

2021 STI Update

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**Sexually Transmitted Infections Treatment
Guidelines, 2021**

Disclosures

UpToDate: Royalties (Herpes section)

Consultant: Gilead, AbbVie

Data Safety Monitoring Board: Medpace

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- Thanks to Ina Park, Roz Plotzker, and Hillary Liss!

Top 8 Changes to the 2021 STI Guidelines*

*excluding topics previously covered!
GC, syphilis, vaginal discharge

1. Name Change!

STD

VS

STI

- Sexually transmitted disease
- Refers to disease state

- Sexually transmitted infection
- Refers to pathogen
- Often asymptomatic

2. Inclusivity



Revised “5Ps”

1. Partners – What is the gender...
2. Practices
3. Protection from STIs
4. Past history of STIs
5. Pregnancy intention (new)
 - Previously “prevention”

STI Screening: Transgender (TG) Persons

Based on current anatomy and gender of sex partners

- Offer HIV screening to all transgender persons
- TG persons who have sex with cisgender men, at similar risk for STIs as cis-MSM

Transgender women post vaginoplasty

- GC/CT at all sites of exposure: oral, anal, genital)
 - Urine vs neovaginal swab not specified, best specimen type based on tissue type used to construct neovagina.

Transgender Men post metoidioplasty

- If vagina still present and need to screen for STIs, use cervical/vaginal swab

Expedited Partner Therapy guidance

- EPT more permissive for MSM
 - “Unless prohibited by law or other regulations, medical providers **should offer EPT to patients** with chlamydia infection when the provider cannot ensure that all of a patient’s sex partners from the prior 60 days will seek timely treatment.”
 - “In light of limited data and the potential for inadequate treatment of bacterial STI in MSM partners, shared clinical decision-making regarding EPT is recommended.”

3. Doxycycline is preferred treatment for chlamydia at any site

Recommended Regimens for Chlamydial Infection Among Adolescents and Adults

Doxycycline 100 mg orally 2 times/day for 7 days

Alternative Regimens

Azithromycin 1 g orally in a single dose

OR

Levofloxacin 500 mg orally once daily for 7 days

*Doxycycline delayed release 200 mg daily is available and can be used

Evidence base for shift to doxycycline for chlamydia

Urogenital Chlamydia

1. Both doxycycline and azithromycin are highly effective

100% cure rates with doxy
97% with azithro

Situations where azithromycin may still be used:

- Pregnancy
- Concerns about ability to adhere to 7 day regimen
- Allergy, intolerance

Geisler W, NEJM 2015

Rectal Chlamydia



Dombrowski J, 2021, CID <https://doi.org/10.1093/cid/ciab153>



4. *M. genitalium*: diagnostics and more resistance

- More than 1 in 4 men with urethritis have *Mycoplasma genitalium*
- Population based screening for *M. genitalium* is NOT recommended
- **Diagnostic testing: NAAT (FDA approved in 2019) for urine, urethral, penile meatal, endocervical, vaginal specimens**
- **When to test: persistent urethritis that fails initial treatment, also consider for persistent PID or cervicitis**
- **Resistance: 64% resistant to macrolides (AZ), 11.5% par C (FQ), 8% both**

M. genitalium treatment

Recommended Regimens if *M. genitalium* Resistance Testing is Available

If **macrolide sensitive**: **Doxycycline** 100 mg orally 2 times/day for 7 days, followed by **azithromycin** 1 g orally initial dose, followed by 500 mg orally once daily for 3 additional days (2.5 g total)

If **macrolide resistant**: **Doxycycline** 100 mg orally 2 times/day for 7 days followed by **moxifloxacin** 400 mg orally once daily for 7 days

Recommended Regimens if *M. genitalium* Resistance Testing is Not Available

If *M. genitalium* is detected by an FDA-cleared NAAT: **Doxycycline** 100 mg orally 2 times/day for 7 days, followed by **moxifloxacin** 400 mg orally once daily for 7 days

5. Metronidazole is now recommended for PID

Regimens:

- ❖ Ceftriaxone 500 mg IM (or other parenteral 3rd generation cephalosporin) x 1 **or**
- ❖ Cefoxitin 2 g IM **with** probenecid 1 g orally once **PLUS**
- ❖ Doxycycline 100 mg orally twice daily for 14 days **WITH ~~OR WITHOUT~~**
- ❖ Metronidazole 500 mg orally twice daily for 14 days

PID Outpatient Treatment: Evidence for metronidazole

- **Randomized Controlled Trial (N=233 cis women)**
- **Ceftriaxone 250 mg IM plus Doxycycline 100 mg PO BID x 14 days plus**
 - Metronidazole 500 mg BID x 14 day **OR**
 - Placebo BID X 14 day
- **Primary outcome: Clinical improvement 3 days**
 - Similar between the arms
- **Additional outcomes:**
 - Anerobic organisms in endometrium at 30 days (Metronidazole: 8% vs 21%, $p < 0.05$)
 - CMT reduction/Pelvic tenderness (Metronidazole: 9% vs 20%, $p < 0.05$)

STUDY RESULTS

- **Primary outcome: Clinical improvement at 3 days similar between two arms**
- **Metronidazole**
 - Reduced anaerobes in endometrium (8% vs 21%, $p < 0.05$)
 - Reduced *M. genitalium* (cervical) (4% vs 14%, $p < 0.05$)
 - Reduced CMT/pelvic tenderness (9% vs 20%, $p < 0.05$)
- **Conclusion: Metronidazole should be routinely added for PID RX**

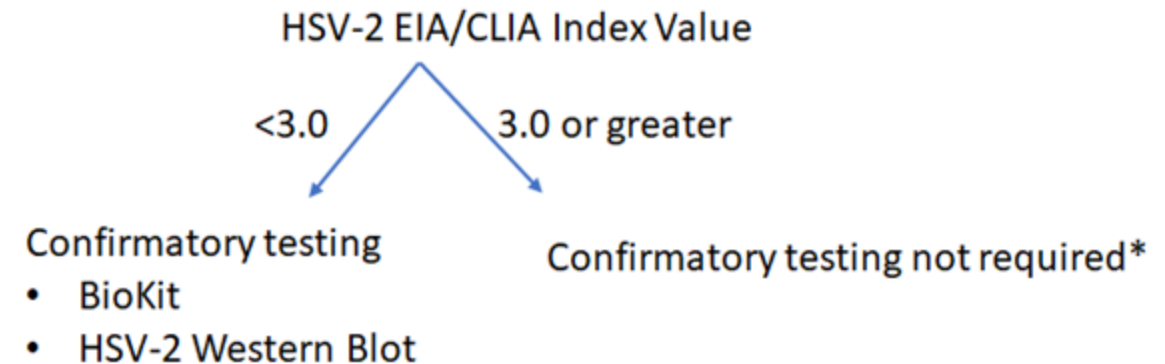
6. Genital Herpes: Diagnostic updates

- In presence of lesion:
 - Type-specific HSV PCR preferred diagnostic test
 - HSV culture (acyclovir resistant HSV)
- In absence of lesion:
 - HSV IgG Type-specific serologic testing:
 - Screening among asymptomatic not recommended (USPSTF)
 - Recurrent or atypical genital symptoms with negative PCR/culture result
 - Clinical diagnosis of genital herpes without laboratory confirmation
 - Partner with genital herpes
 - Persons at higher risk (those presenting for STI evaluation):
 - Consider screening for symptoms of genital herpes, serologic screening if symptoms



Genital Herpes: Serologic testing

- Serologic two-step testing for HSV-2 should be performed
 - Poor specificity of EIA at low index values (<3.0)
 - Serologic testing 12 wks after suspected recent acquisition
 - IgM not recommended



*False positive tests are possible even at higher index values

If confirmatory tests are unavailable, patients should be counseled about the limitations of available testing before obtaining serologic tests, and health care providers should be aware that false-positive results occur.

7. Penicillin Allergy: another opportunity for stewardship

- Prevalence of penicillin allergy is due to imprecise use of “allergy”
 - (IgE-mediated hypersensitivity vs. drug intolerances, idiosyncratic reactions)
- Use history to validate penicillin or another β -lactam antibiotic allergy
 - If low risk, consider treat with appropriate antibiotic
 - If high-risk (IgE-mediated), consider skin test, if negative, oral amoxicillin challenge
- Updates on penicillin skin testing procedures
- Modified desensitization protocols (clinical syndrome, drug, route of administration)

BOX 2. Low risk history in patients who report Penicillin allergy

Gastrointestinal Symptoms

Headache

Pruritis without rash

Localized rash

Delayed onset rash (>24 hours)

Symptoms unknown

Family history of penicillin or other drug allergy

Patient denies allergy, but it is on the medical record

8. Early detection for anal cancer

- **Warts:** Persons with external anal or perianal warts might also have intra-anal warts. Thus, persons with external anal warts might benefit from an inspection of the anal canal by digital examination, standard anoscopy, or high-resolution anoscopy.
- **Anal Cancer Early Detection:**

Men Who Have Sex
with Men (MSM)

- Digital anorectal rectal exam²
- Data is insufficient to recommend routine anal cancer screening with anal cytology^{2, 18}



National **STD** Curriculum

www.std.uw.edu

The *National STD Curriculum* is reviewing and updating content to align with CDC's 2021 STI Treatment Guidelines. Updated content will then launch as 2nd Edition. The free site addresses the diagnosis, treatment, and prevention of STDs and STIs.

- Seven self-study Lessons
- Question Bank topics with board-review style questions
- Podcast series on innovative and significant topics
- A learning group tool for healthcare entities to enroll members, assign units, and track progress
- FREE CME credits, CNE, and CE contact hours, and pharmacology CE for advanced practice nurses

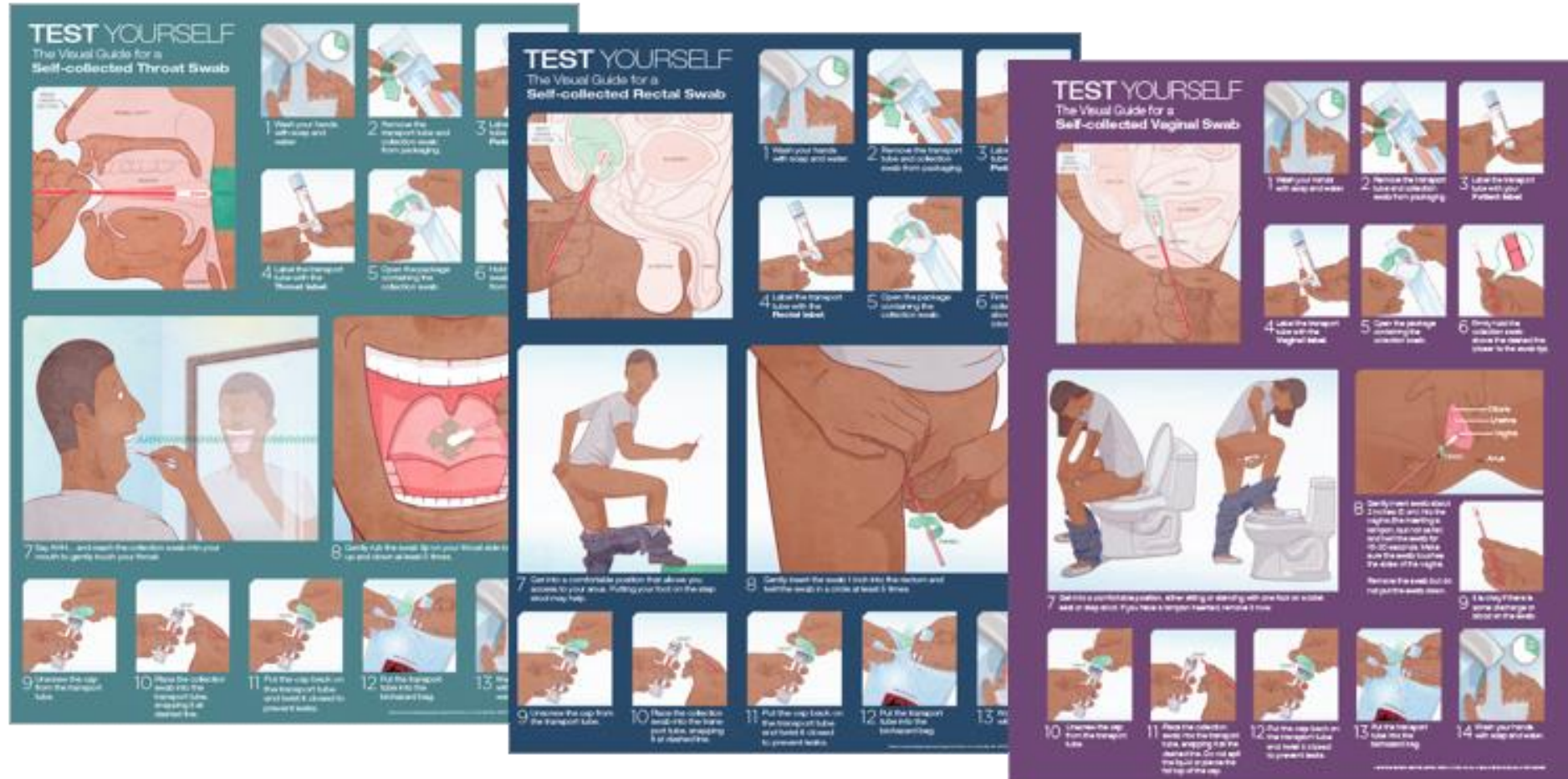
CLINICIANS, Got a Tough STD Question?

GET FREE EXPERT STD CLINICAL
CONSULTATION AT YOUR FINGERTIPS



STDCCN.org

Extragenital Self-Testing Resources



Available in English and Spanish
Email aradford@uw.edu for free posters for your clinic

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