

# MODULE 1 PARTICIPANT MANUAL: Contents

**Incorporating HIV Prevention into the Medical Care of Persons Living with HIV. MMWR 2003;52(RR-12). Recommendations of CDC/HRSA/NIH/IDSA-HIVMA**

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# NATIONAL HIV/AIDS STRATEGY

On July 13, 2010, the White House released the National HIV/AIDS Strategy (NHAS). This ambitious plan is the nation's first-ever comprehensive coordinated HIV/AIDS roadmap with clear and measurable targets to be achieved by 2015.

## Vision for the National HIV/AIDS Strategy

*The United States will become a place where new HIV infections are rare and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination.*

The development of the NHAS is important because it is an effort to reflect on what is and is not working in order to increase the outcomes that we receive for our public and private investments. The Strategy is intended to refocus our existing efforts and deliver better results to the American people within current funding levels, as well as make the case for new investments. It is also a new attempt to set clear priorities and provide leadership for all public and private stake-holders to align their efforts toward a common purpose.

Thirty years ago, the first cases of human immunodeficiency virus (HIV) garnered the world's attention. Since then, over 575,000 Americans have lost their lives to AIDS and more than 56,000 people in the United States become infected with HIV each year.<sup>i</sup> Currently, there are more than 1.1 million Americans living with HIV.<sup>ii</sup> Moreover, almost half of all Americans know someone living with HIV.

***Our country is at a crossroads.*** Right now, we are experiencing a domestic epidemic that demands a renewed commitment, increased public attention, and leadership. We have the knowledge and tools needed to slow the spread of HIV infection and improve the health of people living with HIV. Despite this potential, however, the public's sense of urgency associated with combating the epidemic appears to be declining. In 1995, 44% of the general public indicated that HIV/AIDS was the most urgent health problem facing the nation, compared to only 6% in March 2009.<sup>iii</sup> While HIV transmission rates have been reduced substantially over time and people with HIV are living longer and more productive lives, approximately 56,000 people become infected each year and more Americans are living with HIV than ever before.<sup>iv,v</sup> Unless we take bold actions, we face a new era of rising infections, greater challenges in serving people living with HIV, and higher healthcare costs.<sup>vi</sup>

## Goals of the National HIV/AIDS Strategy

### Reducing New HIV Infections

- By 2015, lower the annual number of new infections by 25% (from 56,300 to 42,225).
- Reduce the HIV transmission rate, which is a measure of annual transmissions in relation to the number of people living with HIV, by 30% (from 5 persons infected per 100 people with HIV to 3.5 persons infected per 100 people with HIV).
- By 2015, increase from 79% to 90% the percentage of people living with HIV who know their serostatus (from 948,000 to 1,080,000 people).

### Increasing Access to Care and Improving Health Outcomes for People Living with HIV

- By 2015, increase the proportion of newly diagnosed patients linked to clinical care within three months of their HIV diagnosis from 65% to 85% (from 26,824 to 35,078 people).
- By 2015, increase the proportion of Ryan White HIV/AIDS Program clients who are in continuous care (at least 2 visits for routine HIV medical care in 12 months at least 3 months apart) from 73% to 80% (or 237,924 people in continuous care to 260,739 people in continuous care).
- By 2015, increase the number of Ryan White clients with permanent housing from 82% to 86% (from 434,000 to 455,800 people). (This serves as a measurable proxy of our efforts to expand access to HUD and other housing supports to all needy people living with HIV.)

### Reducing HIV-Related Health Disparities

- Improve access to prevention and care services for all Americans.
- By 2015, increase the proportion of HIV diagnosed gay and bisexual men with undetectable viral load by 20%.
- By 2015, increase the proportion of HIV diagnosed Blacks with undetectable viral load by 20%.
- By 2015, increase the proportion of HIV diagnosed Latinos with undetectable viral load by 20%.

## ***To accomplish the Strategy's goals, we must undertake a more coordinated national response to the epidemic.***

This will require increasing the coordination of HIV programs across the Federal government and between Federal agencies and state, territorial, tribal, and local governments, as well as developing improved mechanisms to monitor and report on progress toward achieving national goals. Towards these ends, accompanying the release of the Strategy the White House also issued a NHAS Federal Implementation Plan that outlines key, short-term actions to be undertaken by the Federal government to execute the recommendations outlined in the Strategy. Additionally, the White House issued a Presidential Memorandum directing agencies to take specific steps to implement this Strategy.

**Implementing the NHAS does not fall to the Federal government alone.** The release of the NHAS is just beginning. Success will require the commitment of all parts of society, including state, local and tribal governments, businesses, faith communities, philanthropy, the scientific and medical communities, educational institutions, people living with HIV, and others.

Countless Americans have devoted their lives to fighting the HIV epidemic and thanks to their tireless work we have made real inroads. People living with HIV have transformed how we engage community members in setting policy, conducting research, and providing services. Researchers have produced a wealth of information about the disease, including a number of critical tools and interventions to diagnose, prevent, and treat HIV. Successful prevention efforts have averted more than 350,000 new infections in the United States. And healthcare and other services providers have taught us how to provide quality services in diverse settings and develop medical homes for people with HIV. This moment represents an opportunity for the nation. Now is the time to build on and refocus our existing efforts to deliver better results for the American people.

#### **What You Can Do**

- Read the Strategy and accompanying Federal Implementation Plan available online at [AIDS.gov](http://AIDS.gov).
- Follow updates on the Strategy on [AIDS.gov](http://AIDS.gov) and the [AIDS.gov](http://blog.aids.gov/) blog (<http://blog.aids.gov/>) which features posts from the Office of National AIDS Policy, HHS officials, and others.
- Inform others about the Strategy and encourage their engagement in activities that help achieve its goals.
- Discuss what your agency or organization can do in new or different ways to better serve your constituents and align your efforts with the Strategy.

#### **Developing the Strategy**

The Strategy and the action steps it contains are the result of broad-based engagement with Federal and community partners. Since taking office, the Obama Administration has taken extraordinary steps to engage the public to evaluate what we are doing right and identify new approaches that will strengthen our response to the domestic epidemic.

The Office of National AIDS Policy hosted 14 HIV/AIDS Community Discussions with thousands of Americans across the country. They also reviewed suggestions from the public via the White House website, organized a series of expert meetings on several HIV-specific topics, and worked with Federal and community partners who organized their own meetings to support the development of a national strategy. The White House also convened a panel of Federal officials from across government to assist in reviewing the public recommendations, assessing the scientific evidence for or against various recommendations, and making their own recommendations for the Strategy.

#### **Action Steps**

##### **Reducing New HIV Infections**

- Intensify HIV prevention efforts in the communities where HIV is most heavily concentrated
- Expand targeted efforts to prevent HIV infection using a combination of effective, evidence-based approaches
- Educate all Americans about the threat of HIV and how to prevent it

##### **Increasing Access to Care and Improving Health Outcomes for People Living with HIV**

- Establish a seamless system to immediately link people to continuous and coordinated quality care when they learn they are infected with HIV
- Take deliberate steps to increase the number and diversity of available providers of clinical care and related services for people living with HIV
- Support people living with HIV with co-occurring health conditions and those who have challenges meeting their basic needs, such as housing

##### **Reducing HIV-Related Disparities and Health Inequities**

- Reduce HIV-related mortality in communities at high risk for HIV infection
- Adopt community-level approaches to reduce HIV infection in high-risk communities
- Reduce stigma and discrimination against people living with HIV

##### **Achieving a More Coordinated National Response to the HIV Epidemic**

- Increase the coordination of HIV programs across the Federal government and between Federal agencies and state, territorial, tribal, and local governments
- Develop improved mechanisms to monitor and report on progress toward achieving national goals

- Participate in state and local discussions about how HIV prevention, care and treatment efforts can be fine-tuned to better serve vulnerable populations and contribute to realizing the Strategy's goals.
- Engage new partners in HIV prevention, care, treatment and stigma-reduction efforts to strengthen our collective efforts and reach more people.

The National HIV/AIDS Strategy provides a basic framework for moving forward. With government at all levels doing its part, a committed private sector, and leadership from people living with HIV and affected communities, the United States can dramatically reduce HIV transmission and better support people living with HIV and their families.

<sup>i</sup> Hall HI, Song R, Rhodes P, et al. Estimation of HIV incidence in the United States. *JAMA* 2008;300(5):520-529.

<sup>ii</sup> CDC. HIV Prevalence Estimates—United States, 2006. *MMWR* 2008;57(39):1073-76.

<sup>iii</sup> Kaiser Family Foundation. *2009 Survey of Americans on HIV/AIDS: Summary of Findings on the Domestic Epidemic*. April 2009.

<sup>iv</sup> CDC. *Estimates of new HIV infections in the United States*. August 2008. Available at <http://www.kff.org/kaiserpolls/upload/7889.pdf>

<sup>v</sup> CDC. HIV Prevalence Estimates—United States, 2006. *MMWR* 2008;57(39):1073-76.

<sup>vi</sup> If the HIV transmission rate remained constant at 5.0 persons infected each year per 100 people living with HIV, within a decade, the number of new infections would increase to more than 75,000 per year and the number of people living with HIV would grow to more than 1,500,000 (*AIDS*, in press).

**THIS SECTION TO BE COMPLETED BY PATIENT**

## Sexual Health Questionnaire

In order to provide you with the best possible care, we have to ask you some very personal questions. Please take a few minutes to answer the questions on this page. Your answers are very important. **Please give this form to your medical provider when you are finished.**

**Your answers are completely confidential, so please answer as accurately as you can.**

1. Over the past 3 months, did you have sex with anyone (oral, anal, or vaginal sex)?  
 No       Yes      **If no, skip a, b, and c.**
  - a. How many different sex partners did you have in the past 3 months?  
 \_\_\_\_\_ # males      \_\_\_\_\_ # females
  - b. Have you had any **main** sex partners in the past 3 months (someone you are committed to)?  
 No       Yes      **If yes, how many?** \_\_\_\_\_
  - c. Have you had any **occasional** sex partners in the past 3 months?  
 No       Yes      **If yes, how many?** \_\_\_\_\_
2. Were you told you had a sexually transmitted disease other than HIV in the past 3 months (e.g., chlamydia, syphilis, gonorrhea)?  
 No       Yes
3. Did you smoke any crack or use crystal meth or alcohol in the past 3 months?  
 No       Yes
4. Have you injected any drugs or medicines not prescribed by a medical provider in the past 3 months?  
 No       Yes
5. For women only: Are you pregnant now or thinking about getting pregnant in the future?  
 No       Yes      Date of last menstrual period: \_\_\_\_\_
6. For men and women: Are you doing anything to prevent pregnancy?  
 No       Yes
7. Is there anything about sex, drugs, or mental health that you want to talk about today?  
 No       Yes

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**We encourage you to talk to the medical staff about your concerns and ask any questions you may have. All information is kept strictly confidential.**



**SUGGESTED DISCUSSION TOPICS**

**Any oral sex, anal sex, or vaginal sex?**

Receptive or insertive? Main or casual partner? Partner serostatus? Condom or barrier used? How often?

**Any injection drug use?**

Shared needles/works/cottons or water? Shared with main partner? Shared with casual contacts? Serostatus of persons patient shared needles/works with?

**Pregnancy**

Considering trying to become pregnant? Serostatus of partner? Using any contraception?

**RISK REDUCTION PLAN** (Check all that apply)

**Partner Choice Strategies Disclosure/Communication Strategies**

- Avoid places/people that cause you to take risks
- Choose partners who are also HIV positive
- Identify people you can talk to
- Tell partners you have HIV
- Ask partners if they have HIV
- Talk to partner about safer sex

**Condom/Barrier Use Drug-related Strategies**

- Always carry condoms/barrier
- Increase use of condom/barrier
- Don't share needles/works/cottons/water
- Have needle exchange options
- Use clean needles/works

**Other Risk-reduction Suggestions**

- Reduce or don't use drugs/alcohol with sex
- Reduce episodes of unprotected anal intercourse with different partners
- Reduce episodes of unprotected vaginal intercourse with different partners
- Mutual masturbation only – no exchange of body fluids
- Don't share sex toys
- Other \_\_\_\_\_

**Continue current risk-reduction plan**

**Referrals**

- CRCS (Comprehensive Risk Counseling & Services)
- Case Management
- Linkage/Engagement in Care Interventions
- Medication Adherence Intervention
- PCRS (Partner Counseling & Referral Services)
- Substance Abuse Counseling
- None
- Other \_\_\_\_\_
- Domestic Violence Prevention
- Mental Health
- Food
- Housing
- Financial



# ASI Provider Guide

## Effective Prevention in HIV Care



**ASK:** Routinely obtain a sexual and substance use history from all patients to assess risk behaviors.

**Framework for asking:** Reinforce confidentiality, be tactful, be clear, check your assumptions, and be non-judgmental.

**Open with:** *“To provide the best care, I ask all my patients about their sexual activity — so tell me about your sex life.”*

WHO?	WHAT?	HOW?
<p><i>“Tell me about your partners.”</i></p> <ul style="list-style-type: none"> <li>Gender</li> <li>Number</li> <li>New Partners</li> <li>Partners with other partners</li> </ul>	<p><i>“What types of sex have you been having?”</i></p> <ul style="list-style-type: none"> <li>Vaginal</li> <li>Anal</li> <li>Oral</li> </ul>	<p><i>“How do you protect your partners and yourself during sex?”</i></p> <p><i>“How do you make sure your works are clean?”</i></p>

**SCREEN:** Appropriately screen patients for STIs based on risk assessment, and ask about STI symptoms.

**SCREEN all HIV-positive patients for the following:**

	Men	Women
<b>Syphilis</b>	<ul style="list-style-type: none"> <li>Annually, repeated as indicated by risk</li> </ul>	<ul style="list-style-type: none"> <li>Annually, repeated as indicated by risk</li> </ul>
<b>Gonorrhea*</b>	<ul style="list-style-type: none"> <li>Annually, repeated as indicated by risk</li> <li>Urine specimen for urethral infection</li> <li>Rectal or pharyngeal specimen, if exposed</li> </ul>	<ul style="list-style-type: none"> <li>Annually, repeated as indicated by risk</li> <li>Vaginal swab, urine or cervical specimen</li> <li>Rectal or pharyngeal specimen, if exposed</li> </ul>
<b>Chlamydia*</b>	<ul style="list-style-type: none"> <li>Annually, repeated as indicated by risk</li> <li>Urine specimen for urethral infection</li> <li>Rectal specimen, if exposed</li> </ul>	<ul style="list-style-type: none"> <li>Annually, repeated as indicated by risk</li> <li>Vaginal swab, urine or cervical specimen</li> <li>Rectal specimen, if exposed</li> </ul>
<b>Trichomoniasis</b>	<ul style="list-style-type: none"> <li>n/a</li> </ul>	<ul style="list-style-type: none"> <li>Initial visit and repeated as indicated by risk</li> </ul>
<b>Hepatitis B and C</b>	<ul style="list-style-type: none"> <li>First visit, and annually if immunity or infection is not documented</li> </ul>	<ul style="list-style-type: none"> <li>First visit, and annually if immunity or infection is not documented</li> </ul>

\* Screen all exposed anatomic sites, as indicated, and treat even if asymptomatic. Repeat screening every 3-6 months as indicated by risk factors.

**NOTE:** Evidence suggests that the presence of other STIs increases the risk of HIV transmission and acquisition; therefore prompt diagnosis and treatment for STIs may reduce HIV transmission.

**INTERVENE:** Provide patients with brief, tailored behavioral interventions for risk reduction.

**Discuss risk with patients:**

- Unprotected sexual activity
- Anonymous partners
- Patient or partners with recent STI
- History of recreational or intravenous drug use (*particularly meth*)
- Exchange of sex for money or drugs
- Recent incarceration

**Assess patients’ knowledge and misconceptions** about transmission, and assess attitudes and beliefs. *“What are your concerns about giving someone HIV or getting an STI?”*

**Assess circumstances affecting behaviors:** What and with whom, where, when, triggers. Assess patients’ readiness to change. *“How do you tell your partners about your HIV status?” “What makes it difficult to use condoms with your partners?”*

**Negotiate a behavioral goal:** *“What is the one thing you can do to reduce your risk of giving someone HIV or getting other STIs?”*

**Identify a first step toward the goal that is:**

- concrete
- incremental
- individualized
- realistic

Know the resources in your community and refer for social, mental health, substance abuse, or reproductive concerns as needed.

**PARTNER SERVICES:** The health department helps patients with HIV identify and notify partners in need of testing. For partners, partner services staff provide education and access to testing. Contact your local health department for more information.

**Partner Services:**

- Are free, voluntary, and confidential
- Facilitate linkages to services
- Assist patients with telling their partners about HIV exposure
- May be handled differently for HIV based on jurisdiction

**How to bring up the subject of partners:**

*“Now that we have talked about ways to keep you healthy, let’s talk about ways to keep your partners healthy. How do you feel about telling your partners they have been exposed to HIV?”*





# Effective Prevention in HIV Care

## Handout 4

### STI Screening Recommendations for HIV Infected Persons

The following recommendations are based on guidelines for STI screening from the Centers for Disease Control and Prevention, Infectious Disease Society of America, and the National STD/HIV Prevention Training Center Network. *Contact your local health department or HIV/AIDS Center for additional information and/or assistance if required. All individuals* diagnosed with chlamydia or gonorrhea should be retested for repeat infection at 3 months after treatment; retesting can also be performed anytime the patient returns for care in the 3-12 months after treatment.

Population	STI Screening Recommendations	Frequency	Comments
HIV-positive women <sup>1-4</sup>	CT ..... GC ..... Syphilis ..... Trichomoniasis ..... HSV-2 ..... Hepatitis B Surface Antigen (HBsAg) Hepatitis C .....	First visit First visit First visit First visit First visit First visit First visit Repeat screening at least annually or every 3-6 months, as indicated by risk	CT: • urine/cervical • rectal (if exposed)  GC: • urine/cervical • rectal and pharyngeal (if exposed)
HIV-positive men <sup>1-4</sup>	CT ..... GC ..... Syphilis ..... HSV-2 ..... Hepatitis B Surface Antigen (HBsAg) Hepatitis C .....	First visit First visit First visit First visit First visit Repeat screening at least annually or every 3-6 months, as indicated by risk	CT: • urine/urethral • rectal (if exposed)  GC: • urine/urethral • rectal and pharyngeal (if exposed)

#### NOTES AND REFERENCES

<sup>1</sup>Centers for Disease Control and Prevention. Incorporating HIV prevention into the medical care of persons living with HIV: recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. MMWR 2003;52(No.RR-12):5-7.

<sup>2</sup>Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines. MMWR 2006;55(No. RR-11).

<sup>3</sup>Routine hepatitis B vaccination is recommended for MSM and past or current injection drug users. HBsAg testing should be performed at the same visit that the first vaccine dose is given; if testing is not feasible in the current setting, routine vaccination of these populations should continue. Recommendations for Identification and Public Health Management of Persons with Chronic Hepatitis B Infection. MMWR 2008; 57 (RR-8).

<sup>4</sup>Primary Care Guidelines for the Management of Persons Infected with Human Immunodeficiency Virus: 2009 Update by the HIV Medicine Association of the Infectious Disease Society of America. *Clinical Infectious Diseases* 2009; 49, 651-681.

Design courtesy of California STD/HIV Prevention Training Center



Developed by The National Network of STD/HIV Prevention Training Centers, in conjunction with the AIDS Education Training Centers

Module 1





## STD TREATMENT GUIDELINES TABLE FOR ADULTS & ADOLESCENTS 2012

These guidelines reflect recent updates to the 2010 CDC STD Treatment Guidelines and the Region IX Infertility Clinical Guidelines. The focus is primarily on STDs encountered in office practice. These guidelines are intended as a source of clinical guidance; they are not a comprehensive list of all effective regimens and are not intended to substitute for use of the full 2010 STD treatment guidelines document. Call the local health department to report STD infections; to request assistance with confidential notification of sexual partners of patients with syphilis, gonorrhea, chlamydia or HIV infection; or to obtain additional information on the medical management of STD patients. The California STD/HIV Prevention Training Center is a resource for training and consultation about STD clinical management and prevention (510-625-6000) or [www.stdhivtraining.org](http://www.stdhivtraining.org).

DISEASE	RECOMMENDED REGIMENS	DOSE/ROUTE	ALTERNATIVE REGIMENS: To be used if medical contraindication to recommended regimen.
<b>CHLAMYDIA</b>			
Uncomplicated Genital/Rectal/Pharyngeal Infections <sup>1</sup>	<ul style="list-style-type: none"> <li>Azithromycin or</li> <li>Doxycycline <sup>2</sup></li> </ul>	1 g po 100 mg po bid x 7 d	<ul style="list-style-type: none"> <li>Erythromycin base 500 mg po qid x 7 d or</li> <li>Erythromycin ethylsuccinate 800 mg po qid x 7 d or</li> <li>Levofloxacin <sup>2</sup> 500 mg po qd x 7 d or</li> <li>Ofloxacin <sup>2</sup> 300 mg po bid x 7 d</li> </ul>
Pregnant Women <sup>3</sup>	<ul style="list-style-type: none"> <li>Azithromycin or</li> <li>Amoxicillin</li> </ul>	1 g po 500 mg po tid x 7 d	<ul style="list-style-type: none"> <li>Erythromycin base 500 mg po qid x 7 d or</li> <li>Erythromycin base 250 mg po qid x 14 d or</li> <li>Erythromycin ethylsuccinate 800 mg po qid x 7 d or</li> <li>Erythromycin ethylsuccinate 400 mg po qid x 14 d</li> </ul>
<b>GONORRHEA: Ceftriaxone is the preferred treatment for adults and adolescents with uncomplicated gonorrhea. Dual therapy with ceftriaxone 250 mg IM (increased from 125 mg) Plus azithromycin 1 g po or doxycycline 100 mg po bid x 7 d is recommended for all patients with gonorrhea regardless of chlamydia test results. <sup>4</sup></b>			
Uncomplicated Genital/Rectal Infections <sup>1</sup>	Dual therapy with <ul style="list-style-type: none"> <li>Ceftriaxone</li> <li><b>PLUS</b></li> <li>Azithromycin or</li> <li>Doxycycline</li> </ul>	250 mg IM  1 g po 100 mg po bid x 7 d	Dual therapy with <ul style="list-style-type: none"> <li>Cefixime <sup>5</sup> 400 mg po</li> <li><b>PLUS</b></li> <li>Azithromycin <sup>6</sup> 1g po or Doxycycline 100 mg po bid x 7d</li> </ul> If allergic to cephalosporins or severe penicillin allergy Azithromycin <sup>6</sup> 2 g po in a single dose
Pharyngeal Infections	Dual therapy with <ul style="list-style-type: none"> <li>Ceftriaxone</li> <li><b>PLUS</b></li> <li>Azithromycin or</li> <li>Doxycycline</li> </ul>	250 mg IM  1 g po 100 mg po bid x 7 d	<ul style="list-style-type: none"> <li>Azithromycin <sup>6</sup> 2 g po in a single dose</li> </ul>
Pregnant Women <sup>3</sup>	Dual therapy with <ul style="list-style-type: none"> <li>Ceftriaxone</li> <li><b>PLUS</b></li> <li>Azithromycin</li> </ul>	250 mg IM  1 g po	<ul style="list-style-type: none"> <li>Cefixime <sup>5</sup> 400 mg po</li> <li><b>PLUS</b></li> <li>Azithromycin <sup>6</sup> 1g po</li> </ul> If allergic to cephalosporins or severe penicillin allergy Azithromycin <sup>6</sup> 2 g po in a single dose
<b>PELVIC INFLAMMATORY DISEASE</b> <sup>4, 7, 8</sup>	Parenteral <sup>9</sup> <ul style="list-style-type: none"> <li>Either Cefotetan or Cefoxitin plus Doxycycline <sup>2</sup> or</li> <li>Clindamycin plus Gentamicin</li> </ul> IM/Oral <ul style="list-style-type: none"> <li>Either Ceftriaxone or Cefoxitin with Probenecid plus Doxycycline <sup>2</sup> plus Metronidazole if BV is present or cannot be ruled out</li> </ul>	2 g IV q 12 hrs 2 g IV q 6 hrs 100 mg po or IV q 12 hrs  900 mg IV q 8 hrs 2 mg/kg IV or IM followed by 1.5 mg/kg IV or IM q 8 hrs  250 mg IM 2 g IM, 1 g po 100 mg po bid x 14 d 500 mg po bid x 14 d	Parenteral <sup>9a</sup> Ampicillin/Sulbactam 3 g IV q 6 hrs plus Doxycycline <sup>2</sup> 100 mg po or IV q 12 hrs  Oral <sup>10</sup> <ul style="list-style-type: none"> <li>Levofloxacin <sup>2</sup> 500 mg po qd x 14 d or</li> <li>Ofloxacin <sup>2</sup> 400 mg po bid x 14 d or</li> <li>Ceftriaxone 250 mg IM in a single dose and Azithromycin 1 g po once a week for 2 weeks</li> </ul> <b>plus</b> <ul style="list-style-type: none"> <li>Metronidazole 500 mg po bid x 14 d if BV is present or cannot be ruled out</li> </ul>
<b>CERVICITIS</b> <sup>4, 7, 11</sup>	<ul style="list-style-type: none"> <li>Azithromycin or</li> <li>Doxycycline <sup>2</sup> plus</li> <li>Metronidazole if BV or trichomoniasis is present</li> </ul>	1 g po 100 mg po bid x 7 d 500 mg po bid x 7 d	
<b>NONGONOCOCCAL URETHRITIS</b> <sup>7</sup>	<ul style="list-style-type: none"> <li>Azithromycin or</li> <li>Doxycycline</li> </ul>	1 g po 100 mg po bid x 7 d	<ul style="list-style-type: none"> <li>Erythromycin base 500 mg po qid x 7 d or</li> <li>Erythromycin ethylsuccinate 800 mg po qid x 7 d or</li> <li>Levofloxacin 500 mg po qd x 7 d or</li> <li>Ofloxacin 300 mg po bid x 7 d</li> </ul>
<b>EPIDIDYMITIS</b> <sup>4, 7</sup>	Likely due to Gonorrhea or Chlamydia <ul style="list-style-type: none"> <li>Ceftriaxone plus Doxycycline</li> </ul> Likely due to enteric organisms <ul style="list-style-type: none"> <li>Levofloxacin <sup>12</sup> or</li> <li>Ofloxacin <sup>12</sup></li> </ul>	250 mg IM 100 mg po bid x 10 d  500 mg po qd x 10 d 300 mg po bid x 10 d	
<b>CHANCROID</b>	<ul style="list-style-type: none"> <li>Azithromycin or</li> <li>Ceftriaxone or</li> <li>Ciprofloxacin <sup>2</sup> or</li> <li>Erythromycin base</li> </ul>	1 g po 250 mg IM 500 mg po bid x 3 d 500 mg po tid x 7 d	
<b>LYMPHOGRANULOMA VENEREUM</b>	<ul style="list-style-type: none"> <li>Doxycycline <sup>2</sup></li> </ul>	100 mg po bid x 21 d	<ul style="list-style-type: none"> <li>Erythromycin base 500 mg po qid x 21 d or</li> <li>Azithromycin 1 g po q week x 3 weeks</li> </ul>
<b>TRICHOMONIASIS</b> <sup>13,14</sup>			
Non-pregnant women	<ul style="list-style-type: none"> <li>Metronidazole or</li> <li>Tinidazole <sup>15</sup></li> </ul>	2 g po 2 g po	<ul style="list-style-type: none"> <li>Metronidazole 500 mg po bid x 7 d</li> </ul>
Pregnant Women	<ul style="list-style-type: none"> <li>Metronidazole</li> </ul>	2 g po	<ul style="list-style-type: none"> <li>Metronidazole 500 mg po bid x 7 d</li> </ul>
HIV-infected Women	<ul style="list-style-type: none"> <li>Metronidazole</li> </ul>	500 mg po bid x 7 d	

- Annual screening for women aged 25 years or younger. Nucleic acid amplification tests (NAATs) are recommended. All patients should be re-tested 3 months after treatment for chlamydia or gonorrhea.
- Contraindicated for pregnant and nursing women.
- Every effort to use a recommended regimen should be made. Test-of-cure follow-up (preferably by NAAT) 3-4 weeks after completion of therapy is recommended in pregnancy.
- If treatment failure is suspected because GC has been documented, the patient has been treated with a recommended regimen for GC, and symptoms have not resolved, then perform a test-of-cure using culture and antibiotic susceptibility testing and report to the local health department. For clinical consult, call the CA STD Control Branch at 510-620-3400. For further guidance, go to [www.std.ca.gov](http://www.std.ca.gov) ("STD Guidelines").
- Oral cephalosporins give lower and less-sustained bacteriocidal levels than ceftriaxone 250 mg and have limited efficacy for treating pharyngeal GC. Therefore, ceftriaxone is the preferred medication.
- For patients with cephalosporin allergy, or severe penicillin allergy, (e.g., anaphylaxis, Stevens Johnson syndrome, and toxic epidermal necrolysis), azithromycin is an option. However, because of GI intolerance and concerns regarding emerging resistance, it should be used with caution.
- Testing for gonorrhea and chlamydia is recommended because a specific diagnosis may improve compliance and partner management, and because these infections are reportable by California law.
- Evaluate for bacterial vaginosis. If present or cannot be ruled out, also use metronidazole.
- Discontinue 24 hours after patient improves clinically and continue with oral therapy for a total of 14 days.
- Fluoroquinolones can be considered for PID if the risk of GC is low, a NAAT test for GC is performed, and follow-up of the patient can be assured. If GC is documented, the patient should be re-treated with the recommended ceftriaxone and doxycycline regimen. If cephalosporin therapy is not an option, the addition of azithromycin 2 g orally as a single dose to a quinolone-based PID regimen is recommended.
- If local prevalence of gonorrhea is greater than 5%, treat empirically for gonorrhea infection.
- If gonorrhea is documented, change to a medication regimen that does not include a fluoroquinolone.
- For suspected drug-resistant trichomoniasis, rule out re-infection: see 2010 CDC Guidelines, Trichomonas Follow-up, p. 60, for other treatment options, and evaluate for metronidazole-resistant *T. vaginalis*. For laboratory and clinical consultations, contact CDC at 404-718-4141: <http://www.cdc.gov/std>.
- For HIV-positive women with trichomoniasis, metronidazole 500 mg po bid x 7 d is more effective than metronidazole 2 g orally.
- Safety in pregnancy has not been established: pregnancy category C.

DISEASE	RECOMMENDED REGIMENS	DOSE/ROUTE	ALTERNATIVE REGIMENS: To be used if medical contraindication to recommended regimen
<b>BACTERIAL VAGINOSIS</b>			
Adults/Adolescents	<ul style="list-style-type: none"> <li>Metronidazole or</li> <li>Metronidazole gel or</li> <li>Clindamycin cream <sup>16</sup></li> </ul>	500 mg po bid x 7 d 0.75%, one full applicator (5g) intravaginally qd x 5 d 2%, one full applicator (5g) intravaginally qhs x 7 d	<ul style="list-style-type: none"> <li>Tinidazole <sup>15</sup> 2 g po qd x 2 d or</li> <li>Tinidazole <sup>15</sup> 1 g po qd x 5 d or</li> <li>Clindamycin 300 mg po bid x 7 d or</li> <li>Clindamycin ovules 100 mg intravaginally qhs x 3 d</li> </ul>
Pregnant Women	<ul style="list-style-type: none"> <li>Metronidazole or</li> <li>Metronidazole or</li> <li>Clindamycin</li> </ul>	500 mg po bid x 7 d 250 mg po tid x 7 d 300 mg po bid x 7 d	
<b>ANOGENITAL WARTS</b>			
External Genital/Perianal Warts	<b>Patient-Applied</b> <ul style="list-style-type: none"> <li>Imiquimod <sup>15,16</sup> 5% cream or</li> <li>Podofilox <sup>15</sup> 0.5% solution or gel or</li> <li>Sinecatechins <sup>15</sup> 15% ointment</li> </ul> <b>Provider-Administered</b> <ul style="list-style-type: none"> <li>Cryotherapy or</li> <li>Podophyllin <sup>15</sup> resin 10%-25% in tincture of benzoin or</li> <li>Trichloroacetic acid (TCA) 80%-90% or</li> <li>Bichloroacetic acid (BCA) 80%-90% or</li> <li>Surgical removal</li> </ul>	Topically qhs 3 x wk up to 16 wks Topically bid x 3 d followed by 4 d no tx for up to 4 cycles Topically tid, for up to 16 wks  Apply once q 1-2 wks Apply once q 1-2 wks  Apply once q 1-2 wks Apply once q 1-2 wks	<b>Alternative Regimen</b> <ul style="list-style-type: none"> <li>Intralesional interferon or</li> <li>Laser surgery or</li> <li>Photodynamic therapy or</li> <li>Topical cidofovir</li> </ul>
Mucosal Genital Warts <sup>17</sup>	<ul style="list-style-type: none"> <li>Cryotherapy or</li> <li>TCA or BCA 80%-90% or</li> <li>Podophyllin <sup>15</sup> resin 10%-25% in tincture of benzoin or</li> <li>Surgical removal</li> </ul>	Vaginal, urethral meatus, and anal Vaginal and anal Urethral meatus only  Anal warts only	
<b>ANOGENITAL HERPES <sup>18</sup></b>			
First Clinical Episode of Anogenital Herpes	<ul style="list-style-type: none"> <li>Acyclovir or</li> <li>Acyclovir or</li> <li>Famciclovir or</li> <li>Valacyclovir</li> </ul>	400 mg po tid x 7-10 d 200 mg po 5x/day x 7-10 d 250 mg po tid x 7-10 d 1 g po bid x 7-10 d	
Established Infection Suppressive Therapy <sup>19,20</sup>	<ul style="list-style-type: none"> <li>Acyclovir or</li> <li>Famciclovir <sup>19</sup> or</li> <li>Valacyclovir or</li> <li>Valacyclovir</li> </ul>	400 mg po bid 250 mg po bid 500 mg po qd 1 g po qd	
Episodic Therapy for Recurrent Episodes	<ul style="list-style-type: none"> <li>Acyclovir or</li> <li>Acyclovir or</li> <li>Acyclovir or</li> <li>Famciclovir or</li> <li>Famciclovir or</li> <li>Famciclovir or</li> <li>Famciclovir or</li> <li>Valacyclovir or</li> <li>Valacyclovir</li> </ul>	400 mg po tid x 5 d 800 mg po bid x 5 d 800 mg po tid x 2 d 125 mg po bid x 5 d 1000 mg po bid x 1 d 500 mg once, then 250 mg bid x 2 d 500 mg po bid x 3 d 1 g po qd x 5 d	
<b>HIV Co-Infected <sup>20</sup></b>			
Suppressive Therapy <sup>19</sup>	<ul style="list-style-type: none"> <li>Acyclovir or</li> <li>Famciclovir <sup>19</sup> or</li> <li>Valacyclovir</li> </ul>	400-800 mg po bid or tid 500 mg po bid 500 mg po bid	
Episodic Therapy for Recurrent Episodes	<ul style="list-style-type: none"> <li>Acyclovir or</li> <li>Famciclovir or</li> <li>Valacyclovir</li> </ul>	400 mg po tid x 5-10 d 500 mg po bid x 5-10 d 1 g po bid x 5-10 d	
<b>SYPHILIS <sup>21,22</sup></b>			
Primary, Secondary, and Early Latent	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	2.4 million units IM	<ul style="list-style-type: none"> <li>Doxycycline <sup>23</sup> 100 mg po bid x 14 d or</li> <li>Tetracycline <sup>23</sup> 500 mg po qid x 14 d or</li> <li>Ceftriaxone <sup>23</sup> 1 g IM or IV qd x 10-14 d</li> </ul>
Late Latent and Latent of Unknown Duration	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	7.2 million units, administered as 3 doses of 2.4 million units IM each, at 1-week intervals	<ul style="list-style-type: none"> <li>Doxycycline <sup>23</sup> 100 mg po bid x 28 d or</li> <li>Tetracycline <sup>23</sup> 500 mg po qid x 28 d</li> </ul>
Neurosyphilis <sup>24</sup>	<ul style="list-style-type: none"> <li>Aqueous crystalline penicillin G</li> </ul>	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	<ul style="list-style-type: none"> <li>Procaine penicillin G, 2.4 million units IM qd x 10-14 d plus Probenecid 500 mg po qid x 10-14 d or</li> <li>Ceftriaxone <sup>23</sup> 2 g IM or IV qd x 10-14 d</li> </ul>
<b>Pregnant Women <sup>25</sup></b>			
Primary, Secondary, and Early Latent	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	2.4 million units IM	• None
Late Latent and Latent of Unknown Duration	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	7.2 million units, administered as 3 doses of 2.4 million units IM each, at 1-week intervals	• None
Neurosyphilis <sup>24</sup>	<ul style="list-style-type: none"> <li>Aqueous crystalline penicillin G</li> </ul>	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	<ul style="list-style-type: none"> <li>Procaine penicillin G, 2.4 million units IM qd x 10-14 d plus Probenecid 500 mg po qid x 10-14 d</li> </ul>

15. Safety in pregnancy has not been established; pregnancy category C.

16. May weaken latex condoms and contraceptive diaphragms.

17. Cervical and intra-anal warts should be managed in consultation with specialist.

18. Counseling about natural history, asymptomatic shedding, and sexual transmission is an essential component of herpes management.

19. The goal of suppressive therapy is to reduce recurrent symptomatic episodes and/or to reduce sexual transmission. Famciclovir appears somewhat less effective for suppression of viral shedding.

20. If HSV lesions persist or recur during antiviral treatment, drug resistance should be suspected. Obtaining a viral isolate for sensitivity testing and consulting with an infectious disease expert is recommended.

21. Benzathine penicillin G (generic name) is the recommended treatment for syphilis not involving the central nervous system and is available in only one long-acting formulation, Bicillin® L-A (the trade name), which contains only benzathine penicillin G. Other combination products, such as Bicillin® C-R, contain both long- and short-acting penicillins and are not effective for treating syphilis.

22. Persons with HIV infection should be treated according to the same stage-specific recommendations for primary, secondary, and latent syphilis as used for HIV-negative persons. Available data demonstrate that additional doses of benzathine penicillin G, amoxicillin, or other antibiotics in early syphilis do not result in enhanced efficacy, regardless of HIV status.

23. Alternates should be used only for penicillin-allergic patients because efficacy of these therapies has not been established. Compliance with some of these regimens is difficult, and close follow-up is essential. If compliance or follow-up cannot be ensured, the patient should be desensitized and treated with benzathine penicillin.

24. Some specialists recommend 2.4 million units of benzathine penicillin G q week for up to 3 weeks after completion of neurosyphilis treatment.

25. Pregnant women allergic to penicillin should be treated with penicillin after desensitization.

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# Additional Resources

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AIDS Education and Training Centers (AETC). <http://www.aidsetc.org>

National Network of STD/HIV Prevention Training Centers (NNPTC). <http://www.nnptc.org>

Interactive online STD cases. <http://www.stdcases.org>

Practitioner's handbook for the management of STDs. <http://www.stdhandbook.org>

AMA and AAHIVMA's Coding Guidance for Routine HIV Testing and Counseling: <http://nnptc.org/resources/coding-guidance-for-routine-hiv-testing-and-counseling-in-health-care-settings/>

Primary Syphilis Algorithm: <http://nnptc.org/resources/primary-syphilis-algorithm/>

Secondary Syphilis Algorithm: <http://nnptc.org/resources/secondary-syphilis-algorithm/>

Reverse Sequence Syphilis Screening Frequently Asked Questions:

<http://nnptc.org/resources/reverse-sequence-syphilis-screening-frequently-asked-questions/>