





Building Skills in Sexual Health Series Session #2:

STI Update for Primary Care

Special Presentation from:

UW STD Prevention Training Center

National STD Curriculum

Friday, August 19, 2022







WELCOME!!!

Washington State Department of Health, the Washington Association for Community Health, and the Washington AIDS Education and Training Center are partnering to offer a monthly webinar series that will aid primary care health care professionals and organizations in Washington leverage the whole care team to address patients' sexual health.









WELCOME!!!

Third Friday of each month

July 2022 through April 2023 (No session in December)

Most sessions 90-minutes

Clinical information

Resources



Logistics

- This session is being recorded.
- Zoom Meeting.
 - We encourage you to have your cameras on.
 - Be mindful of background noise.
 - Unmute to ask questions or use Q/A.
- CE certificates to all participants.
- Evaluation.
 - For data reporting purposes.





STI Update for Primary Care

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Last Updated: 8/15/22

Disclaimer

Funding for this presentation was made possible [in part, if applicable] by U10HA29296 from the Human Resources and Services Administration HIV/AIDS Bureau. The views expressed do not necessarily reflect the official policies of the Department of Health and Human Services nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government. *Any* trade/brand names for products mentioned during this presentation are for training and identification purposes only.

Disclosures

No conflicts of interest or relationships to disclose.



Objectives

- Describe the recommended regimens in the CDC STI treatment guidelines
- List the preferred-over-alternative regimens in the guidelines
- Discuss the emerging and ongoing challenges of the leading STIs
- Discuss the current monkeypox epidemic

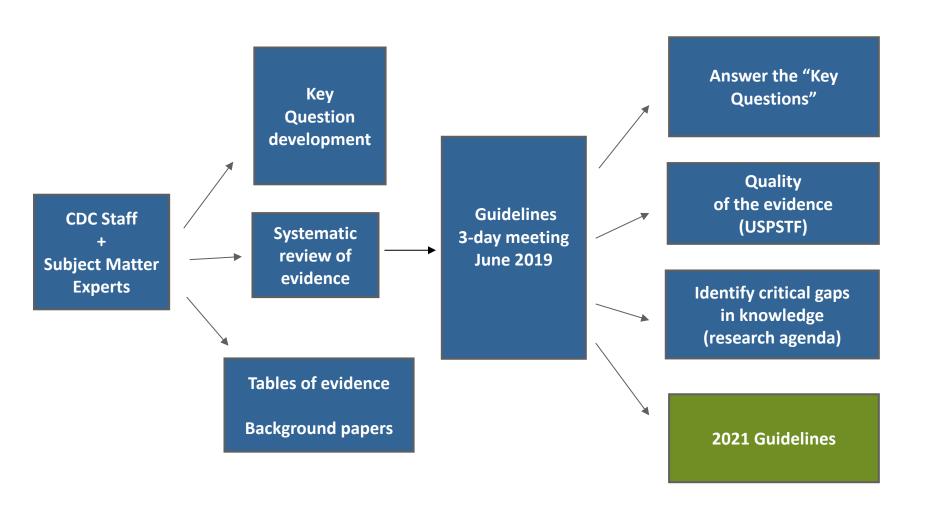


Additional caveats

- Sex-based data & recommendations
 - Screening guidelines for "women" and "men"
 - For clinical purposes, consider anatomy and anatomic sites of exposures
- Language could be more inclusive of other gender/sexual minorities
- Graphic image warning
- Racism, not race/ethnicity, creates and perpetuates health disparities



Evidence-based approach to guideline development





2021 STI Treatment Guidelines – What's new?

- STD → STI
- Discrete population-based screening recommendations
- Highlight of ongoing antimicrobial resistance
- Treatment
 - "Recommended" preferred to "alternative" regimens
 - Changes to several first-line regimens: rectal CT, Trichomonas, etc.
- Additional information on diagnostics for STI
- Enhanced focus on management of complicated syphilis



Toolbox for STI control and prevention

- Accurate risk assessment; education and counseling to reduce risk or avoid STIs through changes in sexual behaviors and use of prevention services
- Pre-exposure vaccination for vaccine preventable STIs
- Screening: Identifying asymptomatic infection
- Diagnosis: Identifying infection in persons with STIassociated symptoms → treatment, counseling, follow-up
- Partner services: Evaluation, treatment and counseling of sex partners of persons diagnosed with STIs



Screening



Updates to Hepatitis C (HCV) screening

All adults

At least once if ≥18 years*

Pregnant persons

With each pregnancy*

MSM with HIV

At least once if ≥18 years* & annually thereafter



STI Screening: Non-pregnant cisgender women (partners of any gender)

Women younger than 25 years of age

- Chlamydia & gonorrhea (CT/GC) annually
 - Cervix, vaginal or urine
 - Rectal & pharyngeal: may consider
- HIV at least once
- HCV at least once if ≥18 years

Women 25 years of age or older

- GC and CT: if at risk
- HIV at least once
- HCV at least once if ≥18 years

Screening <u>not</u> recommended for *Mycoplasma* genitalium or *Trichomonas vaginalis*



STI Screening: Pregnant persons (partners of any gender)

All pregnant individuals

- HIV at 1st prenatal visit. If at risk, retest during 3rd trimester (by 36 weeks)
- <u>Syphilis</u> at 1st prenatal visit. If at risk, retest at start of 3rd trimester (and possibly delivery)
- HBsAg at 1st prenatal visit (even if previously vaccinated or tested)
- HCV with every pregnancy*

If <25 years of age or at risk

• GC and CT at 1st prenatal visit, again in 3rd trimester if at risk



STI Screening: Cisgender men who have sex with women (MSW)

- HIV if seeking STI testing; CDC and USPSTF Grade A recommendation to screen at least once for all persons aged 15-65
- HCV at least once as an adult*
- Syphilis: no specific recommendation; PHSKC/WA DOH joint guidelines



2022 PHSKC & WA DOH Updated Syphilis Screening Guidelines

Cis-women and cis-men who have sex with women (including pregnant persons)

Test sexually active* patients with any of the following risk factors at least annually and whenever they present for care up to every 3 months:

Persons who inject drugs

Persons who use methamphetamine or nonprescription opioids

Persons living homeless or who are unstably housed

Person engaged in transactional sex

Persons entering correctional facilities or with a history of incarceration in the prior 2 years

Persons with a history of syphilis in the prior 2 years

Persons with a sex partner with any of the above risks should test for syphilis at least annually

Pregnant persons should be tested at the following times:

First prenatal care

Time of 3rd trimester laboratory testing - typically done at 24-28 weeks gestation

Time of delivery if any of the above risks are present or the pregnant person was diagnosed with a bacterial STI or first-episode of HSV (genital herpes) during pregnancy⁺⁺.

Test pregnant persons not engaged in prenatal care any time that present to a clinical setting (i.e., ERs, jail, substance use treatment facilities, labor and delivery, etc.)

Pregnant persons with fetal demise at >20 weeks gestation

Sexually active persons aged 45 and under if they have not tested since January 2021.

Women whose male partners have sex with both men and women should test for syphilis annually

Sexually active HIV positive persons outside of mutually monogamous relationships should test annually

Persons diagnosed with gonorrhea or HIV should be tested for syphilis if not done at the time of their initial gonorrhea/HIV testing



STI Screening: Cisgender men who have sex with men (MSM)

- HIV*
- Syphilis*
- Urethral GC and CT*
- Rectal <u>GC and CT</u> (if receptive anal sex)*
- Pharyngeal <u>GC</u> (if receptive oral sex)*
- Hepatitis B (sAg, cAb, sAb)
- HCV[△]
- Anal cancer: annual DARE may be useful (no anal Pap rec's yet)
- HSV-2 serology: may consider

Screening <u>not</u> recommended for *M. genitalium* or *T. vaginalis*



^{*} Annually, but more frequently (every 3-6 months) if additional risk factors △ Unless local prevalence is <0.1%

STI Screening: Transgender and nonbinary persons

Based on current anatomy and gender of sex partners

- HIV: offer to all persons
- Trans persons who have sex with men likely have similar risk for STIs as cis MSM

Trans men s/p metoidioplasty

If vagina still present and need to screen: use cervical/vaginal swab

Trans women s/p vaginoplasty

- GC and CT at all sites of exposure: oral, anal and genital
- Urine vs neovaginal swab not specified



STI screening for persons living with HIV

	First evaluation	Annually (if sexually active)	More frequently based on risk behaviors
СТ	x	x	x
GC	x	x	x
Syphilis	x	x (MSM)	x (MSM)
HSV	(Consider)		
Trichomonas (persons with vagina)	X	X	
Cervical cancer	x	\mathbf{x}^{Δ}	
Anal cancer (DARE)	x	x	
HBV	x		
HCV	x	x (MSM)	

Screen extragenital sites based on exposure!

Pharynx: GC (if received oral sex)
Rectal: GC/CT (if received anal sex)



^{*} Repeat within 6 months

△ With 3 normal consecutive Pap smears → screen every 3 years

Screening in other special populations

- Women who have sex with women (and men)
- Adolescents and children
- Persons in correctional facilities
- Sexual assault victims (including men)



Who to screen for GC & CT

Women

< 25 annually, 25+ if at risk

• Pregnant <25 or risk

MSM

 3-6 month intervals at all exposed sites: genital, rectal, pharyngeal

MSW

 High prevalence settings (e.g., Corrections, STI Clinics, adolescents)

Persons living with HIV

- At least annually
- All exposed sites: genital, rectal, pharyngeal

Patients on PrEP

- Every 3-6 months
- All exposed sites

Adolescents

Consider rectal/pharyngeal screen based on reported behavior/ exposure



Who to screen for syphilis

Pregnancy

- At first prenatal visit
- Again at 28 weeks and at delivery (if at high risk, or residing in area with high syphilis morbidity)

MSM

Including those on PrEP, 3-6 month intervals

Corrections

Universal opt out screening on intake based on local area or institutional incidence

Persons living with HIV

At least annually

STI Clinic patients

- Regardless of symptoms
- If other STI diagnosed



Swab self-collection





Test of cure vs retesting

	Test of cure		Testing for reinfection at 3 months
	Pregnant persons	All others	
СТ	At 3-4 weeks	At 14 days	x
Anogenital GC	At 3-4 weeks*		x
Pharyngeal GC	At 14 days		x
Trichomonas			Persons with vagina



^{*} Not included in 2021 CDC STI Guidelines

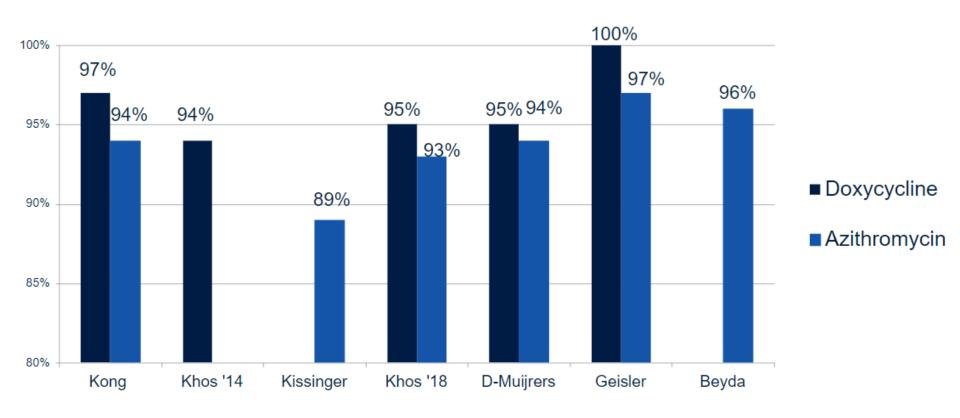
∆ With 3 normal consecutive Pap smears → screen every 3 years

TREATMENT AND MANAGEMENT

Chlamydia

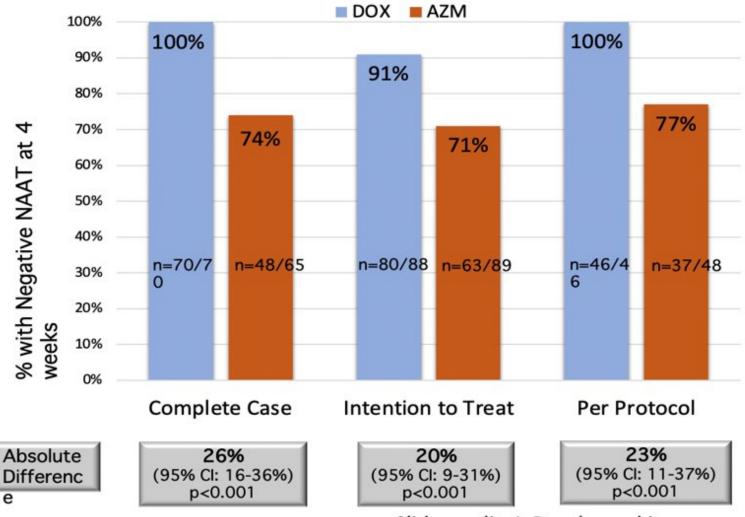


Doxycycline vs azithromycin for urogenital CT





Doxycycline vs azithromycin for rectal CT







Treatment of CT in non-pregnant individuals

Recommended regimens

Doxycycline 100 mg PO bid x 7 days*

Alternative regimens

Azithromycin 1 gm PO in a single dose

OR

Levofloxacin 500 mg PO daily x 7 days



Treatment of CT in pregnant individuals

Recommended regimens

Azithromycin 1 gm PO in a single dose

Alternative regimens

Amoxicillin 500 mg PO three times per day x 7 days

Recommend test of cure in 3-4 weeks



Expedited partner therapy (EPT)

Chlamydia	Gonorrhea	Syphilis	Trichomonas
Ok for all	Ok if partner can't receive IM	Do not give	Not recommended

- No states in US prohibit EPT (either allowable or potentially allowable by law/statute in all 50 states)
- Previously only recommended for heterosexual men/women, now "shared decision making" for EPT for MSM
- Preferred approach: give patients packaged oral medications (+/- information sheet)
- Partners (especially adolescents) may not fill prescriptions



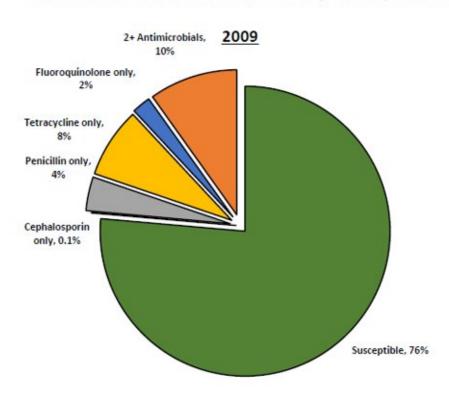
TREATMENT AND MANAGEMENT

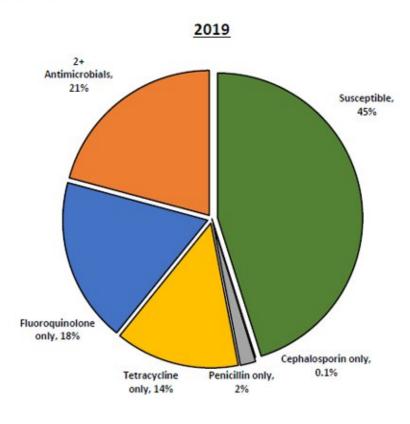
Gonorrhea



GC antibiotic resistance is increasing

Prevalence of Resistant or Decreased Susceptibility of *N. gonorrhoeae* Isolates to Antimicrobials, GISP, 2009 and 2019*







^{* 2019} data are preliminary

New treatment guidance for uncomplicated GC

Update to CDC's Treatment Guidelines for Gonococcal infection, 2020; MMWR

Recommended regimens

Ceftriaxone 500 mg IM x1 (if weight <150 kg) *

If chlamydia has not been excluded:

- Also treat with doxycycline 100 mg PO bid x 7 days
- If pregnancy, allergy or concern for possible non-adherence: ok to give azithromycin 1 gm PO in a single dose

Routine dual coverage with azithromycin no longer recommended

Test of cure recommended for pharyngeal GC at ~14 days



Treatment of uncomplicated GC (if ceftriaxone is not available)

Update to CDC's Treatment Guidelines for Gonococcal infection, 2020; MMWR

Cefixime 800 mg PO x1

If chlamydia has not been excluded:

- Also treat with doxycycline 100 mg PO bid x 7 days
- If pregnancy, allergy or concern for possible non-adherence: ok to give azithromycin 1 gm PO in a single dose

If true cephalosporin allergy:

Gentamicin 240 mg IM + azithromycin 2 gm PO

No reliable alternative for pharyngeal gonorrhea
Test of cure recommended for pharyngeal GC at ~14 days



Rationale for GC treatment changes

- Push to minimize antibiotic exposure (benefit vs risks)
- Increased azithromycin resistance a concern for GC and other bacteria
- Higher doses more likely to cure pharyngeal GC

Ceftriaxone: time above MIC (20-24 hours) with 500 mg dose is most effective^

Weight	3 mg/kg	5 mg/kg^	10 mg/kg	
50 kg	150 mg	250 mg	500 mg	
80 kg*	240 mg	400 mg	800 mg	
100 kg	300 mg	500 mg	1000mg	
150 kg	450 mg	750 mg	1500mg	



TREATMENT AND MANAGEMENT

Syphilis



Atypical primary syphilis









Evaluation of ocular syphilis

- Urgent ophthalmology evaluation
- Ocular syphilis may or may not involve CNS
- If isolated ocular sx that are confirmed
 on exam + reactive serology = CSF
 exam is unnecessary before
 treatment
- CSF may be helpful if ocular sx + reactive serology and normal exam

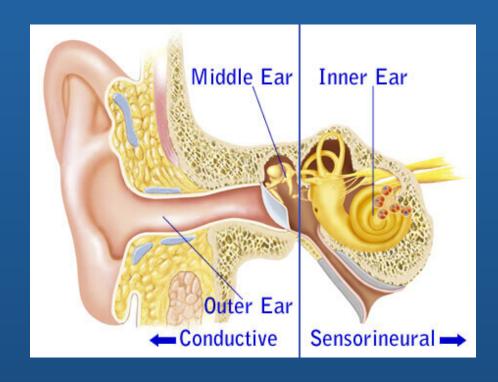


Panuveitis, retinal vasculitis, CN II-VI dysfunction, etc.



Evaluation of otosyphilis

- Urgent ENT or audiology evaluation
- Otosyphilis may or may not involve the CNS
- If isolated auditory
 abnormalities + reactive
 serology, CSF is almost
 always normal and not of
 any additional diagnostic
 benefit





Who really needs a LP?

- Neurologic signs or symptoms <u>or</u> ocular sx + reactive serology with a normal exam
- Evidence of active tertiary disease (aortitis, gumma, general paresis, tabes dorsalis)
- Treatment failure
 - Sustained 2-titer (4-fold) increase in VDRL/RPR
 - High titer (RPR >1:32) syphilis that does not decline 2 titers (4-fold) over 6-12 months (1° or 2° syphilis) or 12-24 months (latent syphilis) soft indication
- Expert opinion: Anyone with RPR titer ≥1:32, HIV patients off ART or with CD4 ≤350



Follow-up LP after treatment?

For those who are immunocompetent or who have HIV and on effective ART, normalization* of the serum RPR titer predicts normalization of CSF parameters after NS tx.

Repeat CSF exams not necessary in setting of serologic and clinical response to therapy.



Follow up (HIV-negative patients)

- Quantitative nontreponemal titers are used to follow clinical response
- Fourfold change (two dilutions) is an appropriate response within 6-12 months
- Public Health Seattle & King County practice is to retest at 3 months (or sooner) as reinfection risk is high

Stage	2015 rec's	2021 rec's
P&S, early latent	Retest at 6, 12 mo	Retest at 12 mo
Late latent/unk duration	Retest at 6, 12, 24 mo	Retest at 24 mo



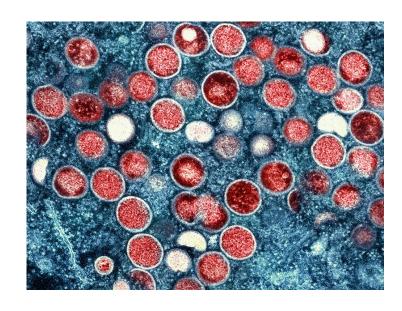
CLINICAL OVERVIEW, TREATMENT AND MANAGEMENT

Monkeypox



Background

- Orthopoxvirus first isolated in macaques in 1958
- Zoonosis → human-human transmission
 - Direct, close/intimate contact with infected lesions or fluid (including sex)
 - Contact with contaminated fomites
 - In utero
 - (Rarely by respiratory droplets)
- Incubation period: avg 6-13 days (range 3-21 days)





Monkeypox cases in WA State

County	Number of cases
<u>Benton</u>	1
Clark	4
Cowlitz	1
King	266
<u>Kitsap</u>	3
<u>Lewis</u>	1
Mason	1
<u>Pierce</u>	17
Snohomish	7
Spokane	5
Whatcom	1
Whitman	1
<u>Yakima</u>	4
Non-WA Resident	7
Total cases	319

Classic clinical presentation

- Prodromal phase
 - Fever
 - Headache
 - Myalgias (backache)
 - Lymphadenopathy
 - Chills
 - Exhaustion, lassitude
 - Viremia occurs

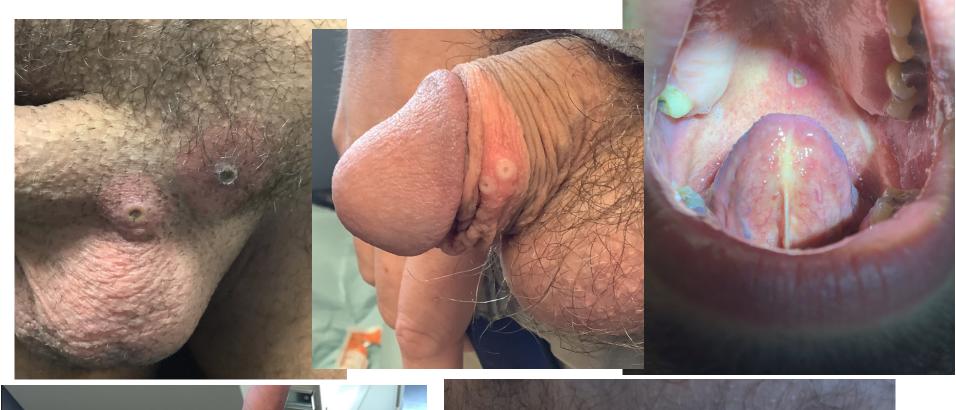
- Rash phase (1-3 days after fever)
 - Viremia and virus in lesions
 - Lesions synchronously progress over 2-4 weeks
 - Macules
 - Papules
 - Vesicles
 - Pustules
 - Scabs
 - New epithelialized skin (healed, non-infectious)



Clinical presentation in current outbreak

- Mild or absent prodrome may not "precede" rash
- Rash may be limited to 1 body site (51% have 2-10 lesions)
- Lesions may be in varying stages of development
- Common presentations
 - Tonsillitis and/or pharyngitis
 - Anogenital lesions with significant pain, tenesmus
 - Para/phimosis
- Coinfections with syphilis, HSV, GC/CT, etc.
- Superinfections with Staph. aureus, Strep spp., etc.









Day 2





Clinical presentation in current outbreak











Day 7

Day 8

Day 9











Day 10 Day 11

Day 16

Evaluation and diagnosis

- Requires high index of suspicion; consider epidemiologic risk factors
- Consider for any rash, especially if DDx includes HSV or syphilis
- PPE: K/N95 (or highest-level mask tolerated), gown, gloves, eye protection
- Swab for orthopox (or monkeypox) PCR
 - Vigorously swab or brush lesion for 5 seconds; ok to sample multiple sites with same swab
 - No need to unroof lesions
 - Place sterile dry polyester or Dacron swab into dry tube, UVM, VTM or Aptima tube

Testing sites

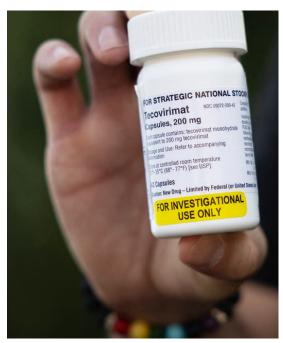
- UW monkeypox-specific PCR (TAT 1-2d)
- DOH (Shoreline) non-variola orthopoxvirus PCR (TAT 2-3d after specimen received and appropriate approval provided)
- LabCorp (TAT 5-6d)
- Quest (TAT 3-6d)
- ARUP, etc.



Management

Tecovirimat (*TPOXX*): Anti-orthopoxvirus drug available under EA-IND protocol

- Safety data in healthy human volunteers;
 used for smallpox dz or vaccine reactions
- Efficacy in animal models of poxvirus
- Criteria: severe infection, those at high risk for complications, immunocompromise, pregnancy, etc.
- Most people receive 600 mg PO bid x 14 days; must be taken with 600 cal and 25g fat
- AEs: headache, n/v, abdominal pain
- Anecdotally improves sx and reduces duration of illness





Management

- TPOXX allowed as directed or presumptive therapy
- Counseling: isolation, sx monitoring, reporting TPOXX AEs
- Symptom management
 - Proctitis
 - · Stool softeners
 - Lidocaine gel
 - Anti-inflammatory (if not bleeding)
 - · Sitz Baths
 - Avoid opioids if possible

- Genital Lesions
 - Frequent bathing
 - Keep it dry
 - Change clothes frequently

- Oropharyngeal lesions
 - · Magic mouthwash



MPX vaccination

Preferred: JYNNEOS™ (aka Imvamune) 0.5 mL SQ or fractional ~0.1 mL ID in two doses 28 days apart

Pre-exposure prophylaxis

Who should receive it? (CDC/ACIP)

- Clinical lab personnel handling orthopoxviruses
- Research lab workers handling animals or cx
- Certain HCW or public responders on preparedness teams

Post-exposure prophylaxis

Persons who meet risk criteria as determined by LHJs based on supply; within 4-14 days from exposure

PEP: for those <u>after known</u> exposure

PEP++: for those with risk factors and possible/presumed exposure based on recent experiences, including contacts identified by PH



MPX vaccination: Notes from the field

- Some going to Canada for vaccine
- Most LHJ focusing on first dose strategy; planning needed for 2nd doses (maybe sooner for immunocompromised, etc.)

Intradermal method

- Typically, can get 3-4 doses from single vial
- High probability of vaccine reaction with potential for permanent pigmentation



								1000
		1 st injection	2 wk post 1st injection	2 wk post 2 nd injection	2 wk post 3 rd injection	2 wk post 4 th injection	3 mo post 4 th injection	6 mo post 4 th injection
(T3)	Participant 1				*			
INTRADERMAL	Participant 2		рициприциприциприциприциприциприциприци			10 20 30 40		
	Participant 3	Barana M		to the second sector			-tacacacacac	



TREATMENT AND MANAGEMENT

Other pathogens



Mycoplasma genitalium

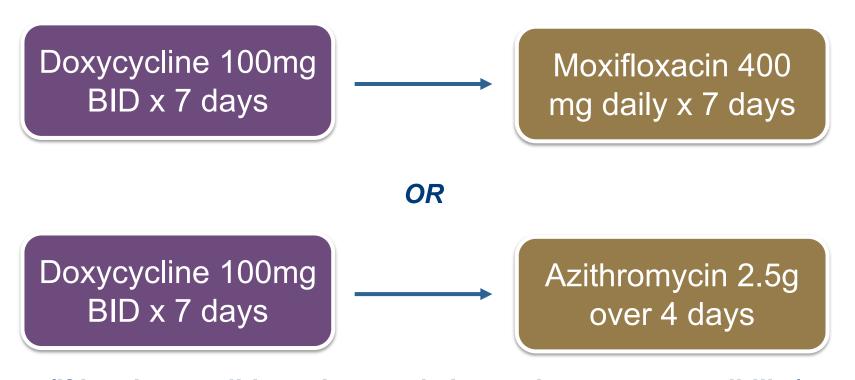
- Detected in >25% men with urethritis
- Yet population-based screening is not recommended
- FDA approved NAAT for urine, urethral, penile meatal, endocervical and vaginal specimens
- When to test
 - Persistent urethritis that fails therapy
 - Consider for persistent PID or cervicitis

Study Site (n)	Prevalence of MG (95% CI)
Durham, NC (n=93)	24.7 (16.0–33.5)
Greensboro, NC (n=152)	38.8 (31.1–46.6)
Pittsburgh, PA (n=174)	27.6 (20.9–34.2)
Birmingham, AL (n=235)	29.8 (23.9–35.6)
New Orleans, LA (n=103)	29.1 (20.4–37.9)
Seattle, WA (n=157)	20.4 (14.1–26.7)
TOTAL (n=914)	28.7 (23.8–33.6)



Sequential treatment for documented/suspected *Mycoplasma genitalium*

Start with doxycycline to reduce bacterial burden



(If local macrolide resistance is low or known susceptibility)



Rapid fire updates

Trichomonas

- Screening: cis women with HIV, or in correctional facilities or other high prevalence settings
- Dx: NAAT from urine, urethra, endocervical, vaginal
- Tx: Metronidazole 500 mg PO BID x7 days (HIV neutral)
- Men/contacts: Metronidazole 2 gm PO in single dose
- Counseling to refrain from EtOH intake is no longer recommended¹

Pelvic inflammatory disease

- Giving metronidazole led to lower endometrial anaerobe burden, reduced cervical *M. genitalium* and less CMT/pelvic tenderness (*P*<0.05)²
- Tx:
 - Ceftriaxone 500 mg IM (or other parenteral 3rd gen cephalosporin) x1 or cefoxitin 2 gm IM with probenecid 1 gm PO once
 - PLUS doxycycline 100 mg PO bid x 14 days
 - PLUS metronidazole 500 mg PO bid x 14 days
- 1. Fjeld H, Raknes G. Tidsskr Nor Laegeforen. 2014
- 2. HC Wiesenfeld, etl. CID 2021



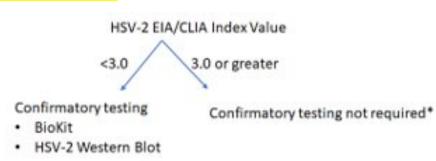
Rapid fire updates

Bacterial vaginosis – additional therapies

- Recommended (in addition to metronidazole 500 mg bid x 7 days)
 - Metro gel 0.75%, give 1 full intravaginal application (5 gm) daily x 5 days
 - Clindamycin cream 2%, 1 full intravaginal application (5 gm) qhs x 7 days
- Alternative (four prior regimens remain)
 - Secnidazole 2 gm oral granules in single dose (sprinkle onto soft food before ingesting and drink full glass of water to help with swallowing)

Herpes simplex virus (HSV)

- Consider screening only if symptoms c/w HSV
- If lesion present: type-specific HSV PCR is preferred
- Serologic 2-step testing for HSV-2 12 weeks after suspected acquisition;
 IgM not recommended



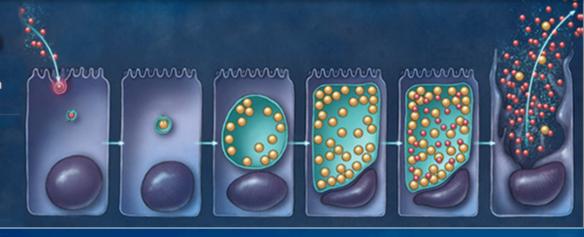
National STD Curriculum

A free educational website from the University of Washington STD Prevention Training Center.

□ Contributors

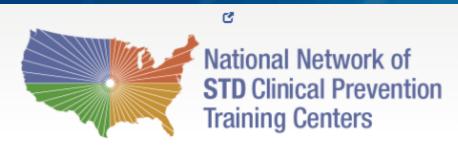
Funded by

Centers for Disease Control and Prevention (CDC)





Sexually Transmitted Infections Treatment Guidelines, 2021



STD Clinical Consultation Network

Consultations can be submitted at https://www.STDCCN.org 🖸 🕜 or by clicking on the logo above.



Acknowledgement

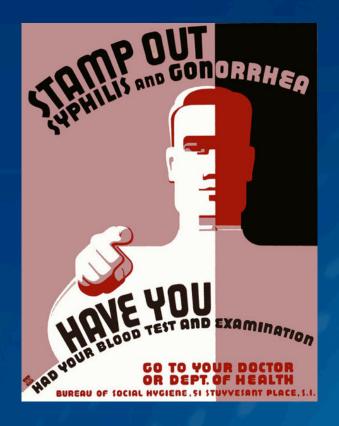
This Mountain West AIDS Education and Training (MWAETC) program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$3,098,654 with 0% financed with non-governmental sources.

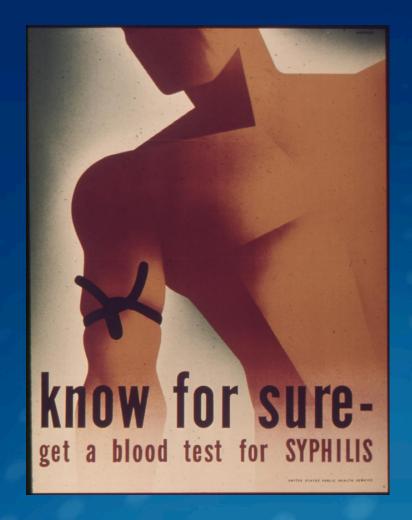
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Thank you!

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Next Session

Friday, September 16 9:00 – 10:30 AM PT HIV Prevention in Primary Care

Joanne D. Stekler, MD, MPH

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Division of Allergy & Infectious Diseases
Adjunct Associate Professor, Department of Epidemiology
Adjunct Associate Professor, Department of Global Health
University of Washington

Presentation on the WA AETC
HIV Prevention Coaching Program



Additional Topics

- HIV Prevention
- HIV Testing in Primary Care
- HIV Stigma and Implicit Bias
- Hep B and C Screening and Treatment
- STI and HIV in Adolescents
- Reproductive Health
- Chem Sex



Questions

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