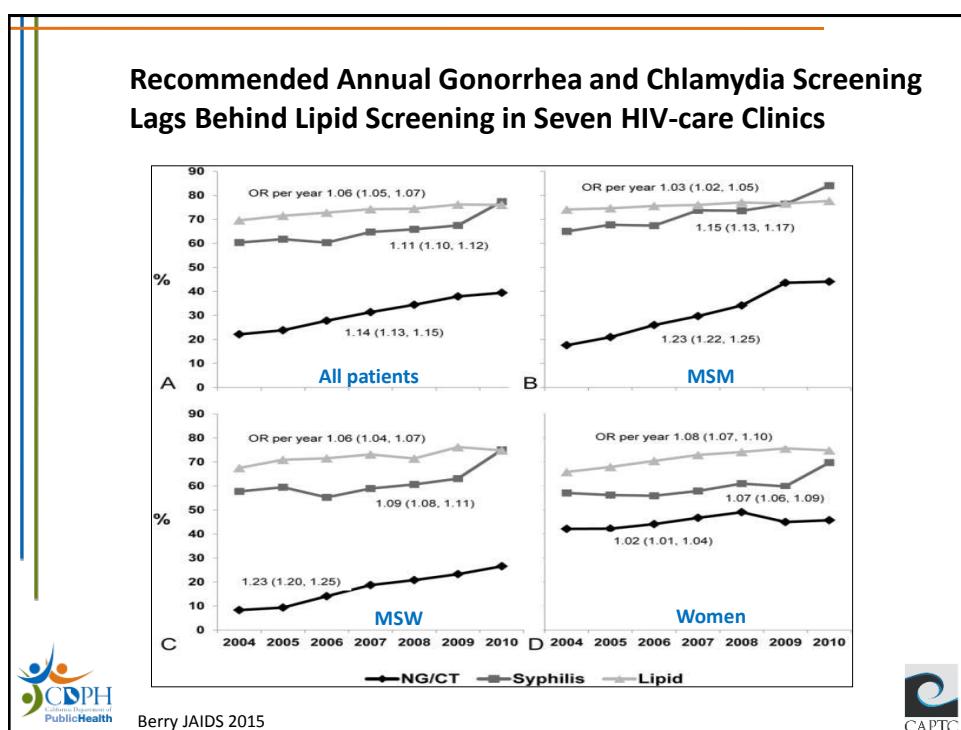
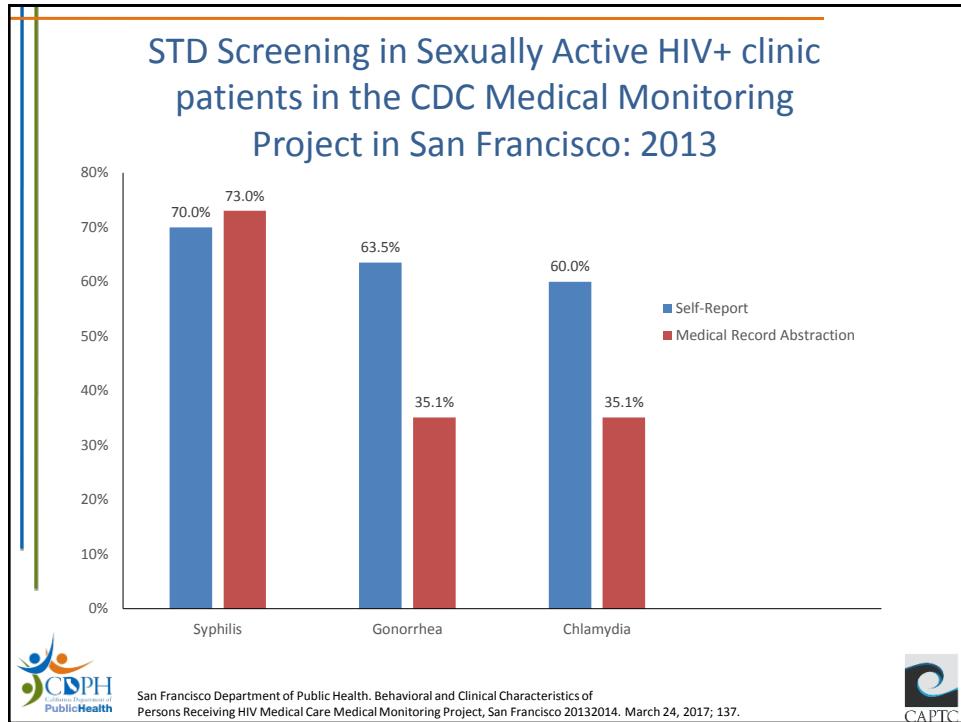
- N=4217 interviews and chart reviews from Medical Monitoring Project, nationally representative sample of adults in HIV care

% of sexually active HIV+ MSM screened for STIs, N=1411



Flagg EW, 2015, STD





Identify Methods/Best Practices for Routinely Conducting a Sexual History



STD Control Branch

How Do We Know if Our Patients are at Risk for STDs/HIV?

- Infections are commonly asymptomatic, so relying on report of symptoms is not adequate
- *Discussions about risk behaviors are necessary*



Sexual History/Risk Assessment Guides Clinical Services & Prevention Efforts

- Allows individualization of STD/HIV diagnosis and screening for asymptomatic infection => detect disease and prevent serious sequelae
- Guides counseling through risk assessment => promote behavior change to prevent future infection
- Allows patient to express concerns and ask questions
- Enables appropriate referrals



Concerns about Taking a Sexual History

- Patients: confidentiality/privacy
- Providers:
 - Discomfort discussing sexual issues
 - What to ask and how to ask it
 - What to do with all the information
 - Accomplishing it quickly



Barriers to Taking a Sexual History

- Structural barriers (time/reimbursement concerns)
- Low priority given to STD prevention
 - Low priority given to sexual health issues
 - Acute versus preventive role perception
- Unfamiliarity with content or language
 - Perceived complexity of the sexual history
 - Inadequate training
- Provider discomfort discussing sexual health



Discomfort as a Barrier

“Ironically, it may require greater intimacy to discuss sex than to engage in it.”

The Hidden Epidemic: Confronting Sexually Transmitted Diseases

Institute of Medicine, 1997



Sexual History: How to begin...

- Acknowledge personal nature of the subject matter
 - *"I know this is very personal information"*
- Normalize conversation and emphasize confidentiality
 - *"I talk to all of my patients about their sexual history because it is an important part of their health. Before I ask my questions, I want to let you know that everything we talk about is confidential."*
- Explain how the information will help you care for the patient
 - *"This information will help me understand if there are issues with your health that I can help with."*



Summary: The Five “P’s”



- Partners
 - *"Have your sex partners been males, females, or both?"*
- (Sexual) Practices
 - *"What types of sex did you have?"*
- Past STDs
 - *"What STDs have you had in the past?"*
- Prevention of STDs/HIV
 - *"What do you do to prevent getting an STD or HIV?"*
- Pregnancy history and plans
 - *"Are you and your partner planning on having a baby or getting pregnant in the next year?"*
 - *"What do you and your girlfriend use to prevent pregnancy?"*



General Considerations for Taking a Sexual History

- Make no assumptions
 - Ask all patients about gender and number of partners
 - Ask about specific sexual practices
 - ✓ Vaginal, anal, and oral sex
- Be clear
 - Avoid medical jargon
 - Clarify when necessary



More Considerations for Sexual History Taking

- Be tactful and respectful
 - Avoid showing surprise
 - Never use a family member as a translator
- Be non-judgmental
 - Recognize patient concerns
 - Recognize our own biases
 - Avoid value-laden language

"You should..."

"Why didn't you..."

"I think you..."



Use Neutral Language



Why didn't you use a condom?



Do you tell your partners that you are HIV positive?



Why didn't you finish all your medicine?



What made it difficult to use a condom in that situation?



What's your approach to discussing HIV status with partners?



What made it difficult to finish all your medicine?



What about Time Constraints or Issues Not Fully Discussed?

- Schedule follow-up visit
- Refer to a counselor (if available in clinic)
- Offer patient information sheets
- Refer to a specialized care source and/or hotline: support group, substance abuse treatment, domestic violence



Taking Personal Stock

- Helping clients change behavior may begin with changing some of our own:
 - Give it a try!!
Be willing to practice a new skill
 - Work on recognizing biases and keeping them in check



Sexual Health Survey

In the past year, have you had sex with:

Men

Women

Both

Provider Report

Summary of patient's answers

Recommendations for STD testing according to national guidelines

Suggestions for education and counseling "conversation starters"

Report (Sample_1, Jul 19, 2013) Print

Sample_1 - July 19, 2013

Partners	Gender of partner(s)	Transgender Partner(s)	# of partners	New Partner(s)	Partner Has Partner(s)	Any negative partners	Partner(s) use Meth
Yes	Men	FTM	2-5	Yes	N/A	Unsure	Yes

Practices	Sex in last 3 months	Venues	Disclosure	Sexual practices	Condom use	Substance use	STD in past year
Yes	new partner(s); Mobile Apps (Grindr, Radar, etc.)		More than 1/2	RAS, Give oral sex (MSM); Receives oral sex, Give oral sex (MSW)	RAS	Sometimes	Gonorrhea

Recommended STD Screening (check mark appears if test is indicated)		Counseling Messages					
Screen	check for last annual test	test today	# of partners	What types of relationships do you have with your partners—Steady partners/boyfriend/girlfriend? Friends you see from time to time? Casual partners?			
Syphilis, serology, per protocol		✓	Venues	Tell me about where you meet partners. How do you approach safer sex and using condoms in situations with new partners?			
Rectal CT and GC; rectal swab		✓	Disclosure	What is your approach to disclosing HIV status with partners? What has been the most difficult part of discussing HIV status with partners?			
Urogenital CT and GC; urine		✓	HIV Transmission	How do you protect your negative partners from acquiring HIV? (Unprotected topping; condom, oral sex only) How do you protect yourself and your partners from sexually transmitted infections?			
Pharyngeal GC; pharyngeal swab		✓	Condom use	Having anal sex, particularly as a "top", can pass HIV to negative partner(s). Unprotected sex can spread STDs, which are more common among HIV+ MSM. What made it difficult to use condoms? What steps can you take? What do you do to make using condoms more likely?			
Recent STD Treatment: Test for Gonorrhea		✓	Substance Use	Using drugs like crack, cocaine, or meth can affect your health. Have you thought about cutting back or getting help? Has your drug/alcohol use been a concern to you or your loved ones? Has your drug/alcohol use caused tension/problems in your relationships?			

Expert STD Clinical Services are a Key Principle in Reducing HIV in the United States

1.B.2 

Support and strengthen integrated and patient-centered HIV and related screening (sexually transmitted infections [STI], substance use, mental health, intimate partner violence [IPV], viral hepatitis infections) and linkage to basic services (housing, education, employment).

1.B.3 

Expand access to effective prevention services, including pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP).

NATIONAL HIV/AIDS STRATEGY for the UNITED STATES:

UPDATED TO 2020

JULY 2015



<https://www.aids.gov/federal-resources/national-hiv-aids-strategy/nhas-update.pdf>



Chlamydia and Gonorrhea Treatment



STD Control Branch

Chlamydia Treatment

Adolescents and Adults

Recommended regimens (non-pregnant):

- ❖ Azithromycin 1 g orally in a single dose
- ❖ Doxycycline 100 mg orally twice daily for 7 days

Recommended regimens (pregnant*):

- ❖ Azithromycin 1 g orally in a single dose

* Test of cure at 3-4 weeks only in pregnancy



CDC 2015 STD Treatment Guidelines www.cdc.gov/std/treatment

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Gonorrhea Dual Therapy

Uncomplicated Genital, Rectal,
or Pharyngeal Infections

Ceftriaxone 250 mg IM in
a single dose

PLUS*

Azithromycin
1 g orally

- Regardless of CT test result



CDC 2015 STD Treatment Guidelines
www.cdc.gov/std/treatment

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Gonorrhea Treatment Alternatives

Anogenital Infections

ALTERNATIVE CEPHALOSPORINS:

- ❖ Cefixime 400 mg orally once

PLUS

- ❖ Azithromycin 1 g, regardless of CT co-infection

IN CASE OF SEVERE ALLERGY:

Gentamicin 240 mg IM + azithromycin 2 g PO

OR

Gemifloxacin 320 mg orally + azithromycin 2 g PO



CDC 2015 STD Treatment Guidelines www.cdc.gov/std/treatment

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Who needs a test of cure for GC?

- Patients with pharyngeal GC treated with an alternative regimen
 - Obtain test of cure 14 days after treatment, using either culture or NAAT
- Cases of suspected treatment failure (culture and simultaneous NAAT)
- Consider if using non-recommended or monotherapy

CDC 2015 STD Treatment Guidelines www.cdc.gov/std/treatment



Examples of Complicated STDs

- Antibiotic-resistant gonorrhea
- Ocular syphilis



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Neisseria gonorrhoeae causes gonorrhea, a sexually transmitted disease that can result in discharge and inflammation at the urethra, cervix, pharynx, or rectum.

RESISTANCE OF CONCERN
N. gonorrhoeae is showing resistance to antibiotics usually used to treat it. These drugs include:

- ceftriaxone (or oral cephalosporin)
- cefixime (an injectable cephalosporin)
- aztreonam
- tetracycline

PUBLIC HEALTH THREAT

According to the most recent data reported, gonococcal infection in the United States is on the increase. It occurs more frequently in certain groups and disproportionately affects sexual, racial, and ethnic minorities. Gonococcal control relies on prompt diagnosis and treatment. Because of the development of resistance, some drugs are less effective in treating gonorrhea. CDC recently updated its treatment guidelines to slow the emergence of drug resistance. CDC now recommends oral ceftriaxone

plus either aztreonam or doxycycline as first-line treatment for gonorrhea. The emergence of resistance to aztreonam and tetracycline resistance, would greatly limit treatment options and could disrupt gonorrhea control efforts.

In 2011, 321,849 cases of gonorrhea were reported to CDC, but CDC estimates that more than 800,000 cases occur annually in the United States.

	Percentage	Estimated number of cases
Gonorrhea	30%	246,000
Resistance to any antibiotic	30%	246,000
Reduced susceptibility to ceftriaxone	≤1%	11,480
Reduced susceptibility to aztreonam	≤1%	3,280
Reduced susceptibility to azthromycin	≤1%	2,400
Resistance to tetracycline	33%	180,600

Data: The Gonococcal Isolate Surveillance Project (GISP)-2,800 isolates tested for susceptibility in 2011.

For more information about gonorrhea and related topics see gonorrhea.cdc.gov.



U.S. Department of
Health and Human Services
Centers for Disease Control and Prevention

Screening for rectal and pharyngeal gonorrhea, and appropriate two drug treatment with ceftriaxone and azithromycin, are key strategies in reducing the risk of resistant *Neisseria gonorrhoeae*



Cephalosporin Treatment Failures

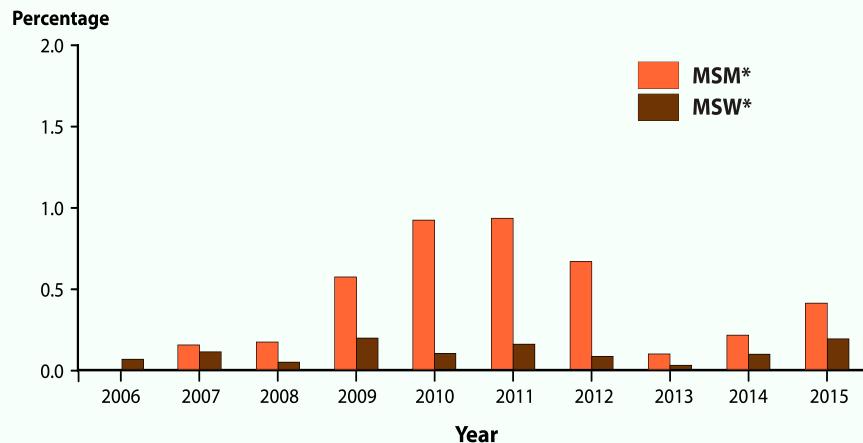
- Oral cephalosporin treatment failures reported worldwide
 - Japan, Hong Kong, England, Austria, Norway, France, South Africa, and Canada
 - No cephalosporin treatment failures reported in U.S. to date
- Ceftriaxone treatment failures in pharyngeal gonorrhea and a few isolates with high-level ceftriaxone resistance reported



HEALTH ALERT
BEWARE OF
GONORRHEA
SUPERBUG

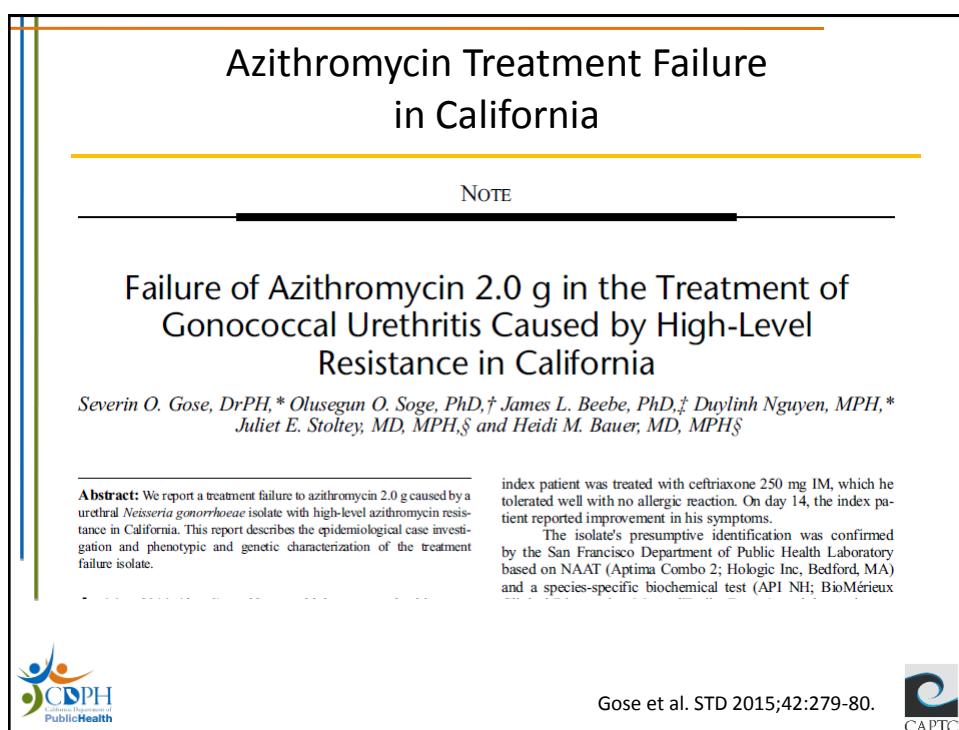
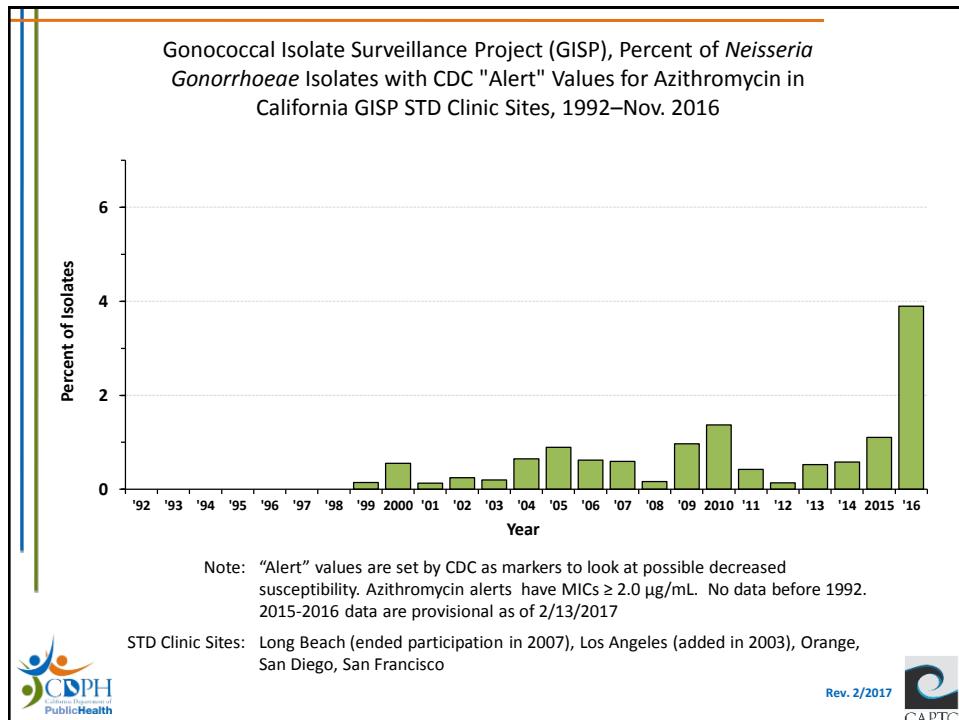


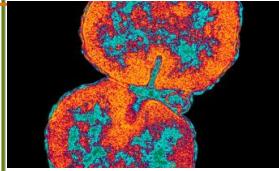
Neisseria gonorrhoeae — Percentage of Urethral Isolates with Elevated Ceftriaxone Minimum Inhibitory Concentrations (MICs) ($\geq 0.125 \mu\text{g/ml}$) by Reported Sex of Sex Partner, Gonococcal Isolate Surveillance Project (GISP), 2006–2015



* MSM = Gay, bisexual, and other men who have sex with men (collectively referred to as MSM); MSW = Men who have sex with women only.







the guardian

Doctors fear spread of 'super-gonorrhoea' across Britain

Drug-resistant strain of sexually transmitted superbug at risk of becoming untreatable, say health experts

Press Association

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A highly drug-resistant type of "super-gonorrhoea" is spreading across the country, with senior medics warning it may become untreatable.

A powerful strain of the sexually transmitted superbug first seen in the north of England has been found in the West Midlands and the south-east, Public Health England (PHE) said.

The strain is highly resistant to the antibiotic azithromycin, which means medics are relying on a second drug, ceftriaxone, to treat it. But there are no other effective drugs to tackle the strain, raising the prospect of it becoming untreatable if it builds further resistance.

 <http://www.theguardian.com/society/2016/apr/17/gonorrhoea-will-spread-across-uk-doctors-fear> 



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Gonorrhea outbreak in Hawaii shows increased antibiotic resistance

By Susan Scutti, CNN

Updated 10:50 AM ET, Thu September 22, 2016





Suspected GC Treatment Failure

TEST WITH CULTURE AND NAAT:

- If GC culture not available, call your local health department

REPEAT TREATMENT:

- Gemifloxacin 320 mg + AZ 2g OR Gentamicin 240 mg IM + AZ 2g
- If reinfection suspected, repeat treatment with CTX 250 + AZ 1g

REPORT:

- To your local health department within 24 hours

TEST AND TREAT PARTNERS:

- Treat all partners in last 60 days with same regimen

TEST OF CURE (TOC):

- TOC 7-14 days with culture (preferred) and NAAT



CAPTC

Ocular Syphilis



Photo Courtesy: Dr. Kees Rietmeijer, STD Control , Denver PHD

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Notes from the Field

A Cluster of Ocular Syphilis Cases — Seattle, Washington, and San Francisco, California, 2014–2015

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From December 1, 2014, to January 30, 2015, in King County, Washington, four cases of ocular syphilis, defined as clinical signs or symptoms consistent with ocular disease (e.g., uveitis or vision loss) in a person with laboratory-confirmed syphilis of any stage, were reported. All four cases occurred in men who have sex with men (MSM), two of whom were sex partners. Median age of the four patients was 39 years

- Dec 2014-Jan 2015:
4 cases in Seattle-King county
 - All MSM
 - 3 HIV-infected
 - All treated
 - 2 considered legally blind after 5 months
- Dec 2014-Mar 2015:
8 cases in San Francisco
 - 6 MSM
 - 7 HIV-infected
 - All treated
 - 1 with permanent vision loss in one eye after 3 months



<https://www.cdc.gov/mmwr/pdf/wk/mm6440.pdf>

Slide courtesy of Drs. Torrone & Kidd, CDC



Clinical Advisory: Ocular Syphilis in the United States

Updated April 16, 2015

Since December 2014, 24 cases of ocular syphilis have been reported from California and Washington, with several other states reporting potential cases. The majority of cases have been among HIV-infected MSM; a few cases have occurred among HIV-uninfected persons including heterosexual men and women. Several of the cases have resulted in significant sequelae including blindness.

Neurosyphilis can occur during **any** stage of syphilis including primary and secondary syphilis. Ocular syphilis, a clinical manifestation of neurosyphilis, can involve almost any eye structure, but posterior uveitis and panuveitis are the most common. Additional manifestations may include anterior uveitis, optic neuropathy, retinal vasculitis and interstitial keratitis. Ocular syphilis may lead to decreased visual acuity including permanent blindness. While previous research supports evidence of neuropathogenic strains of syphilis, it remains unknown if some *Treponema pallidum* strains have a greater likelihood of causing ocular infections.

- Clinicians should be aware of ocular syphilis and screen for visual complaints in any patient at risk for syphilis (MSM, HIV-infected persons, others with risk factors and persons with multiple or anonymous partners).
- All patients with syphilis should receive an HIV test if status is unknown or previously HIV-



Suspected Ocular Syphilis, 8 Jurisdictions, 2014-2015 (n=388)

- 93% male
 - 69% of males were MSM
- 56% white, 20% black, 12% Hispanic
- 51% HIV-infected
- Stage at diagnosis
 - 2% primary
 - 26% secondary
 - 20% early latent
 - 50% late or unknown duration
- 84% reported symptoms
 - 65% blurry vision
 - 33% vision loss
 - 14% pain or red eye
- 41% had eye exam
- 45% has CSF analysis with results available
 - 70% had reactive VDRL



MMWR Nov 4 2016; 65(43):1185-88.

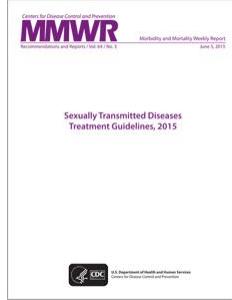
Slide courtesy of Drs. Torrone & Kidd, CDC

Conclusions

- Bacterial STDs are highly prevalent among MSM and increasing
- Sexual history taking is a core component of guiding recommended clinical and preventive services
- STD testing for syphilis and GC/CT (including rectal and pharyngeal sites) is essential to:
 - Identify asymptomatic infection
 - Reduce transmission
 - Identify candidates at risk for HIV acquisition and initiate on PrEP
- As STDs increase, we need to be vigilant in our efforts to reduce associated morbidity, including antibiotic-resistant gonorrhea and ocular syphilis
- HIV care settings and clinics that prescribe PrEP provide opportunities to improve STD screening and sexual health promotion among populations at risk for STDs



Clinical Guidelines and Consultation



www.cdc.gov/std/treatment/



STD Clinical Consultation
Network stdccn.org

CDPH STD Control Branch
Warm line 510-620-3400



CDC STD Treatment Guidelines
App
Available now, free
Search for "STD TX"

Thanks!

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