The Sexual Health of MSM: Making Sexual Health the newest "vital sign"

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The Sexual Health of MSM

Gay and bisexual men and other men who have sex with men (MSM) represent an incredibly diverse community. Gay and bisexual men have both shared and unique experiences and circumstances that affect their physical health and mental health needs as well as their ability to receive high-quality health services.

MSM Health

- Stigma and Discrimination
- For all men, the leading causes of death are **heart disease** and **cancer**
- However, among MSM, there are higher rates of **HIV** and other **STDs**, **tobacco and drug use**, and **depression** compared to other men.
- Viral Hepatitis
- Substance Abuse
- Mental Health

Why focus on MSM Health?

- Gay and bisexual men account for:
  - over half of the 1.1 million people living with HIV in the U.S. and
  - 2/3 of all new HIV infections each year
- In 2013, 75% of the reported syphilis cases were among MSM.
- In NYC in 2012
  - 55% of all new HIV diagnoses were among MSM
  - 69% of MSM newly diagnosed with HIV were black or Hispanic

Sexual Reproductive Health

"A state of physical, mental & social well-being & not merely absence of disease, dysfunction or infirmity in all matters relating to reproductive system, its functions & its processes"

Cairo UN International Conference on Population & Development. 1994.
WHO. Defining sexual health. Geneva, Switzerland. 2002.
CDC. A public health approach for advancing sexual health in U.S. Atlanta, GA. 2011.

CME/CNE Activity Online

City Health Information

Volume 33 (2014) The New York City Department of Health and Mental Hygiene No. 4; 29-36

Providing Comprehensive Health Care to Men Who Have Sex With Men (MSM)

- Provide a welcoming environment for men who have sex with men (MSM).
- Take a sexual history as a routine part of primary care and remember that MSM may not identify as gay.
- Routinely screen for alcohol, drug use, tobacco use, depression, HIV, and other STIs.
- Counsel on consistent condom use and the new HIV prevention medications, PEP and PrEP.
- Vaccinate against human papillomavirus (HPV), hepatitis A virus, and hepatitis B virus.

Create a Welcoming Environment

- Display posters and/or pamphlets with gay-friendly or gay positive messages
- Post nondiscrimination statements inclusive of sexual orientation
- Subscribe to gay-oriented news or entertainment magazines
- Acknowledge relevant observances, such as World AIDS Day or Gay Pride

Scan your environment

Create a Welcoming Environment

- Train staff on cultural competence relating to MSM
- Give MSM patients a list of community resources
- Give patients a written confidentiality statement to reinforce that their information is protected

Structural interventions

- Utilize other resources already created in support of an LGBT-affirming practice: GLMA, Fenway, NYC, San Fran, etc.

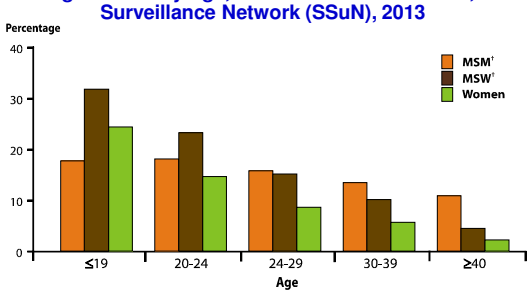
Gay and Lesbian Medical Association. Guidelines for Care of Lesbian, gay, Bisexual, and Transgender Patients.
http://glma.org/data/n_0001/resources/live/GLMA%20guidelines%202006%20FINAL.pdf

- Are other staff available for more in depth discussions?
- Are there external resources that are available to you in the community?

Understand your patients' concerns

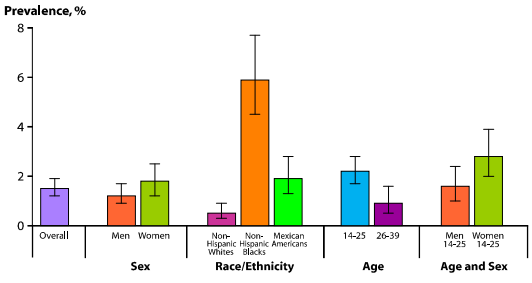
- MSM of color may experience homophobia and racism and may have higher rates of HIV, syphilis and other STIs than other MSM

Chlamydia — Proportion of STD Clinic Patients* Testing Positive by Age, Sex and Sexual Behavior, STD Surveillance Network (SSuN), 2013



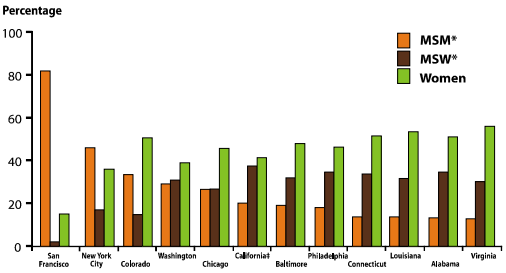
*Only includes patients tested for chlamydia
†MSM=men who have sex with men; MSW=men who have sex with women only.
NOTE: Six jurisdictions (Birmingham, Chicago, Denver, Hartford/New Haven, New Orleans, and Richmond) contributed data from January through June 2013 and the remaining jurisdictions (Baltimore, Los Angeles, New York City, Philadelphia, San Francisco and Seattle) contributed data for all of 2013.

Chlamydia — Prevalence Among Persons Aged 14–39 Years by Sex, Race/Ethnicity, or Age Group, National Health and Nutrition Examination Survey, 2005–2008



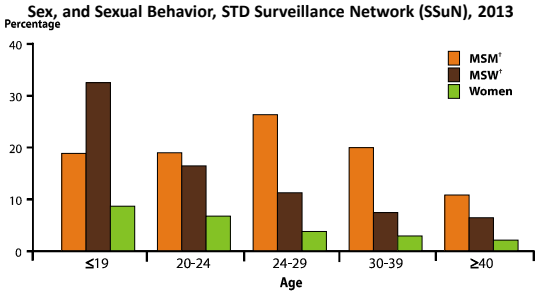
NOTE: Error bars indicate 95% confidence intervals.

Estimated Proportion MSM*, MSW*, and Women Among Gonorrhea Cases† by Site, STD Surveillance Network (SSuN), 2013



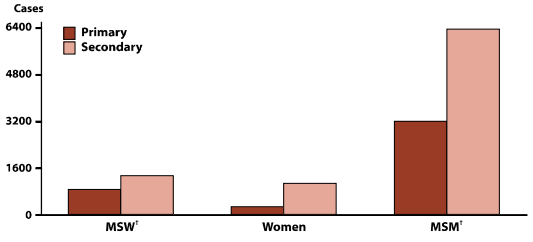
*MSM=men who have sex with men; MSW=men who have sex with women only.
†Estimate based on weighted for analysis of data obtained from interviews (n=3,121) conducted from a random sample of reported cases of gonorrhea during January to June 2013.
‡California data excludes San Francisco County (shown separately).

Gonorrhea — Proportion of STD Clinic Patients* Testing Positive by Age, Sex, and Sexual Behavior, STD Surveillance Network (SSuN), 2013



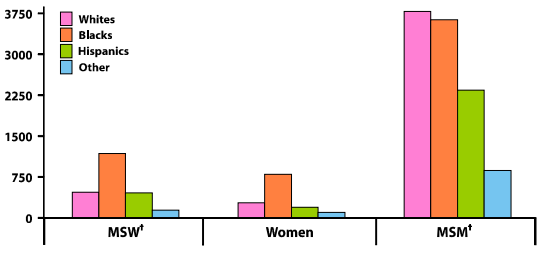
*Only includes patients tested for gonorrhea.
† MSM=men who have sex with men; MSW=men who have sex with women only.
NOTE: Six jurisdictions (Birmingham, Chicago, Denver, Hartford/New Haven, New Orleans and Richmond) contributed data from January through June 2013 and the remaining jurisdictions (Baltimore, Los Angeles, New York City, Philadelphia, San Francisco and Seattle) contributed data for all of 2013.

Primary and Secondary Syphilis—Reported Cases* by Stage, Sex, and Sexual Behavior, United States, 2013



*Of the reported male cases of primary and secondary syphilis, 16.9% were missing sex of sex partner information.
†MSW=men who have sex with women only; MSM=men who have sex with men.

Primary and Secondary Syphilis—Reported Cases* by Sex, Sexual Behavior, and Race/Ethnicity, United States, 2013



*Of the reported male cases of primary and secondary syphilis, 16.9% were missing sex of sex partner information; 2.9% of reported male cases with sex of sex partner data were missing race/ethnicity data.
†MSW–men who have sex with women only; MSM–men who have sex with men.

Understand your patients' concerns

- Younger MSM may engage in increased sexual risk-taking and have disproportionate rates of HIV
- Younger MSM may face barriers to health care
  - Lack of insurance
  - Reluctance to seek care
- Parental consent is not required for adolescents to receive STI screening or treatment (except for HIV tx) in New York State
  - BUT insurance EOBs or bills may be sent to main policyholder and can compromise confidentiality

Understand your patients' concerns

- Older MSM may be less inclined to "come out" to younger providers and may be less comfortable accessing youth-oriented services
- Transgender refers to people whose gender identify, expression, or behavior is different from that typically associated with their assigned sex at birth.

The Sexual History

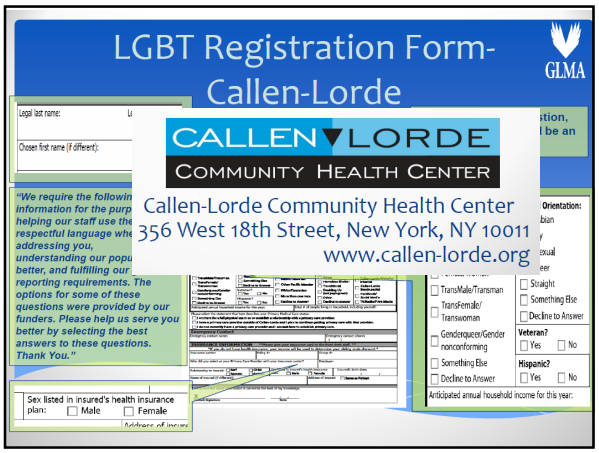
"MSM" refers to behavior, not identity, and some MSM do not identify as gay

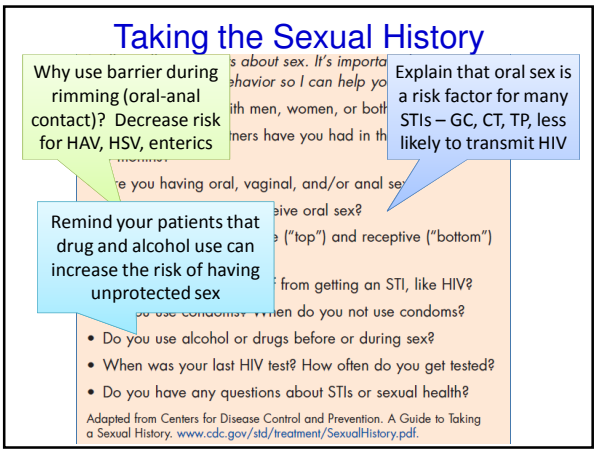
Messaging

- We should remember that we are privileged as providers to be welcomed into our patients' lives.
- Put aside our biases. Build trust. Build relationships.
- Utilize gain frame/affirming messaging throughout.
- Recognize that sex is about pleasure.
- Recognize that our patients have a right to culturally-responsive sexual health information and services.
- Taking a sexual history is about building a relationship: What is sexual health for you?
- Ask affirming questions – what are you doing to stay safe?
- "The value of touch" meaning develop a relationship with patient, engage in physical exam.

Create a Welcoming Environment

Ensure that patient intake forms use inclusive language





Counseling & Condoms

- Discuss the use of condoms with all MSM.
- Offer condoms to all patients.
- Offer lube to all patients.
- This conversation should be based on data and in context consistent with their present risk and protective behaviors.
- Recognize that in the current era, universal "always use condoms" messaging may discredit the messenger.

Counseling & Condoms:What's real?

- Male latex condoms, when used consistently and correctly, are highly effective in reducing sexual transmission of :
  - HIV,
  - Gonorrhea
  - Chlamydia
  - Trichomoniasis
- And when the infected area or site of potential exposure is covered, reduces risk for:
  - Syphilis
  - Genital herpes
  - Human papillomavirus [HPV], or
  - Chancroid
- Female condoms are sometimes used for protection during receptive anal intercourse, although their effectiveness is unproven

2015 STD Treatment Guidelines: www. cdc.gov/std

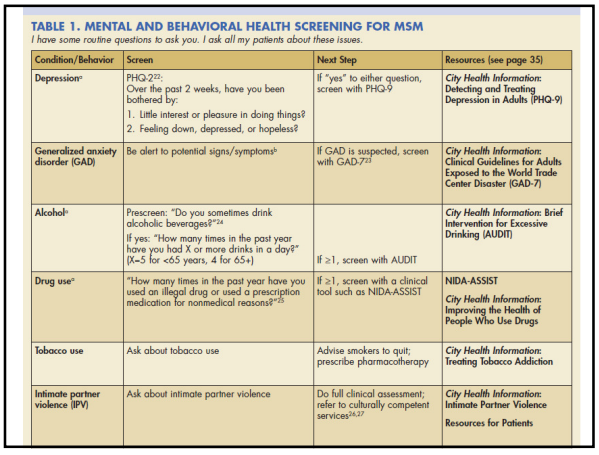


TABLE 1. MENTAL AND BEHAVIORAL HEALTH SCREENING FOR MSM

I have some routine questions to ask you. I ask all my patients about these issues.

Condition/Behavior	Screen	Next Step	Resources (see page 35)
Depression[a]	PHQ-2[22]: Over the past 2 weeks, have you been bothered by: 1. Little interest or pleasure in doing things? 2. Feeling down, depressed, or hopeless?	If "yes" to either question, screen with PHQ-9	*City Health Information:* Detecting and Treating Depression in Adults (PHQ-9)
Generalized anxiety disorder (GAD)	Be alert to potential signs/symptoms[b]	If GAD is suspected, screen with GAD-7[23]	*City Health Information:* Clinical Guidelines for Adults Exposed to the World Trade Center Disaster (GAD-7)
Alcohol[b]	Prescreen: "Do you sometimes drink alcoholic beverages?"[24] If yes: "How many times in the past year have you had X or more drinks in a day?" (X=5 for <65 years, 4 for 65+)	If ≥1, screen with AUDIT	*City Health Information:* Brief Intervention for Excessive Drinking (AUDIT)
Drug use[c]	"How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?"[25]	If ≥1, screen with a clinical tool such as NIDA-ASSIST	NIDA-ASSIST *City Health Information:* Improving the Health of People Who Use Drugs
Tobacco use	Ask about tobacco use	Advise smokers to quit; prescribe pharmacotherapy	*City Health Information:* Treating Tobacco Addiction
Intimate partner violence (IPV)	Ask about intimate partner violence	Do full clinical assessment; refer to culturally competent services[26,27]	*City Health Information:* Intimate Partner Violence Resources for Patients

Counseling is prevention

- Remind your patients that drug and alcohol use can increase the risk of having sex without a condom…..

And that reminds me to remind you….

Sex Under the Influence

- Risk for HIV acquisition
- Risk for HIV transmission
- Substance use as a challenge to medication adherence and viral suppression
- Patterns of sex/drug-linked behavior as a challenge to sobriety

Histories of Sex/Drug-Linked Behaviors

- "When Colin Farrell sobered up eight years ago, he worried he wouldn't be able to have sex without the help of booze. "I made love to a woman about two and half years after I got clean, and it was one of the most terrifying moments of my life.""

Source: http://www.elle.com/pop-culture/celebrities/colin-farrell-quotes-interview

Sexual Health in Recovery Topics

- Motivations for sex under the influence
- Healthy sexual choices; roles/scripts
- Relationships in recovery
- Talking about sex without judgment
- Anticipating sex-related relapse triggers
- Sexual functioning in recovery
- Sexual boundaries in recovery
- Body image and self-talk
- HIV prevention

Now that you know your patient's risk and practices, what do you do?

STI screening

Remember screening is NOT testing. Screen for STIs based on risk behavior and exposures. Most STIs are asymptomatic!

STI Screening

- Ask routinely about exposure:
  - Do you have sex with men, women, or both?
  - How many sex partners have you had in the last 3 months?
  - Are you having oral, vaginal, and/or anal sex?
  - Do you both give and receive oral sex?
  - Do you have both insertive ("top") and receptive ("bottom") anal sex?
  - How do you keep yourself from getting an STI, like HIV?
  - Do you use condoms? When do you not use condoms?
  - Do you use alcohol or drugs before or during sex?

TABLE 2. STI SCREENING FOR MSM[5,39-42]

Screening	Test	Frequency	Comments
HIV	Serology	At least annually	Screening recommended every 3 to 6 months for MSM with multiple or anonymous sex partners or illicit drug use, especially methamphetamine (self or partner)
Chlamydia and Gonorrhea	First-catch urine NAAT (preferred) or urethral swabs AND Anorectal NAAT if receptive anal intercourse ("bottoming") AND Oropharyngeal NAAT if receptive oral intercourse (giving oral sex)	At least annually	
Syphilis[a]	Serology	At least annually (and at HIV diagnosis, for positive MSM)	
Hepatitis B[b]	Serology: HBsAg AND Anti-HBs or anti-HBc	Once	Give first dose of vaccine[c] at time of test, after the blood draw; discontinue series if HBsAg+
Hepatitis C[d]	Serology: Hepatitis C antibody test Positive test results should be followed with a quantitative HCV RNA test	HIV positive: test at baseline (and at least annually if patient has sex with men without a condom)	
		Injection or illicit nasal drug use (ever): test once and retest at least annually if use is ongoing	
		Born between 1945 and 1965: test once	
Herpes	Serology: Consider type-specific test for HSV-2	No specified frequency	
Human papillomavirus (HPV)	Anal Pap test	Baseline and then annually	If HIV positive or according to clinical judgment

STD Screening for MSM*

Screen at least annually, q 3-6 mos if high risk*
- HIV
- Syphilis
- Urethral GC and CT
- Rectal GC and CT (if anal sex)
- Pharyngeal GC (if oral sex)

Also screen for:
- Hepatitis B *(repeat as indicated by risk)*

Proposed: Anal Cancer in HIV+ MSM: Annual digital rectal exam may be useful, some centers perform anal Pap and HRA for ASC-US or worse.

* High risk: multiple and/or anonymous partners, drug use, or high risk partners

CDC 2010 STD Tx Guidelines www.cdc.gov/std/treatment

Don't forget the triple dip

- Syphilis serology
- Pharyngeal GC
- Urine GC/CT
- Rectal GC/CT

GC/CT

- Offer screening with a NAAT test in all 3-sites at baseline (first visit).
- Offer screening with a NAAT test at least annually in all 3-sites after the first visit according to history.
- Consider screening with a NAAT test every 3-6 months in those with ongoing risk.
- Allow patients the option to self-collect rectal and pharyngeal specimens, as well as urine, for NAAT.
- If screen positive, rescreen in 3-6 months (not for test of cure, but due to increased risk of reinfection).
- Offer test of cure if alternative therapies are used to treat.

What's the big deal with extragenital testing?

Clinical Infectious Diseases Advance Access published April 13, 2014

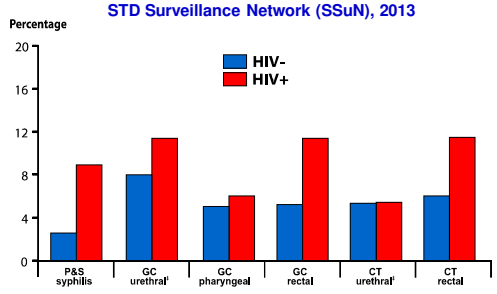
MAJOR ARTICLE

Extragenital Gonorrhea and Chlamydia Testing and Infection Among Men Who Have Sex With Men—STD Surveillance Network, United States, 2010–2012

- Use STD surveillance Network data from 42 STD clinics
- Of 21,884 MSM:
  - 84% GC urogenital test
  - 66% GC pharynx
  - 50% GC rectal
  - 81% CT urogenital
  - 32% CT pharynx
  - 46% CT rectal

More than 70% of extragenital GC and 85% of extragenital CT were associated with negative urethral tests and would have been missed

Proportion of MSM* Attending STD Clinics with Primary and Secondary Syphilis, Gonorrhea or Chlamydia by HIV Status†, STD Surveillance Network (SSuN), 2013



*MSM–men who have sex with men.
† Excludes all persons for whom there was no laboratory documentation or self-report of HIV status.
‡ GC urethral and CT urethral include results from both urethral and urine specimens.
NOTE: Six jurisdictions (Birmingham, Chicago, Denver, Hartford/New Haven, New Orleans, and Richmond) contributed data from January through June 2013 and the remaining jurisdictions (Baltimore, Los Angeles, New York City, Philadelphia, San Francisco and Seattle) contributed data for all of 2013.

HIV screening

- Unless your patient is incapacitated, offer HIV testing to patients receiving hospital or primary care who are between 13 and 64 years of age
- Test MSM at least annually, and up to every 3 months if at higher risk
- Use combo antibody-antigen tests (serum)
  - Detects HIV within 11 days of infection
  - Traditional antibody tests may be negative for up to 3 months

HIV testing

- When should I order an HIV NAAT?
  - Patient with a recent known or potential exposure
    - If exposure within the past 36 hours – PEP
  - Patient has signs of acute HIV
    - Flu-like symptoms
    - Lymphadenopathy
    - Skin rash

Postexposure prophylaxis (PEP)

- PEP is a 3-drug regimen:
  - Truvada (tenofovir + emtricitabine) once daily and either
  - Isentress(raltegravir) 400 mg twice daily or
  - Tivicay(dolutegravir) 50 mg once daily

  for 28 day
- adherence to the regimen is critical to reduce the risk of HIV infection.

PEP

- Exposure to HIV is a medical emergency
- Initiate PEP ASAP – ideally within 2 hours and at least within 36 hours
- Beyond 36 hours after exposure is case-by-case – remember the longer the delay, the less effective PEP is
- Evaluate patients who seek PEP for potential use of PrEP

Pre-exposure prophylaxis (PrEP)

- Trials in MSM, persons with HIV+ partners, heterosexuals living in high HIV prevalence areas and IDUs show reduction in risk of HIV by 44-90% with daily use of tenofovir (300 mg)-emtricitabine (200 mg)=(Truvada)
- Truvada is well tolerated
  - tenofovir has been associated with acute and chronic kidney disease and declines in bone mineral density but not increased fractures
- Prior to initiation: HIV test or HIV RNA if recent high risk exposure; serum creatinine and UA; hepatitis B serologies, pregnancy test
- Give 90 day supply and monitor q 3 months HIV/STDs; creatinine; pregnancy

Truvada as HIV PrEP

- When people are adherent, once-daily Truvada taken as PrEP provides up to 92% reduction in risk for HIV acquisition
- Recommended for persons:
  - In ongoing relationships with PLWH
  - Sharing injection drug use equipment
  - With a recent and/or repeat bacterial STIs
  - Having unprotected sex with persons of unknown serostatus
  - Multiple sex partners
  - Inconsistent condom use
  - Recent commercial sex work

www.nyc.gov/html/doh/html/living/prep-pepprovider.shtml.

PrEP Program Components

- Screening (risk assessment; insurance coverage)
- HIV Testing (to ensure patient is HIV negative)
- STI Testing and Treatment, Hep A&B vaccination
- Kidney Test
- Risk reduction counseling; condoms
- Side effects and adherence counseling
- 1, 3, 6, 9, and 12 month follow ups

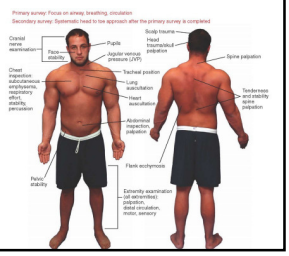
STI Testing

- Ask routinely about:
  - Urethral discharge, dysuria
  - Genital/anal ulcers or warts
  - Lymphadenopathy
  - Skin rash
  - Anorectal pain, discharge, or bleeding
  - Abdominal cramping, diarrhea, or flatulence (c/w enteric infections)

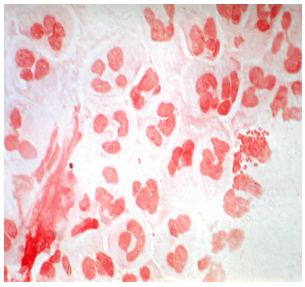
DO A TEST!

Remember the exam!

- Carefully examine the mouth and oropharynx, genitals, and anorectal area
- Check for lymphadenopathy
- Examine the skin for rashes and look at the palms and soles
- ANOSCOPY!



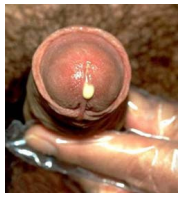
Urethritis

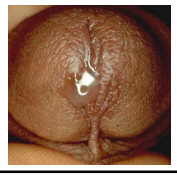


- GC (5-20%)
- Chlamydia 15-40%
- *M. genitalium* 5-25%
- *Ureaplasma* 0-20%
- *Trichomoniasis* 5-20%
- HSV 15-30%,
- Adenovirus
- Enterics, *Candida*

MSM and urethritis

- Urethral discharge, dysuria
- POC (gram stain**> 2 WBCs, methylene blue or gentian violet**) or LE or first void urine
- Sx but no signs of inflammation, NAAT testing may identify infection
  - GC or CT treat per recommendations
  - Empiric tx for high risk or unlikely follow-up

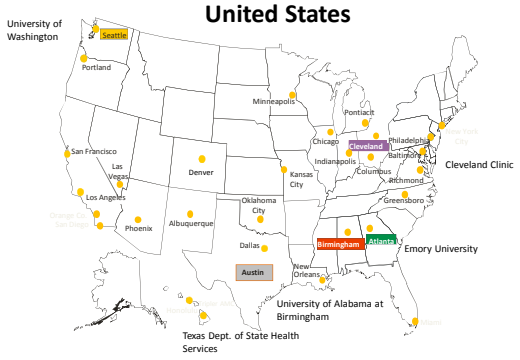




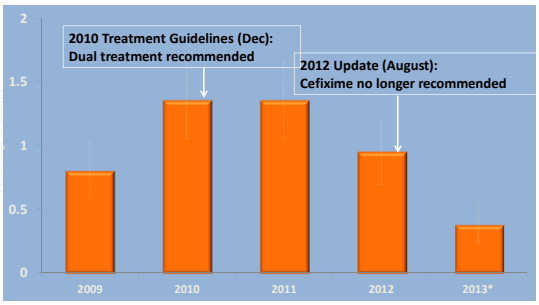
Gonorrhea treatment

2015 STD Treatment Guidelines

GISP sites and regional laboratories — United States

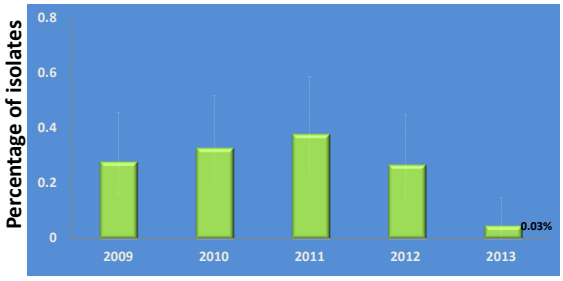


Percentage of Isolates with Elevated Cefixime MICs (≥0.25 µg/ml), United States, 2009–2013*



* Preliminary data

Percentage of Isolates with Elevated Ceftriaxone MICs (≥0.125 µg/ml), 2009–2013*



Uncomplicated Gonococcal Infections of Cervix, Urethra & Rectum

Ceftriaxone 250 mg as a single intramuscular dose

PLUS

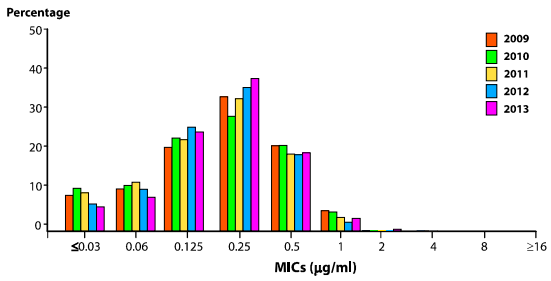
Azithromycin 1 g orally

Alternative:

If Ceftriaxone is not available:

Cefixime 400 mg PLUS azithromycin 1 gram

Neisseria gonorrhoeae — Distribution of Azithromycin Minimum Inhibitory Concentrations (MICs), Gonococcal Isolate Surveillance Project (GISP), 2009–2013



GC Treatment

- No clinical data to support increasing dose of ceftriaxone or azithromycin as part of dual therapy
- Higher ceftriaxone and/or azithromycin doses recommended outside US (UK, Japan) based on modeling not clinical data
- Ceftriaxone treatment failures rare- all outside US
- Azithromycin monotherapy effective not recommended - ease of resistance
- Test of cure not needed after treatment for urogenital or rectal infection (recommended/alternative); recommended for pharynx (alternative)

Why two agents to prevent resistance?

Why it should work

- CTX and Azi have different mechanisms of action and should prevent emergence of resistance
  - Based on mathematical principal applied to rate of chromosomal mutation in bacteria
  - Works for TB and HIV

Why it may not

- Unlike TB that develops resistance through chromosomal mutations, GC is highly social and acquires foreign DNA in large chunks – like in plasmids – and can transform it DNA by incorporating naked DNA it acquires for the environment.
- Plus it mutates its DNA commonly and acquires resistance that way too.
- CTX and Azi are not always used in combination (Z-pack)

Rice LB. Sex Transm Infect 2015;91:238-240

New Treatment Option

- NIH sponsored RCT (Kirkaldy, CID 2014)
  - **Gentamicin 240 mg IM + azithromycin 2 g PO, OR**
  - **Gemifloxacin 320 mg PO + azithromycin 2 g PO**
- Rationale
  - Additive effect, gentamicin and azithromicin *in vitro*
  - Gemifloxacin more active against cipro resistance or GyrA and ParC mutations

	Gentamicin / Azithromycin		Gemifloxacin / Azithromycin	
	n/N	% (L 95% CI)	n/N	% (L 95% CI)
Urethra/Cervix	202/202	100% (98.5%)	198/199	99.5% (97.6%)
Pharynx	10/10	100%	15/15	100%
Rectum	1/1	100%	5/5	100%

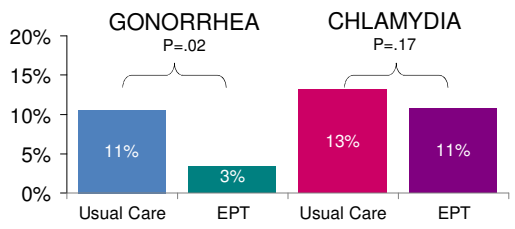
Suspect Treatment Failures

- **Most treatment failure likely due to reinfection**
- If tx failure suspect, obtain culture/ susceptibility test
- Treatment
  - If reinfection likely (ceftriaxone/azi); Rx ceftriaxone 250 mg +azithromycin 1 gram
  - If reinfection likely (cefixime/azi) , Rx ceftriaxone 250 mg + azithromycin 2 gram
  - If tx failure suspected, Rx gemifloxacin 320 mg +azithromycin 2 g or gentamicin 240 IM + azithromycin 2g
- Report to local or state health department
- Test of cure 7-14 days after retreatment (culture/AST preferred with NAAT)
- Ensure partner tx

CT/GC Partner Management Options

- Patient referral
  - Ask patient to notify partner and ensure treatment
  - Have patient bring partner to clinic for concurrent treatment Internet-based anonymous notification
- Expedited partner treatment (EPT)
  - Patient-delivered partner treatment (PDPT)
  - Health department field-delivered treatment
  - Pharmacy-based
- Provider or clinic-based referral
- Health department referral

The Effectiveness of Expedited Partner Treatment on Re-Infection Rates



Golden M, et al. N Engl J Med 2005 Feb 17;352(7):676-85.

EPT

- All providers should be familiar with EPT.
- Clinical evaluation of partners should always be the first option.
- If clinical evaluation is not possible, consider erring on the side of EPT for male partners of men.
- But not blessed for NY State….

And wait a minute….

Sexually Transmitted Diseases 2015;42:331-336 (June 2015)

Gonorrhea Treatment Failures With Oral and Injectable Expanded Spectrum Cephalosporin Monotherapy vs Dual Therapy at 4 Canadian Sexually Transmitted Infection Clinics, 2010–2013

Ameeta E. Singh, BMBS, MSc, FRCPC, Jennifer Gratrix, MSc, Irene Martin, BSc, Dara S. Friedman, PhD, Linda Hoang, MD, Richard Lester, MD, Gila Metz, MD, Gina Ogilvie, MD, Ron Read, MD, and Tom Wong, MD

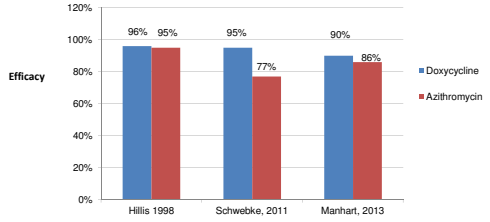
Background: Antimicrobial resistance has developed to all antibiotics used to treat gonorrhea (GC), and trends in GC antimicrobial resistance have prompted changes in treatment guidelines. We examined treatment failures in sexually transmitted infection clinics.
Methods: Four Canadian sexually transmitted infection clinics reviewed treatment regimens, minimum inhibitory concentrations for cephalosporins and azithromycin, anatomical infection sites, and treatment outcomes for GC infections between January 2010 and September 2013, in individuals who returned for test of cure within 30 days of treatment. Treatment failure was defined as the absence of reported sexual contact during the posttreatment period and (i) positive for *Neisseria gonorrhoeae* on culture of specimens taken at least 72 hours after treatment or (ii) positive nucleic acid amplification test specimens taken at least 2 to 3 weeks after treatment, and matching sequence type pretreatment and posttreatment. χ^2 Test and Fisher exact test were used to assess association of categorical variables.
Results: Of 389 specimens reviewed, GC treatment failures occurred in 13 specimens treated with cefixime 400-mg single dose (17.8% treatment failure rate regardless of anatomical site) and in 1 oropharyngeal specimen treated with cefixime 800-mg single dose. No treatment failures occurred using either ceftriaxone monotherapy or cefixime/ceftriaxone combined with azithromycin or doxycycline.
Conclusions: In contrast to oral cefixime monotherapy, no treatment failures were identified with injectable ceftriaxone monotherapy or combination GC treatment. Our data support the use of combination treatment of GC with an extended spectrum cephalosporin (including oral cefixime) with azithromycin or doxycycline as well as ceftriaxone monotherapy.

Chlamydia treatment

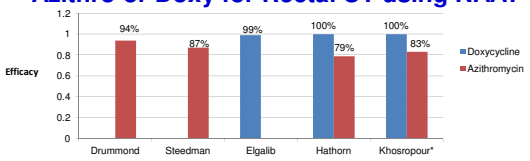
Chlamydia Treatment

- Effectiveness of azithromycin < doxycycline
  - Data from one NGU trial and several rectal infection studies
- Doxycycline delayed release 200 mg tablets (Doryx)
- Amoxicillin moved to alternative regimen in pregnancy
  - In vitro studies demonstrate PCN induces persistent viable noninfectious *Chlamydia* forms that revert to infectious forms after PCN removal (Wyrick)
  - Earlier amoxicillin Rx studies in CT in pregnancy had major limitations
  - RCT by Kacmar et al. showed higher TOC by LCR w/ azithro vs. amox (95% vs. 80%),

Azithro vs. Doxy RCTs using NAAT



Azithro or Doxy for Rectal CT using NAAT



REF	CT + Cohort	Rx	TEST	TOC	Limitations
Drummond	85 MSM	Azithro	PCR	21-372 days	-Retrospective -45% tested >12 wks
Steedman	68 MSM	Azithro	PCR	Rec ≥21 days	-Retrospective -Most repeat CT+ sex after Rx -1/3 repeat CT+ tested ≤ 21 days
Elgalib	165 MSM	Doxy	SDA/TMA	Median 45d IQR 34-88d	-Retrospective -Long post-Rx test interval -Majority rectal CT pts excluded
Hathorn	82 MSM/women	42 Azithro 40 Doxy	TMA	Rec 42 days	-High lost-to-f/u (~50%) -Treatment bias in doxy Rx phase
Khosropour* (Unpublished)	89 MSM	69 Azithro 20 Doxy	Culture/TMA (majority culture)	21-42 days	-Retrospective, prelim data (unpublished) -Culture less sensitive assay -Possible bias of doxy group cultured more

*Analysis shown restricted to 21-42 day interval (study included testiong up to 180 days)

Proctitis

Recommended:
Ceftriaxone 250 mg IM once
PLUS
Doxycycline 100 mg orally BID x 7 days
If LGV suspected
Doxycycline 100 mg orally BID x 3 weeks

- Bloody discharge, perianal ulcers, or mucosal ulcers among MSM with acute proctitis and either a positive rectal chlamydia NAAT or HIV infection should be offered presumptive treatment for LGV with doxycycline 100 mg twice daily orally for a total of 3 weeks.
- If painful perianal ulcers are present or mucosal ulcers are detected on anoscopy, presumptive therapy should also include a regimen for genital herpe

Proctitis, Proctocolitis, and Enteritis

Proctitis

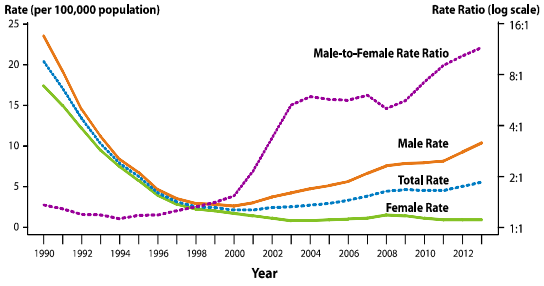
- Inflammation of the rectum (distal 10-12 cm)
- Receptive anal intercourse
- Anorectal pain, tenesmus, rectal discharge
- GC, CT, TP, HSV most common

Proctocoliltis

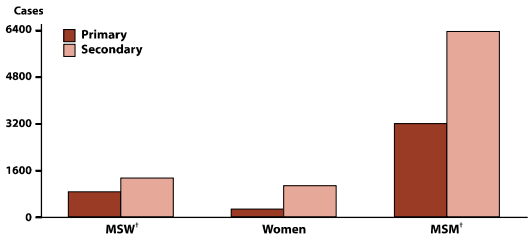
- Inflammation of colonic mucosa extending to 12 cm above anus
- Receptive anal intercourse or by oral-anal contact
- Proctitis symptoms, diarrhea or abdominal cramps
- Campylobacter sp, Shigella sp, Entamoeba histolytics, and LGV serovars of CV
- HIV infected persons can also have CMV and other OIs

SYPHILIS

Primary and Secondary Syphilis—Rates of Reported Cases by Sex and Male-to-Female Rate Ratios, United States, 1990–2013

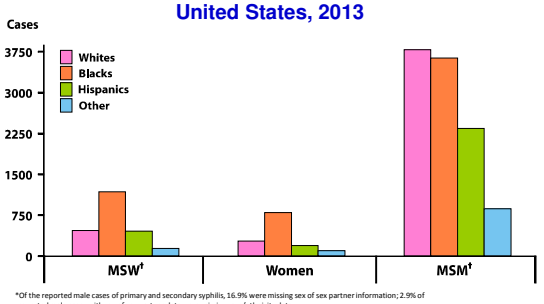


Primary and Secondary Syphilis—Reported Cases* by Stage, Sex, and Sexual Behavior, United States, 2013



*Of the reported male cases of primary and secondary syphilis, 16.9% were missing sex of sex partner information.
†**MSW**=men who have sex with women only; **MSM**=men who have sex with men.

Primary and Secondary Syphilis—Reported Cases* by Sex, Sexual Behavior, and Race/Ethnicity, United States, 2013



*Of the reported male cases of primary and secondary syphilis, 16.9% were missing sex of sex partner information; 2.9% of reported male cases with sex of sex partner data were missing race/ethnicity data.
†**MSW**=men who have sex with women only; **MSM**=men who have sex with men.

HIV/Syphilis screening

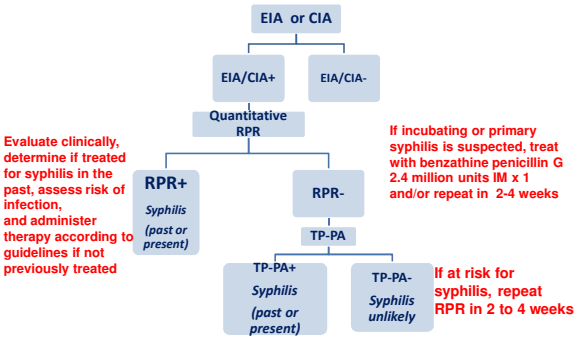
- Screen annually at minimum.
- Screen every 3-6 months in those with ongoing risk.
- Utilize highly sensitive tests, such as 4th generation, when screening.
- Screen HIV-infected MSM for syphilis annually at minimum.
- If your patient is living with HIV, discuss any disclosure challenges that might exist and recognize that significant stigma may remain a barrier to disclosure.

Syphilis

- No *T pallidum* detection tests available
- Serological response to tx (Sena 2011)
  - Stage (earlier stage more likely to decrease 4x)
  - titer (low titer less to decline than higher titer)
- Time between Benz pcn doses (LL)
  - *<9 days is best based on limited PK (nonpregnant)*
  - *7 days in pregnant women*
    - *40% are below treponemicidal levels after 9 days*
    - *If a dose is missed, the entire series must be restarted*

79

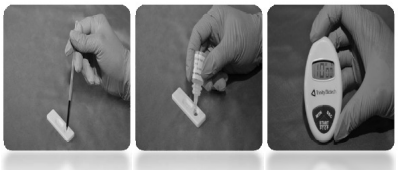
Reverse Screening Algorithm



MMWR / February 11, 2011 / Vol. 60 / No. 5

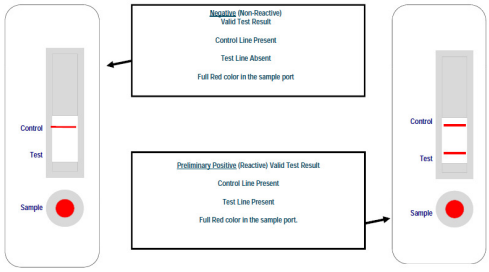
Syphilis Health Check™ Venipuncture Procedure.....

- Po
- Tes
- Fir



1. Collect Venipuncture Sample (WB, serum, plasma)
2. Dispense 1 Drop of Sample into Sample Port (2 drops if WB or FS)
3. Add 4 Drops of Wash Solution
4. Read Test Device between 10 and 15 Minutes

Syphilis Health Check™ Test Interpretation.....



Syphilis Treatment
Primary, Secondary, Early Latent

- Penicillin treatment of choice +/- HIV
  - Benz Pcn 2.4 mu IM x 1
- No benefit of additional therapy (Rolfs 1997)
  - Enhanced (IM+oral)
- PCN alternatives
  - Doxycycline, ceftriaxone
  - Azithromycin 2 gm (A2058G mutation/tx failure)
    - MSM>MSW (Su, STD 2012)
    - Do not use in MSM or pregnancy

Evaluation of CNS Involvement

- Clinical signs (neurologic, ocular, auditory, meningitis, stroke) warrant investigation
- CNS invasion in early syphilis +/- HIV is common
  - CSF abnormalities
  - Unknown clinical significance in absence of signs or sx
- **Neurosyphilis: CSF tests + reactive RPR + signs/sx**
- LP: neuro/ocular sx, serologic treatment failure, tertiary
  - Some studies in HIV+ showed association with CSF abnormalities*
    - RPR ≥ 1:32 and/or CD4 ≤350
  - Unless neurologic signs/sx, value of LP unknown.

*** Marra 2004; Libois A, *STD* 2007; Ghanem CID; Marra CID 2008**

Clinical Advisory: Ocular Syphilis in US. MMWR April 16, 2015

What is it?

- Ocular syphilis is a manifestation of neurosyphilis
  - Can involve any eye structure, but posterior uveitis and panuveitis are most common
- Decreased visual acuity including permanent blindness

What do I do?

- Screen for visual symptoms in patients at risk for syphilis
- Do a careful neuro exam including all cranial nerves
- If ocular signs or symptoms, send for ophthalmologic evaluation
- Do lumbar puncture
- Treat for neurosyphilis
- Report case to state or local health department

Lymphogranuloma venereum

- Outbreaks of proctocolitis among HIV+ MSM
- MSM presenting with protocolitis should be tested with rectal NAATs (chlamydia)
  - PCR based genotyping LGV vs non LGV strains but results not available in real time
  - Protocolitis +/- perianal ulcers should receive presumptive tx for LGV (doxy 100 mg bid x 21 d)
    - Painful perianal ulcers or mucosal ulcers (anoscopy) presumptive therapy for HSV

HPV Infection

- ACIP HPV vaccine recommendations (*MMWR, 2014, Vol 63)*
- Podophyllin resin 10-25% (alternative)
  - Case reports of serious systemic toxicity (including death)
  - No clear efficacy benefit when compared with podophyllotoxin
- Case reports of inflammatory responses to imiquimod
  - Worsened inflammatory and autoimmune skin disease
    - **psoriasis, vitiligo, and lichenoid dermatoses**
- Imiquimod (3.75%) applied daily for genital warts

Risk to Healthcare Workers Treating GW

- HPV DNA can be found in smoke plumes after laser or electrosurgical therapy on EGW, CIN, common warts
- 2 case reports of laryngeal papillomas reported in HCW exposed to smoke plumes during treatment of GW
- Appropriate infection control to prevent possible transmission for anogenital warts and anogenital intraepithelial neoplasias (e.g. CIN) with CO2 laser or electrosurgical procedures (local exhaust ventilation-smoke evacuator)

Anal Cancer Screening

- HPV vaccination of MSM (ACIP 2014)
- Some clinical centers perform anal cytology in high risk populations
- Data are insufficient to recommend routine anal cancer screening with anal cytology
  - More evidence on best screening methods
  - Safety and response to treatment
  - Programmatic considerations
- High risk HPV tests not clinically useful for anal cancer screening (high prevalence of anal HPV infection)

HPV

- Discuss/offer HPV vaccine, regardless of age and regardless of clinical presentation, but cognizant of payer.
- All MSM should have an annual anal exam.
- All MSM should have an (annual?) digital rectal exam.
- Refer for further evaluation if condyloma present.
- Consider anal PAP if infrastructure exists to follow up.

9vHPV (MMWR March 27, 2015)

Characterisitc	Bivalent (2vHPV)	Quadrivalent (4vHPV)	9-valent (9vHPV)*
Brand name	Cevarix	Gardasil	Gardasil 9
VLPs	16,18	6,11,16,18	6,11,16,18,31,33,45, 52,58
Manufacturer	GSK	Merck	Merch
Manufacturing	*Trichoplusia ni* insect cell line infected with L1 encoding recombinant baculovirus	*Saccharomyces cerevisiae* (Baker's yeast0, expressing Li	*Saccharomyces cerevisiae* (Baker's yeast0, expressing Li

- HPV routine vaccination at age 11 or 12
- Gardasil is licensed for males and females
- Also for females 13 through 26 and males 13 through 2, if not previously vaccinated
- Also for MSM through age 26 and for immunocompromised, if not previously vaccinated
- **December 10, 2014 FDA approved for use in females ages 9-26 and males ages 9-15; ACIP also includes males up to 26 in MMWR

Hepatitis

- Vaccinate for Hep A
- Query about Hep B vaccine, vaccinate those not in vaccinated cohort
- Consider screening for chronic active Hep B in those not vaccinated
- Screen for Hep C (annually?)

HSV

- Consider undertaking discussion about HSV disclosure with your patient.

Emerging Issues

- **Sexually acquired HCV**
  - Unprotected receptive anal intercourse
  - Rough or poorly lubricated unprotected anal penetration(fisting)
  - Ulcerative STIs (syphilis, LGV)
- **Annual screening**
  - MSM +/-HIV infection
  - Yearly testing with repeat test (HCV prevalence, high risk behavior, ulcerative STI or STI-related proctitis)
- Acute HCV may be HCV Ab negative (CD4 <200)
  - HCV RNA with new LFT elevation

Family planning

- Gay people oftentimes have, or more importantly desire to have, children.
- Many MSM also have sex with women.
- Providers should be comfortable discussing family planning in the context of LGBT families.

Mental health/Substance abuse

- Screen for mental health issues.
- Screen for sexual abuse/violence.
- Screen for substance abuse issues.
- Be knowledgeable about referral resources for mental health and substance abuse counseling.

Mobile apps

- Providers should be aware of where and how MSM might be meeting their sexual partners.
- Newer varied platforms for meeting sexual partners have both facilitators and barriers to healthy sex lives. Providers should be familiar enough with them to converse about them.

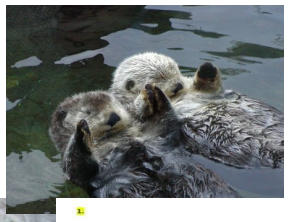
Meanwhile…

Grindr MANHUNT JACK'D

ADAM 4 ADAM

Sexual Scripts

p n' p
(pee-en-PEE) verb. abbreviation for **party and play** as relating to homosexual men engaging in sexual acts while high on methamphatimine (see **p and p** and **crystal dick**)



Silver Daddies
WEEKLY SOCIALS FOR DADDIES AND THEIR ADMIRERS

1.
UB2
This is an abbreviation used often in personal ads in various on-line services for gay men meaning, "You be, too!" -- a call for only other HIV-negative men to respond.
I'm 510 smooth top looking for hook up UB2
by chad79 April 03, 2006

Broad sexual health concepts

- Providers should be comfortable discussing erectile dysfunction with MSM. Providers should not withhold ED drugs for fear of STDs or in the setting of PrEP.
- Providers to MSM should be familiar with testosterone (and growth hormone) deficiency, symptoms of such and how to screen.
- Providers should be comfortable talking about sexual practices with MSM including anal health: douching, enemas, etc.

Closing

- Providers should be able to affirm sexual health and the things that might make sex healthier (like PrEP), while attempting to minimize risk (like STDs).
- Instead of dogmatic messages, providers should empower patients to make wise decisions by providing them accurate and unbiased information and services.