

## The 2010 STD Treatment Guidelines Webinar will begin shortly

Participants are encouraged to use the audio web stream via their computer speakers or headphones to listen to the webcast as audio quality will be higher using this technology.

For those who do not have computer speakers or headphones, audio is available by calling 1.877.420.2982 and entering passcode 7488 487#

Live questions can be submitted via Adobe Connect Pro.

Due to the volume of Webinar participants and the hour we have allotted, we will not be able to provide live answers to all of the submitted questions.

We will compile and answer these questions and will post them online at [www.nnptc.org](http://www.nnptc.org) and [www.cdc.gov/std/treatment/2010](http://www.cdc.gov/std/treatment/2010) as soon as we can.



National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Division of STD Prevention





Your questions submitted during the Webinar will help determine the focus of future 2010 STD Treatment Guidelines Webinars.

Instructions on how to receive CME credits were sent along with the Webinar registration confirmation via e-mail. These instructions are also available at [www.stdhivtraining.org/resource.php?id=644](http://www.stdhivtraining.org/resource.php?id=644).

An archived version of the Webinar will be available at [www.nnptc.org](http://www.nnptc.org) and [www.cdc.gov/std/treatment/2010](http://www.cdc.gov/std/treatment/2010) within a few days.

If you have questions about the 2010 STD Treatment Guidelines following the Webinar you may submit them to [stdtraining@cdc.gov](mailto:stdtraining@cdc.gov).

## CME

- This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the University of Cincinnati and the Centers for Disease Control and Prevention. The University of Cincinnati is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.
- The University of Cincinnati designates this Live activity and Enduring material for a maximum of *1 AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation.
- The University of Cincinnati is committed to resolving all conflicts of interest issues which may arise as a result of prospective faculty members significant relationships with drug or device manufacturer(s). The University of Cincinnati's mandate is to retain only those speakers with financial interest that can be reconciled with the goals and educational integrity of the CME program.



# Speaker Disclosures

In accordance with the ACCME Standards for Commercial Support of CME, the speakers for the Cincinnati STD/HIV Prevention Training Center have been asked to disclose to participants any significant relationships with commercial entities that are either providing financial support for this program or whose products or services may be mentioned during their presentations. In addition, presentation material for this CME activity may not be developed by personnel employed by a pharmaceutical company.

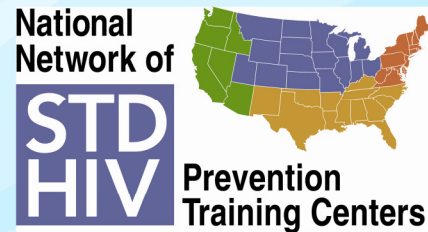
The following relationships were disclosed:

Planning Committee Member	
Blanche Collins, PhD, CHES	No Relationships
Rick Ricer, MD	No Relationships
Barb Boylan, BS	No Relationships
Barb Forney	No Relationships
Jill Huppert, MD, MPH	Grant Recipient & Speaker's Bureau (speaker honorarium) for Genzyme Diagnostics, Inc.; Unrestricted Research grant for clinical conditions of T. vaginalis (No Conflicts); Genzyme/Genprobe – Free titers & reagents (No Conflicts)
Course Director/Speaker	
Charlotte Kent, PhD	No Relationships
Kim Workowski, MD	No Relationships
Gail Bolan, MD	No Relationships
Edward (Ned) Hook III, MD	Grant Recipient for Glaxo-Smith Kline, Gen Probe, Roche Molecular, Becton Dickinson, Siemens Molecular – Product or Service and Clinical conditions (Valacyclovir, Diagnostic Tests for gonorrhea, Chlamydia, trichomoniasis and herpes). <b>Dr. Hook intends to reference off-label/unapproved uses of drugs or devices in his discussion.</b> (Resolved)
Jeanne Marrazzo, MD, MPH	Consultant for Merck Sharpe & Dohme, Graceway Pharmaceuticals, and Bayer Pharmaceuticals – Clinical condition for HIV prevention and Vaginitis (No Conflicts)
Jill Huppert, MD, MPH	Grant Recipient & Speaker's Bureau (speaker honorarium) for Genzyme Diagnostics, Inc.; Unrestricted Research grant for clinical conditions of T. vaginalis (No Conflicts); Genzyme/Genprobe – Free titers & reagents (No Conflicts)



## National Network of Prevention Training Centers (NNPTC)

- Dedicated to increasing and maintaining the skills and knowledge of health professionals in the areas of sexual and reproductive health
- Addresses the STD/HIV prevention training needs of public and private sector health professionals throughout the US, including health departments and community-based organizations
- Develops, delivers, & evaluates training activities on the diagnosis, treatment, and prevention of STDs and HIV
- [www.nnptc.org](http://www.nnptc.org)



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# 2010 STD Treatment Guidelines Webinar:

An Overview by CDC and the NNPTC



January 13, 2011



National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Division of STD Prevention



## Charlotte Kent, PhD

- Acting Director, Division of STD Prevention, CDC



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**Hello, I'm Charlotte Kent, the Acting Director of the Division of STD Prevention at the Centers for Disease Control and Prevention**

## Learning Objectives

- Describe the impact of STDs in the United States
- Discuss the role and importance of the 2010 STD Treatment Guidelines
- Identify the recommended treatment regimens for uncomplicated gonococcal infections
- Discuss antimicrobial resistance in gonorrhea and other STDs
- Identify one resource for additional training on STD prevention and treatment

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The main purpose of today's webinar is to **familiarize clinicians** with the 2010 STD Treatment Guidelines. This slide details the main learning objective of today's webinar which you are familiar with. During the webinar, we would also like to increase your **awareness** about the National Network of Prevention Training Centers as a resource for further training on these guidelines.

## Target Audience

- Providers of clinical care to persons with or at risk for STDs
- Staff in health care settings that provide clinical care for persons with or at risk for STDs

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**Although everyone is welcome to participate in today's webinar, the target audience for this webinar is those providing clinical care to persons with or at risk for STDs, as well as, those working in health care settings that provide clinical care for persons with or at risk for STDs.**

## Future Webinars

- Populations
  - Men who have sex with men (MSM)
  - Adolescents
  - Persons in correctional facilities
- Audiences
  - STD Program managers
  - Providers of STD behavioral interventions and partner services
  - OB/GYNs, family practitioners, and HIV care providers

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**In the interest of time, today's webinar will be a brief overview of the 2010 STD Treatment Guidelines. The Guidelines are very comprehensive and cover many more topics than we can address today. Because of this, we will be producing future webinars that address specific populations in much greater detail including: men who have sex with men (MSM), adolescents, and persons in correctional facilities. Future webinars will also be geared at specific audiences, including STD program managers, providers of STD behavioral interventions and partner services, as well as specific providers types such as OB/GYNs, family practitioners, and HIV care providers**

## Webinar Overview

- Importance of diagnosis and treatment of STDs
- 2010 STD Treatment Guidelines
  - Clinicians' role in STD prevention
  - Highlights of key recommendations
  - Important changes from 2006 Guidelines
- Questions and Answers
- NNPTC's role in STD prevention
- Additional resources

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Over the next hour, I will be discussing why appropriate diagnosis and treatment of STDs is important to the health of your patients. Then Kim Workowski will introduce you to specifics of the 2010 STD treatment guidelines including: the clinician's role in STD prevention, highlights of key recommendations that will be broadly applicable, and important changes since the publication of the 2006 guidelines.

After Dr. Workowski's presentation, you will have the opportunity to ask a panel of three distinguished STD subject matter experts, questions about what the guidelines mean in practice. The question and answer period will be moderated by the incoming Director of the Division of STD Prevention at CDC, Gail Bolan, and the panel also includes Jeanne Marazzo and Ned Hook.

We encourage participants with questions to submit them in writing, utilizing the Ask a Question feature to the left of the viewing screen. Due to the large number of webinar participants, we will not be able to provide live answers to all submitted questions but they will be compiled, answered, and posted online on the NNPTC and CDC STD Treatment Guidelines websites (as listed on the Educational and Training Resources slide that will be shown toward the end of the Webinar).

## Why Diagnose and Treat STDs?

- >19 million STDs in US annually
- Health consequences of untreated STDs
  - Women's reproductive health
    - Untreated Chlamydia (CT) or gonorrhea (GC) may lead to pelvic inflammatory disease (PID)
    - Leading infectious cause of infertility in the U.S.
  - Infant mortality/morbidity
    - Neonatal HIV, herpes simplex virus (HSV) and congenital syphilis
  - HIV transmission
- Health care cost
  - \$16.4 billion (2009)†

†Estimates incorporate minor corrections noted in Persp Sex Rep Hlth, Dec 2009.

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**So why should providers diagnose and treat STDs.**

**There are over 19 million cases of STD that occur annually in the US, but most of these infections are asymptomatic and cannot be correctly managed with out appropriate diagnosis and treatment.**

**Left untreated, even asymptomatic STDs, can cause serious health problems ranging from infertility to the increased risk of HIV infection. For example,**

**•Diagnosis and treatment can improve women's reproductive health.**

**Without treatment,**

- **10-20% of untreated CT or GC might lead to PID**
- **We estimate that at least 24,000 women become infertile in U.S. due to untreated ct and GC each year**
- **Diagnosis and treatment can reduce infant mortality/morbidity by preventing**
  - **Neonatal HIV and herpes simplex virus (HSV) infections as well as congenital syphilis**
- **STDs are associated with 2-5 fold increased risk of acquiring HIV. Thus appropriate diagnosis, treatment and counseling might reduce HIV transmission**

**STDs also incur substantial costs to the health care system. The estimated direct medical costs of treating STDs and their sequelae are \$16.4 billion each year.**



## Populations at Greatest Risk for STDs

- Youth
  - Nearly 50% of STDs estimated to occur in 15-24 year olds
- Racial/ethnic minorities
  - STDs among highest of all racial/ethnic health disparities
  - African-Americans: 71% of GC, 48% CT, 52% syphilis
  - Over last 5 years syphilis cases increased more than 150% among young African American men
- MSM
  - Account for 62% of syphilis cases in 2009
  - High rates of HIV co-infection

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**Thus, comprehensive diagnosis and appropriate treatment of STDs will also decrease substantial health inequities that exist currently in the United States**

## STD Prevention: Clinicians' Role

- Talk to patients about pre-exposure vaccination
- Provide or refer for prevention/risk-reduction counseling
- Talk to patients about testing
- Assess patients' risk and test accordingly
- Diagnose and treat infected patients
- Provide or refer for partner management/services
- Report STD/HIV and AIDS cases in accordance with state and local statutory requirements
- Keep STD/HIV reports confidential

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Physicians and other health-care providers play a critical role in preventing and treating STDs. These guidelines for the treatment of STDs are intended to assist with that effort. Although the STD Treatment Guidelines emphasize treatment, prevention strategies and diagnostic recommendations also are discussed.

## Purpose of 2010 STD Treatment Guidelines

To advise clinicians on most effective

- Diagnostic evaluation
- Treatment regimens
- Prevention and vaccination strategies



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To stop the silent epidemics of STDs, the updated *STD Treatment Guidelines* published in 2010, advise physicians and other health-care providers on the most effective methods for diagnostic evaluation, the most appropriate treatment regimens, and prevention and vaccination strategies for STDs.

By increasing the appropriate diagnosis and treatment of STDs physicians and other health care providers play a critical role in reducing the severe impact of these infections. The dissemination and use of the CDC *STD Treatment Guidelines* plays a critical role in this effort—it is the most widely referenced and authoritative source on STD treatment and management.

The *Guidelines* are applicable to various patient-care settings, including family planning clinics, private physicians' offices, managed care organizations, and other primary care facilities. Although the guidelines emphasize treatment, prevention strategies and diagnostic recommendations also are discussed in the *Guidelines*.

It's important to note that these CDC recommendations should be regarded as a source of clinical guidance and not as standards or inflexible rules. The guidelines focus on the treatment and counseling of individual patients and do not address other community services and interventions that are important in STD/HIV prevention.

## Kimberly Workowski, MD

- Infectious Diseases Specialist in CDC's Division of STD Prevention
- Professor of Medicine at the Emory Clinic

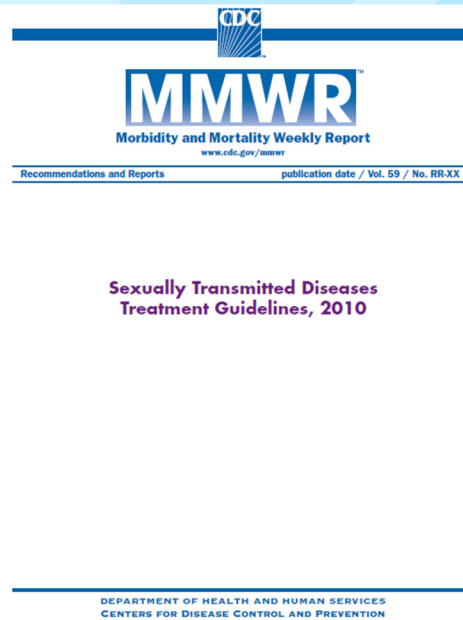


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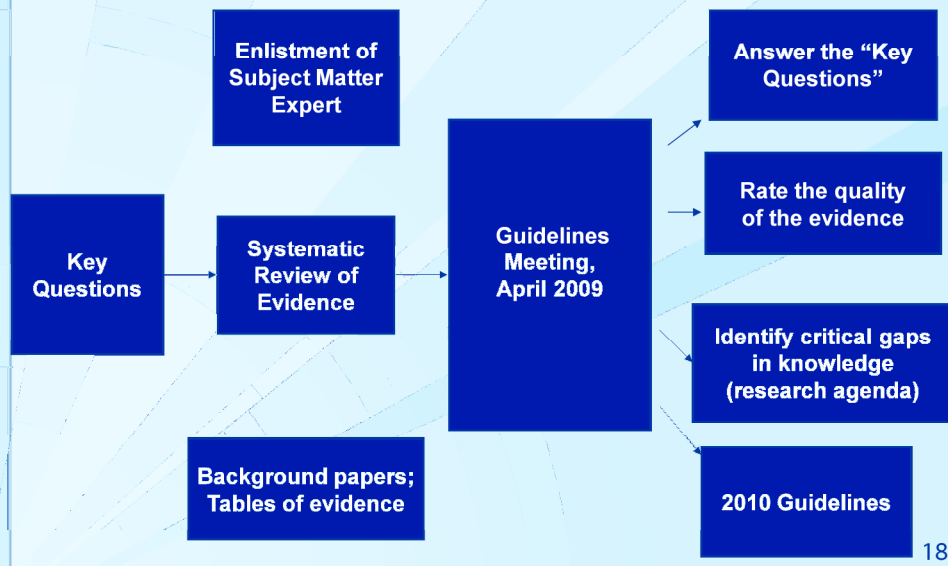
**Dr. Kim Workowski is the lead author of the *2010 STD Treatment Guidelines*. Her knowledge about the management of STDs is encyclopedic.**

**Dr Workowski will now begin her talk.....**

- Authoritative source for STD management
- Diagnostic evaluation, treatment regimens, prevention, and vaccination strategies
- Order hard copies [www.cdc.gov/std](http://www.cdc.gov/std)
- Wall charts, pocket guides



# STD Treatment Guidelines



## Special Populations

- Adolescents
- Children
- STD in pregnancy
- HIV
- MSM
- Women who have sex with women (WSW)
- **Persons in correctional facilities**
  - CT/GC adolescent females (juvenile detention/jail), females <35
  - Syphilis (local/institutional prevalence)

## NAATs Extragenital Sites

- NAATs perform better than culture (rectum, pharynx)
- Commercial laboratories validated NAATs
- Most infections asymptomatic
- Self-collected vaginal swabs preferred specimen in females
- Urine preferred specimen in men



## 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.

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If the ordering codes listed here are used, NAATs can be ordered from anywhere in the US (exception: LabCorp cannot test in New York for these specimens, Quest & ARUP did not give any restrictions). The Quest numbers may have an additional letter throughout the country based on location, but the base code is unique and will suffice to order the appropriate test per Quest.

The CPT codes are used specifically for billing and are uniform for all labs for Chlamydia (87491) and gonorrhea (87591); they are test-specific, not specimen-specific. These are the codes used for billing for Medicare and Medicaid.

## STD Screening in MSM

- HBsAg testing to detect current infection
- Hepatitis A and B vaccination if nonimmune
- Hepatitis C virus (HCV) sexual transmission (HIV+ MSM)
  - HCV serology at initial visit
  - HCV RNA with unexplained alanine aminotransferase rise
  - Routine HCV testing- high-risk sexual behavior or ulcerative STDs
  - Prevention (condoms) at sites of penetration

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## Clinical Prevention Guidance

- High-intensity behavioral counseling (USPSTF)
- Vaccination- hepatitis A virus (HAV), hepatitis B virus (HBV), human papillomavirus (HPV) (bivalent/quadrivalent)
- Condoms
  - CDC fact sheet; female nitrile condom
- Microbicides
  - [www.microbicide.org](http://www.microbicide.org)
  - Pre-exposure prophylaxis for HIV/STD
- Male circumcision
  - Reduced acquisition of HPV, genital HSV

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## Urethritis

- Bacterial STDs: GC (5-20%), CT (15-40%)
- Nongonococcal urethritis (NGU)
  - *Mycoplasma genitalium* 5-25%
  - *Ureaplasma* 0-20%; data inconsistent, biovars differ
  - *Trichomonas vaginalis* 5-20% (age, geography)
  - HSV 15-30%; urethritis in primary infection
  - Adenovirus, enterics, Candida, anaerobes

## *Mycoplasma genitalium* (MG)

- Association with acute or persistent NGU
  - No role in male infertility
- Conflicting/insufficient evidence: cervicitis, PID, infertility, ectopic pregnancy, adverse birth outcomes
- Azithromycin superior to doxycycline for MG urethritis
- Moxifloxacin for persistent NGU

## NGU Treatment

- Current drug regimens adequate
- Cost considerations and lack of public health impact data for MG insufficient to demote doxycycline to alternative agent
- Recurrence
  - Re-exposure from untreated partners
  - *T. vaginalis* and *M. genitalium*
  - *U. ureaplasma* may account for some failures

## Cervicitis

- CT/GC NAATs-vaginal, cervical, urine
- No new antimicrobial treatment trials
- Research needed on the etiology of persistent cervicitis including the potential role of *Mycoplasma genitalium*

## Chlamydia

- Primary focus of screening efforts to detect and prevent complications in women
- Selective male screening (adolescent clinics, corrections, national job training program, < 30 yrs, STD, military)
- Retest women/men 3 mo post treatment
  - CT testing in third trimester (reinfection)



## Gonorrhea

- Screen sexually active women at increased risk (USPSTF)
  - <25 years
  - Previous GC or other STDs
  - Commercial sex work
  - New or multiple partners
  - Inconsistent condom use
  - Drug use
- No screening in men or women at low risk of infection (USPSTF)
- Retest women/men 3 mo after treatment

## Gonorrhea Treatment Efficacy

- Anogenital
  - Ceftriaxone
    - 125 mg = 98.9%
    - 250 mg = 99.2%
    - Geographic distribution *in vitro* decreased susceptibility, ceftriaxone failures, enhanced pharyngeal efficacy, consistent guidance at all anatomic sites
- Oropharyngeal
  - Ceftriaxone
    - 125 mg = 94.1%
    - 250 mg = 98.9 %
  - Oral cephalosporins limited (poor penetration)
  - Azithromycin 2 gm = 95%
  - + oral exposure- regimen with enhanced pharyngeal efficacy

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## Anogenital GC Treatment

- Recommended
  - Ceftriaxone **250 mg** IM (preferred)
    - PLUS azithromycin 1 gm or doxycycline 100 mg bid x 7
  - Cefixime 400 mg PO (if ceftriaxone is not an option)
    - PLUS azithromycin 1 gm or doxycycline 100 mg bid x 7
- Alternatives
  - Cefpodoxime 400 mg or cefuroxime axetil 1 g
  - Azithromycin 2 g (penicillin allergy)

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## Oropharyngeal GC Treatment

- Recommended
  - Ceftriaxone **250 mg** IM
    - PLUS azithromycin 1 gm or doxycycline 100 mg bid x 7
- Alternatives
  - Azithromycin 2 g (penicillin allergy)

## Cephalosporin GC Treatment Failures

- Suspected treatment failure (oral and injectable)
- Treatment failure or *in vitro* resistance
  - Infectious disease consultation
  - Culture and susceptibility
  - Ceftriaxone 250 mg IM
  - Ensure partner treatment
  - Report to CDC via state or local public health authorities

## PID

- Some association with MG
- Quinolone-resistant *Neisseria gonorrhoeae* (QRNG) prevalence
  - Quinolones not recommended
  - Parenteral cephalosporin not feasible
    - Levofloxacin +/- metronidazole may be considered if community prevalence/individual risk low
    - Azithromycin 2 gm + quinolone +/- metronidazole
- Ceftriaxone 250 mg IM + azithromycin 1gm qwk x2 (short term success)
- Insufficient evidence to warrant removal of IUD

## Genital, Perianal, Anal Ulcers

- History/physical examination often inaccurate
- Majority due to HSV or syphilis
  - Less common chancroid
  - Noninfectious (yeast, aphthi, fixed drug eruption, psoriasis)
- Serologic test for syphilis
- Diagnostic evaluation for HSV (culture, PCR)
- Treat for diagnosis most likely based on clinical/epidemiology
  - If syphilis is suspected, treat empirically as initial tests may be negative in primary syphilis
- Biopsy if uncertain

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# Syphilis

- Definitive diagnosis for early syphilis
  - darkfield microscopy; PCR
  - No commercially available *Treponema pallidum* detection tests
- Nontreponemal/treponemal serologic testing
  - Reverse serologic screening
- Management principles for HIV+ similar
  - Frequent clinical/serologic monitoring
- Neurosyphilis can occur at any stage



## Evaluation of CNS Involvement

- Neurologic, ocular, auditory signs/symptoms
- CNS invasion occurs in early syphilis regardless of HIV or neurologic symptoms (protein, pleocytosis)
  - Clinical significance unknown (HIV+/-)
  - Neurosyphilis diagnosis - combination of tests
- CSF: neuro/ocular symptoms, tertiary, serologic treatment failure
  - Some studies - clinical and CSF consistent with neurosyphilis are associated with RPR  $\geq$  1:32 and/or CD4  $\leq$  350
  - Unless neurologic symptoms present, CSF exam has not been associated with improved clinical outcomes

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## Treatment Recommendations Primary, Secondary, Early Latent

- Penicillin treatment of choice +/-HIV
  - Benzathine penicillin 2.4 mu IM x 1
- No benefit of additional therapy
  - Enhanced treatment (IM + oral)
- Penicillin alternatives
  - Doxycycline, ceftriaxone
  - Azithromycin 2 gm (resistance/treatment failure)
    - Use only when penicillin or doxycycline not feasible
    - Do not use in MSM or pregnancy

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## Azithromycin

- Macrolide resistance associated with A2058G mutation in 23S rRNA gene
  - Canada, Ireland, Czech Republic, China
  - Prevalence of mutation US
    - A2058G found in 9/11 US sites (Su, ISSTDR 2009)
    - MSM>MSW; no association with US region, race
- Treatment failure
  - US, Czech Republic, China

## Monitoring in HIV+

- Jarisch-Herxheimer reaction in HIV+
  - Early syphilis, high RPR, prior penicillin treatment
- Immune reconstitution inflammatory syndrome uncommon
- ART use in HIV+ with syphilis
  - Reduced risk of serologic treatment failure
  - Lower risk of neurosyphilis
  - Normalization of CSF parameters with improvement in serum RPR

## Syphilis in Pregnancy and Congenital Syphilis

- Treponemal screening performed with reflex nontreponemal test
- Oral step-wise penicillin dose challenge or skin testing may be helpful in identifying women at risk for acute allergy
- Erythromycin or azithromycin does not reliably cure maternal infection or infected fetus
- Insufficient data on ceftriaxone for treatment of maternal infection and prevention of CS

## HSV

- IgM testing not useful
- Antiviral efficacy
  - Acyclovir, valacyclovir, famciclovir equally effective (episodic)
  - Acyclovir and valacyclovir effective for suppression
  - Famciclovir slightly less effective for suppression
  - Famciclovir 500 mg x 1, 250 mg bid x 2 d episodic
- Acyclovir resistance
  - Topical cidofovir or imiquimod
  - Less likely to develop resistance using suppressive therapy (bone marrow transplant)

## Lymphogranuloma venereum (LGV)

- Proctitis presentation (HIV+ MSM)
- Diagnosis
  - Genital or lymph node aspirates-culture, DFA, nucleic acid detection (CLIA validation)
  - Genotyping required for determining LGV strains
  - Serology not validated for proctitis presentation
- Empiric treatment for appropriate clinical syndrome
  - Doxycycline 100 mg PO bid x 21 d
  - Azithromycin 1 g PO q wk x 3 wks (limited data)

## Proctitis

- HSV/LGV presumptive treatment - painful perianal or mucosal ulceration
- Consider LGV treatment in MSM with anorectal Chlamydia and either proctitis (anoscope) with >10 wbcs/high-power field or HIV +



## Scabies/Pediculosis

- Permethrin superior to crotamiton
- Combined treatment for crusted scabies oral/topical scabicide
- Emerging resistance to all pediculicides except malathion

## Bacterial Vaginosis

- Alternative regimen
  - Tinidazole 2 g qd x 2 or 1 g qd x 5
- Management of recurrences
  - Metronidazole gel 2x weekly x 4-6 mo
  - Oral nitroimidazole followed by intravaginal boric acid and suppressive metronidazole gel
- USPSTF
  - Insufficient evidence to support screening high-risk pregnant women
  - Against screening in low risk

## Trichomoniasis

- Diagnostic evaluation
  - Aptima *T. vaginalis* analyte specific reagents
  - Consider rescreen women (HIV-/HIV+) at 3 mo
- NAAT preferred diagnostic in men
- Antimicrobial resistance (5-10%)
  - No data to guide treatment of male partners
    - Metronidazole 500 mg bid x 7 or tinidazole 2 gm
- HIV and Trichomoniasis
  - Screening at entry into HIV care
  - Treatment metronidazole 500 mg bid x 7 days

## HPV/Genital Warts

- Counseling messages
  - Oral transmission
- Clarification on use of HPV testing
- Genital warts treatment
  - Sinecatechins ointment (15%)
  - Vitiligo side effect of imiquimod
- HPV vaccine
  - Bivalent/quadrivalent vaccine (70% cervical cancer)
  - Quadrivalent vaccine (90% genital warts)

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## Sexual Assault in Children

- STD screening should be independent of symptoms (Giradet et al, Pediatrics 2009)
- Diagnostic evaluation
  - CT NAATs (SDA, TMA) on vaginal swabs/urine in girls; + specimens retained for additional testing
  - GC NAATs test dependent; potential cross-reaction between other *Neisseria* species/commensals (*N. meningitidis*, *N. sicca*, *N. lactamica*, *N. cinerea*, *Moraxella catarrhalis*)
  - Data insufficient for extragenital NAAT in girls
  - Data insufficient for CT/GC NAATs at any site for boys
  - HPV infection/mode remains controversial

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## Sexual Assault in Adults

- CT/GC NAATs -any site of penetration/attempt
- Routine preventive therapy as follow-up poor
- HIV, hepatitis B, syphilis testing individualized
  - Test results likely represent prevalent STDs
  - Some centers have opted to stop STD testing
  - Likely will not impact decision to provide prophylactic treatment
  - Testing costs may be patient's responsibility

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\* Prevention Training Center staff or faculty

## **LIASIONS**

American Academy of Pediatrics (Margaret Blythe, MD)  
American College of Emergency Physicians (Bisan Salhi, MD)  
American College of Obstetrics and Gynecology (Jeffrey Peipert, MD)  
American Medical Association (LJ Tan, PhD)  
American Urological Association (Jordan Dimitrakov, MD)  
American Social Health Association (Lynn Barclay)  
American Venereal Disease Association (Jeanne Marrazzo, MD)  
British Association of Sexual Health (Mark FitzGerald, MD)  
CDC STD/HIV Prevention Training Center (Brad Stoner, MD)  
Health Canada-STD Unit (Tom Wong, MD)  
HIVMA (Laura Bachman, MD)  
HRSA (Kaytura Felix-Aaron, MD)  
Infectious Disease Society of America (Ned Hook, MD)  
Infectious Disease Society of Obstetrics and Gynecology (David Soper, MD)  
IUSTI Europe (Michel Janier, MD, PhD)



# Questions and Answers



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- Medical Director, Seattle STD/HIV Prevention Training Center, University of Washington

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Kim: Dr. Gail Bolan, the Medical Director of the California STD/HIV Prevention Training Center, Dr. Ned Hook, the Director of the Alabama/North Carolina STD/HIV Prevention Training Center, and Dr. Jeanne Marrazzo, the Medical Director of the Seattle STD/HIV Prevention Training Center will now answer questions about the 2010 STD Treatment Guidelines.

Gail: Before we begin answering questions, we just want to remind you that although we will not be able to answer all of your questions today, we will compile and answer your questions and post them on the NNPTC and STD Treatment Guidelines Websites as soon as we can. Your questions will also be used to guide the content for future 2010 STD Treatment Guidelines Webinars.

## National Network of Prevention Training Centers (NNPTC)

- STD Clinical & Laboratory Training
- HIV Prevention in Care Training
- STD/HIV Behavioral Interventions Training
- STD/HIV Partner Services and Program Support Training
- [www.nnptc.org](http://www.nnptc.org)



The NNPTC is dedicated to increasing and maintaining the skills and knowledge of health professionals in the areas of sexual and reproductive health

The NNPTC addresses the STD/HIV prevention training needs of public and private sector health professionals throughout the US

The NNPTC develops, delivers, & evaluates training activities on the diagnosis, treatment, and prevention of STDs and HIV

## Educational and Training Resources

- NNPTC
  - [www.nnptc.org](http://www.nnptc.org)
- 2010 STD Treatment Guidelines
  - [www.cdc.gov/std/treatment/2010](http://www.cdc.gov/std/treatment/2010)
  - [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) or 800.CDC.INFO (800.232.4636)
- CDC Division of STD Prevention
  - [www.cdc.gov/std/training](http://www.cdc.gov/std/training)
  - [stdtraining@cdc.gov](mailto:stdtraining@cdc.gov) or 404.639.8360

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The NNPTC Website can connect you with STD/HIV Prevention Training Centers in your region for additional STD prevention and treatment training and resources.

To obtain a copy of the *2010 STD Treatment Guidelines*, please visit the CDC website at [www.cdc.gov/std/treatment/](http://www.cdc.gov/std/treatment/), or contact CDC-INFO by phone or by e-mail.

The CDC Division of STD Prevention's Website also has many STD prevention and treatment training opportunities and resources.

## Clinician Resources

- Condoms and STDs: Fact Sheet for Public Health Personnel
  - [www.cdc.gov/condomeffectiveness/latex.htm](http://www.cdc.gov/condomeffectiveness/latex.htm)
- Expedited Partner Therapy
  - [www.cdc.gov/std/ept](http://www.cdc.gov/std/ept)
- Get Yourself Tested
  - [www.itsyoursexlife.com/gyt](http://www.itsyoursexlife.com/gyt)

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Additional resources for clinicians on STD prevention and treatment can be found on the websites listed here.

## Reminders

- Stay tuned for additional STD Treatment Guidelines Webinars in the future
  - [www.nnptc.org](http://www.nnptc.org)
  - [www.cdc.gov/std/treatment/2010](http://www.cdc.gov/std/treatment/2010)
- Complete the CME evaluation for credit
  - Instructions are available at [www.stdhivtraining.org/resource.php?id=644](http://www.stdhivtraining.org/resource.php?id=644)
- If you have questions about the 2010 STD Treatment Guidelines following the Webinar you may submit them to [stdtraining@cdc.gov](mailto:stdtraining@cdc.gov)

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We want to thank you for participating in today's 2010 STD Treatment Guidelines Webinar: An Overview by CDC and the NNPTC.

Please stay tuned for additional STD Treatment Guidelines Webinars in the future and don't forget to complete the CME evaluation for continuing education credit.

If you have additional STD Treatment Guidelines questions following the Webinar, please submit them to [stdtraining@cdc.gov](mailto:stdtraining@cdc.gov).

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**For more information please contact Centers for Disease Control and Prevention**

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E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) Web: [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Division of STD Prevention



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