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Sexually Transmitted Infection: Prevention, Screening, Testing and Treatment Guideline

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Last guideline approval: August 2022

Guidelines are systematically developed statements to assist patients and providers in choosing appropriate health care for specific clinical conditions. While guidelines are useful aids to assist providers in determining appropriate practices for many patients with specific clinical problems or prevention issues, guidelines are not meant to replace the clinical judgment of the individual provider or establish a standard of care. The recommendations contained in the guidelines may not be appropriate for use in all circumstances. The inclusion of a recommendation in a guideline does not imply coverage. A decision to adopt any particular recommendation must be made by the provider in light of the circumstances presented by the individual patient.

Interim Update April 2024

Content from the recently retired KP Washington Hepatitis C Screening and Treatment guideline has been incorporated into this guideline.

Major Changes as of August 2022

- KP Washington no longer has a standalone guideline for HIV.
    - **HIV screening** recommendations have been integrated into this guideline.
    - Updated recommendations on **HIV treatment, post-exposure prophylaxis (PEP), and pre-exposure prophylaxis (PrEP)** are now available in the KP Interregional HIV Treatment Practice Resource and the KPWA Infectious Disease Quick Care Guide.
- This updated guideline reflects the 2021 recommendations of the Centers for Disease Control and Prevention and—for syphilis infection—the 2022 Washington Department of Health (DOH) and Seattle King County Public Health (PHSKC) Syphilis Screening Guidelines.
- Due to its rising prevalence in Washington state, information on **syphilis** has been expanded. See "Syphilis Infection Rates in Washington State," below.
- This guideline now includes screening recommendations for the following:
    - Human papillomavirus (HPV)
    - Hepatitis B
    - Hepatitis C

Eligible population/terminology
While we have used inclusive, gender-neutral language to the extent possible in this guideline, our terms sometimes reflect a system of classifications based on biological and physical differences, such as primary and secondary sexual characteristics. The terms *woman/female* and *man/male* do appear in some contexts. *Woman/female* should be understood to refer to an individual born with a cervix, uterus, and vagina, while *man/male* should be understood to refer to an individual born with a penis.

Prevention

Risk reduction counseling should be tailored to each patient's individual risk factors, needs, and abilities.

Effective measures to reduce risk include (CDC 2021):

- Risk assessment, education and counseling
    - Regular and proper use of latex internal or external condoms
    - Avoiding contact with casual partners and high-risk individuals (e.g., injection drug users, commercial sex workers, and persons with multiple sex partners)
    - Avoiding high-risk sexual practices (such as condomless anal intercourse outside of a long-term monogamous relationship)
- Vaccination for vaccine-preventable STIs
    - Vaccination is recommended for all individuals aged 9–26 years for the prevention of HPV-related diseases.
    - Vaccination may be appropriate for adults aged 27–45; use shared decision-making SmartPhrase **.SDMHPVVACCINE27TO45**.
- Pre-exposure prophylaxis (PrEP) for patients who are HIV-negative but at risk of HIV infection
- Identification of persons with asymptomatic infection (through screening) and persons with STI symptoms
- Population-level prevention through effective treatment and follow-up of persons who are infected with STIs (including retesting 3 months post-infection of CT, GC, or trichomonas, and retesting of syphilis and HIV)
- Expedited partner therapy (EPT) providing treatment for sex partners of persons infected with an STI

Syphilis Infection Rates in Washington State

The rate of syphilis infection in Washington state has been increasing since 2010 in:

- Men who have sex with men (MSM),
- Men who have sex with women (MSW), and
- Cisgender women

The highest rates are in Cowlitz, Spokane, and King counties; see Notifiable Conditions: Syphilis (Washington State DOH). Similar to national trends, congenital syphilis rates are also increasing in both Washington state and King County; see the 2019 King County STI Epidemiology Report. In 2021, 51 cases of maternal and congenital syphilis were reported in Washington state, up from 17 cases in 2019. In order to address this increase in prevalence, Washington Department of Health (DOH) and Seattle King County Public Health (PHSKC) released Syphilis Screening Guidelines in May 2022, which have been incorporated into our STI screening recommendations below. (See Tables 1–6.)

High-risk factors for syphilis infection identified in the 2022 Washington DOH screening guidelines include:

- Persons who inject drugs
- Persons who use methamphetamine or nonprescription opioids
- Persons living homeless or who are unstably housed
- Persons 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

Risk-based STI Screening Overview

For risk-based screening, order the STD LAB PANEL (FEMALE) for patients with a vagina or STD LAB PANEL (MALE) for patients with a penis. The lab panel includes HIV, syphilis, and CT/GC.

Note: **Adolescents aged 14–17 years do *not* need parental consent to be screened for HIV and other STIs.** See the Teen Confidential Care at KPWA Practice Resource.

High-risk behaviors identified by the CDC (2021) indicating a need for STI screening include:

- History of previous chlamydia or gonorrhea within past year
- Multiple partners or new partner since last STI testing
- A sex partner with concurrent partners or with an STI
- Inconsistent condom use among persons who are not in mutually monogamous relationships
- History of exchanging sex for money or drugs since last STI testing
- History of juvenile detention in jail facilities or adult correctional facilities in the past 3 years
- Men who have sex with men
- Any illicit drug use
- People who do not report one of these risk factors but who request STI testing

For HIV and hepatitis B and C, also consider risk factors for blood-borne infection. For more information on hepatitis, see https://www.cdc.gov/hepatitis/hcv/index.htm.

Risk-based STI Screening by Population

Screening populations defined by the CDC

(https://www.cdc.gov/std/treatment-guidelines/screening-recommendations.htm)

Women (cisgender) – Table 1
Pregnant persons – Table 2
Men who have sex with women (cisgender) – Table 3
Men who have sex with men (cisgender) – Table 4
Transgender and gender-diverse persons – Table 5
Persons with HIV – Table 6

Table 1.

Risk-based STI screening: WOMEN (CISGENDER)

Source: CDC 2021 except where noted.
For lab test information, see Table 7.

STI	Average risk	High-risk behaviors
Chlamydia	Sexually active women aged < 25. Retest 3 months after treatment.	Sexually active women aged ≥ 25. Retest 3 months after treatment.
Gonorrhea	Sexually active women aged < 25. Retest 3 months after treatment.	Sexually active women aged ≥ 25. Retest 3 months after treatment.
Syphilis *Source:* Washington DOH and PHSKC 2022	Sexually active persons aged ≤ 45 if they have not been tested since January 2021.	Sexually active persons at least annually and whenever they present for care, up to every 3 months.
Herpes	Routine screening is not recommended.	Screen women presenting for an STI evaluation, especially women with multiple sex partners.
Trichomonas	Routine screening is not recommended.	Consider screening women at high risk for infection (multiple sex partners, transactional sex, drug misuse, history of STI, incarceration).
HIV	One-time screening is recommended for all patients aged 15–65.	All women presenting for an STI evaluation, and those with risk factors.
HPV (cervical cancer)	HPV screening is completed only as part of cervical cancer screening. See KPWA Cervical Cancer Screening Guideline for more information.	
Hepatitis B	Routine screening is not recommended.	Screen women at increased risk (multiple sex partners, history of STI, past or current IDU, partner with Hep B).
Hepatitis C	One-time screening is recommended for all patients aged 18–79.	All women presenting for an STI evaluation, and those with risk factors.

Table 2.

Risk-based STI screening: PREGNANT PERSONS

Source: CDC 2021 except where noted.
For lab test information, see Table 7.

STI	Average risk	High-risk behaviors
Chlamydia	Screen at first prenatal visit if aged < 25.	Screen at first prenatal visit (all ages). Rescreen in third trimester.
	If chlamydia infection, treat. Test of cure 4 weeks **and** retest 3 months after treatment.	
Gonorrhea	Screen at first prenatal visit if aged < 25.	Screen at first prenatal visit (all ages). Rescreen in third trimester.
	If gonorrhea infection, treat and retest within 3 months.	
Syphilis *Source:* Washington DOH and PHSKC 2022	Screen at first prenatal visit. Rescreen in third trimester. Rescreen at time of fetal demise if occurs at ≥ 20 weeks gestation.	Screen at first prenatal visit. Rescreen in third trimester. Rescreen at time of delivery if diagnosed with STI during pregnancy or did not receive prenatal care.
Herpes	Routine screening is not recommended.	
Trichomonas	Routine screening is not recommended.	
HIV	Screen at first prenatal visit.	Screen at first prenatal visit. Rescreen in third trimester.
	If not previously screened during pregnancy, rapid testing at delivery.	
HPV (cervical cancer)	HPV screening is completed only as part of cervical cancer screening. See KPWA Cervical Cancer Screening Guideline for more information.	
Hepatitis B	Screen at first prenatal visit.	Screen at first prenatal visit. Retest at delivery.
Hepatitis C	Screen at first prenatal visit **of each pregnancy.**	

Table 3.

Risk-based STI screening: MEN WHO HAVE SEX WITH WOMEN (CISGENDER)

Source: CDC 2021 except where noted.
For lab test information, see Table 7.

STI	Average risk	High-risk behaviors
Chlamydia	Routine screening is not recommended.	Consider screening.
Gonorrhea	Routine screening is not recommended.	Consider screening.
Syphilis *Source:* Washington DOH and PHSKC 2022	Sexually active persons aged ≤ 45 if they have not been tested since January 2021.	Sexually active persons at least annually and whenever they present for care, up to every 3 months.
Herpes	Routine screening is not recommended.	Screen men presenting for an STI evaluation, especially those with multiple sex partners.
HIV	One-time screening is recommended for all patients aged 15–65.	All men presenting for an STI evaluation, and those with risk factors.
HPV (anal cancer)	Routine screening is not recommended.	Routine screening is not recommended.
Hepatitis B	Routine screening is not recommended.	Men at increased risk by sexual or percutaneous exposure.
Hepatitis C	One-time screening is recommended for all patients aged 18–79.	All men presenting for an STI evaluation, and those with risk factors.

Table 4.

Risk-based STI screening: MEN WHO HAVE SEX WITH MEN (CISGENDER)

Source: CDC 2021 except where noted.
For lab test information, see Table 7.

STI	Recommendations
Chlamydia	• Screen at least annually for sexually active MSM at sites of contact (urethra, rectum) regardless of condom use. • Screen every 3–6 months if on PrEP, with HIV, or multiple sex partners.
Gonorrhea	• Screen at least annually for sexually active MSM at sites of contact (urethra, rectum, pharynx) regardless of condom use. • Screen every 3–6 months if on PrEP, with HIV, or multiple sex partners.
Syphilis *Source:* Washington DOH and PHSKC 2022	• Screen at least annually for sexually active MSM. • Screen every 3 months if any apply: ○ On PrEP ○ With HIV ○ Multiple sex partners (≥ 10 in prior year) ○ History of GC/CT or syphilis in prior 2 years ○ Use of methamphetamine, opiates, and/or injection drugs
Herpes	Type-specific serologic tests can be considered if infection status is unknown in MSM with previously undiagnosed genital tract infection.
HIV	• At least annually for sexually active MSM if HIV status is unknown or negative and the patient or their sex partner(s) have had more than one sex partner since most recent HIV test. • Consider the benefits of offering more frequent HIV screening (e.g., every 3–6 months) to MSM at increased risk for acquiring HIV infection.
HPV (anal cancer)	• If history of receptive anal intercourse, screen with digital anorectal rectal exam (DARE). • Data is insufficient to recommend routine anal cancer screening with anal cytology.
Hepatitis B	Screen all MSM.
Hepatitis C	All patients aged 18–79 should undergo one-time screening for hepatitis C. Consider screening at least annually depending on risk factors.

Table 5.

Risk-based STI screening: TRANSGENDER AND GENDER-DIVERSE PERSONS

Source: CDC 2021.
For lab test information, see Table 7.

STI	Average risk	High-risk behaviors
Chlamydia	Screening recommendations should be adapted based on anatomy. The recommendations for annual, routine screening in cisgender women < 25 should be extended to all persons with a cervix.	If aged ≥ 25, persons with a cervix should be screened if at increased risk.
	Consider screening at the rectal site based on reported sexual behaviors and exposure.	
Gonorrhea	Screening recommendations should be adapted based on anatomy. The recommendations for annual, routine screening for gonorrhea in cisgender women < 25 should be extended to all persons with a cervix.	If aged ≥ 25, persons with a cervix should be screened if at increased risk.
	Consider screening at the pharyngeal and rectal sites based on reported sexual behaviors and exposure.	
Syphilis	Consider screening at least annually based on reported sexual behaviors and exposure.	
Herpes	Screening recommendations should be adapted based on anatomy and risk behaviors.	
Trichomonas	Screening recommendations should be adapted based on anatomy and risk behaviors. *Note:* For patients post–gender-affirming vaginoplasty, wet prep is not useful to order.	
HIV	HIV screening should be discussed and offered to all transgender persons. Frequency of repeat screenings should be based on level of risk.	
HPV (cervical cancer)	HPV screening is completed only as part of cervical cancer screening. The recommendations for cervical cancer screening in cisgender women should be extended to all persons with a cervix. See KPWA Cervical Cancer Screening Guideline for more information.	
Hepatitis B	Screening recommendations should be adapted based on anatomy and risk behaviors.	
Hepatitis C	All patients aged 18–79 should undergo one-time screening for hepatitis C. Consider screening at least annually depending on risk factors.	

Table 6.

Risk-based STI screening: PERSONS WITH HIV

Source: CDC 2021.
For lab test information, see Table 7.

STI	Recommendations
Chlamydia	• Screen sexually active individuals at first HIV evaluation and least annually thereafter. • More frequent screening may be appropriate based on risk behaviors and local epidemiology.
Gonorrhea	• Screen sexually active individuals at first HIV evaluation and least annually thereafter. • More frequent screening may be appropriate based on risk behaviors and local epidemiology.
Syphilis	• Screen sexually active individuals at first HIV evaluation and least annually thereafter. • More frequent screening may be appropriate based on risk behaviors and local epidemiology.
Herpes	Type-specific HSV serology testing should be considered for persons presenting for an STI evaluation, especially those with multiple sex partners.
Trichomonas	Recommended for sexually active women at entry to care and at least annually thereafter.
HPV (anal cancer)	• If history of receptive anal intercourse, screen with digital anorectal rectal exam. • Data is insufficient to recommend routine anal cancer screening with anal cytology.
HPV (cervical cancer)	HPV screening is completed only as part of cervical cancer screening. Patients with HIV need to have more frequent cervical cancer screening. See Table 2 in the Cervical Cancer Screening Guideline.
Hepatitis B	Screen all.
Hepatitis C	• Serologic testing at initial evaluation • Annual HCV testing in MSM with HIV infection • More frequent screening depends on ongoing risk factors.

Recommendations for STI Testing: Symptomatic Patients

Symptomatic testing for STIs is recommended for any patient with the symptoms described below.

Chlamydia symptoms may include mild itching/discomfort inside the urethra, vaginal or penile discharge, vaginal bleeding between periods, pelvic pain and dyspareunia, burning during urination, painful or swollen testicles, and anal pain, discharge or bleeding. Note that chlamydia infections may also be asymptomatic.

Gonorrhea symptoms may include burning during urination, painful or swollen testicles, vaginal or penile discharge, vaginal bleeding between periods, pelvic pain and dyspareunia, painful bowel movements, and anal discharge, itching, soreness or bleeding. Note that gonorrhea may be asymptomatic, especially if the infection is in the throat or anus.

Syphilis - Early

Early syphilis symptoms may include a sore or ulcer of the anus, genitals or throat that may or may not be painful, night sweats, or fatigue. Note that early syphilis may also be asymptomatic. ***NOTE:* All** patients with signs and symptoms consistent with early syphilis—or anyone who reports sexual exposure to someone with syphilis, even in the absence of signs or symptoms—**should be treated when they present for care, without waiting for the results of testing** (WA DOH 2022).

Additional early syphilis symptoms typically present as a generalized maculopapular rash on the torso, with or without palmar and plantar lesions, although the rash may be pustular. Other symptoms of secondary syphilis include malaise, lymphadenopathy, sore throat and arthralgias.

Syphilis - Neurosyphilis

Neurosyphilis should be considered in:

- Persons who are experiencing neurologic/ophthalmic signs or symptoms at any stage of syphilis, including hearing loss, tinnitus, headache/neck stiffness, confusion, visual blurriness, diplopia, decreased visual acuity, photophobia, or gait disturbances.
- Persons receiving treatment for any stage of syphilis for whom the RPR has failed to decline by fourfold at 1 year of treatment for primary or secondary syphilis or at 24 months of treatment for latent syphilis.

Neurosyphilis can present at any stage of syphilis, so **it is important to screen with the following questions to see if LP is indicated with each syphilis infection** (first ever or re-infection). If needing guidance, send E-Consult to Infectious Disease.

NEUROSYPHILIS SCREENING QUESTIONS

.SCREENINGNEUROSYPHILIS in KP HealthConnect

1) Have you recently had **new** trouble hearing? ***
2) Do you have **new** ringing in your ears? ***
3) Have you recently had a change in vision, had flashers, had floaters? ***
4) Are you having **new** or changing headaches? ***
5) Have you recently been confused or had **new** memory changes? ***
6) Do you have any **new** trouble concentrating? ***
7) Do you feel that your personality has recently changed? ***
8) Are you having a **new** problem walking? ***
9) Do you have **new** weakness or numbness in your legs? ***

Trichomonas symptoms may include itching, burning during urination or after ejaculation, and vaginal or penile discharge.

Herpes symptoms may include sores or blisters in the genital, anal, or mouth areas, or dysuria in women.

Hepatitis B and C symptoms are usually mild or absent, but if present include fever, fatigue, dark urine, clay-colored stool, abdominal pain, loss of appetite, nausea, vomiting, joint pain, and jaundice.

Mycoplasma genitalium symptoms may include persistent or recurrent urethritis in men and cervicitis and pelvic inflammatory disease in women.

Exposure Sites

All potential STI exposure sites—genitals, anus, and throat—should be screened on an opt-out basis. Because many providers do not routinely ask patients about sexual exposures to the throat or anus, a large proportion of infections in these sites may be missed by genital screening alone.

The Well Visit Questionnaires for teens and adults include a question to address this gap in patient sexual history information:

> "Many sexually transmitted infections (STI) do not have symptoms you can see or feel. Places that could be infected include the genitals, anus, and throat. We routinely do testing for all sites that could be infected. Are there any sites you don't want me to check?"

For talking points on the most approachable way to have conversations with patients about risk factors, exposure tests, and recommended screening tests, see pp. 13–14.

Lab Tests and Collection Methods

For risk-based screening, order the STD LAB PANEL (FEMALE) for patients with a vagina or STD LAB PANEL (MALE) for patients with a penis. The lab panel includes HIV, syphilis, and CT/GC.

For guidance on which swabs and specimen containers to use, see Exam Room Lab Collection Devices.

"Table 7. Lab test and collection methods for STI testing" is on the following page.

Table 7.
Lab test and collection methods for STI testing

STI	Lab test	Collection method
Chlamydia/ Gonorrhea Lab order: Chlamydia Trachomatis/GC (swab or urine)	**All patients** NAAT is used to test for both chlamydia and gonorrhea.	**Patients with a vagina** Vaginal self-swab is the preferred collection method due to higher sensitivity than cervical swab or urine testing. For women who require a pelvic examination for other reasons, a vaginal swab may be collected by the provider. Collect a rectal and/or throat swab if there has been exposure at those sites. Urine testing is an acceptable option if the patient prefers this over vaginal self-swab. Cervical swabs are not recommended. **Patients with a penis** First-catch urine is the recommended collection method for men. Urethral swab is also an acceptable option, especially if discharge is visible. Collect a rectal and/or throat swab if there has been exposure at those sites. Testing urine will not detect infection in the anus or throat. Site-specific testing is needed if there has been an exposure.
Syphilis Lab order: RPR (Syphilis) screen	**All patients** Syphilis testing is done by serology using the reverse sequence for syphilis screening * – treponemal antibody test with reflex to RPR. For information on interpreting the syphilis result, see the KP Northwest Syphilis Screening Practice Resource.	**All patients** Blood draw.
HIV Lab order: HIV screening test w/reflex	**All patients** The HIV screening test is a fourth-generation antigen and antibody combo assay with reflex to the confirmatory HIV-1/HIV-2 and RNA viral loads. The HIV screening test is included in the STI LAB PANEL (both for MALE and FEMALE).	**All patients** Blood draw.
Trichomonas Lab order: Vaginitis screen (aka Trichomonas)	**Partner of a trichomonas-positive individual** **Symptomatic patient with a vagina** Vaginitis screen. If negative, follow up with NAAT if symptoms persist and there is high clinical suspicion of trichomonas.	**Patients with a vagina** Vaginal swab performed in the clinic. *Note:* For patients post–gender-affirming vaginoplasty, wet prep is not useful to order. **Patients with a penis (with positive partner only)** First-catch urine is the recommended collection method.
Herpes Lab order: HSV 1&2 by EIA (blood) (aka Herpes) HSV 1&2 by molecular (swab) (aka Herpes)	**Patients at high risk** who have had a sex partner with genital herpes or have multiple sex partners. If patient is non-symptomatic but at high risk, serologic testing may be useful. If patient is **symptomatic**, the preferred diagnostic test is viral culture of unroofed genital lesions.	**Non-symptomatic** Blood draw: immunoassay. **Symptomatic** Genital swab: NNAT.
Mycoplasma genitalium Lab order: Urogenital uroplasma & mycoplasma species by PCR (aka Genitalium)	**All patients** NAAT is the preferred method to detect *M. genitalium.*	**Patients with a vagina** Mycoplasma genitalium testing is done by vaginal swab. **Patients with a penis** First-catch urine is the recommended method.
Hepatitis B	**Pregnant patients and those at high risk, including MSM** HBsAg, total anti-HBc, IgM anti-HBc, and anti-HBs.	**All patients** Blood draw.
Hepatitis C [1,2] Lab order: Hepatitis C Screening (Reflex)	**All patients** Hep C screening test with reflex to Hep C RNA quantitative test.	**All patients** Blood draw.

[1] For immunocompromised patients (e.g., those with HIV or on chemotherapy or dialysis), there is a high rate of false negatives with the Hep C antibody test. Therefore, it is recommended that these patients be screened using only the Hep C RNA quantitative test.

[2] A positive Hep C antibody test followed by a negative Hep C RNA quantitative test indicates that no active infection is present. No follow-up testing is needed. If a patient has no ongoing risk factors, the one-time screening recommendation has been satisfied.

Talking with Adults About Their Sexual History

When taking the sexual history of an adult, it can be helpful to:

- Remind the patient that the conversation is confidential.
- Explain that you are asking some personal questions about their sex life and behaviors so that you can advise, screen, and vaccinate them appropriately.
- Have the conversation in a comfortable setting, ideally when the patient is dressed/not in a gown.
- Use non-judgmental facial expressions, tone, and questions.
- Keep in mind that a patient's sexual behavior or interests may change over time and are worth revisiting.
- Not assume heterosexuality; behavior and sexual practices are what is important.
- Be wary of using jargon or abbreviations.

Questions when asking adults about their sexual behaviors:

- "Do you have sex with men, women, and or gender diverse partners?"
- "Do you use condoms or other forms of birth control?"
  "Would you like screening for sexually transmitted infections (STIs)? Many STIs do not have symptoms you can see or feel. Places that could be infected include the genitals, anus, and throat. We routinely do testing for all sites that could be infected. Are there any sites you don't want me to check?"
- "Inappropriate pressure to have sex can be common, and people often find it hard to talk about. Do you feel pressure to have sex, or has anyone made you do something sexual when you did not want to?"
  Note: See CDC Guidance on STI screening: Sexual Assault and Abuse and STIs—Adolescents and Adults and Sexual Assault or Abuse of Children.
- "The CDC recommends that all patients between the ages of 15 and 65 have a one-time screening for HIV. May I screen you today?"
- "Do you have any questions or concerns about your sexual interests, practices or partners?"

See the National Coalition for Sexual Health website for additional recommendations for taking sexual histories.

Talking with Teens About Their Sexual History

Adapted from HEEADSSS 3.0: The psychosocial interview for adolescents updated for a new century fueled by media. *(Contemporary Pediatrics* 2014). Follow the link for additional "opening lines" and suggested questions.

For younger teens with a romantic partner, ask a "screener'" question to help decide whether more explicit questions are needed:

- "Do you ever touch each other underneath your clothes?"

If the answer is yes, they are unlikely to be offended by more explicit questions, which should be preceded by,

- "I need to ask you some very personal questions to know how to best take care of your health."

Unlike adults, teens may not intuitively understand why you are asking about which sexual behaviors they engage in. One way to explain it is,

- "I need to know what parts of your body to test for sexually transmitted infections."

Questions when asking teens about their sexual behaviors:

- "Are you or have you been in a romantic relationship?"
- "Are you or have you been in a sexual relationship?"
- "Do you have partners with penises, vaginas, or both?" (It is more helpful to ask about partners' body parts than gender.)

Ask all teens in "consensual" sexual relationships if they ever feel pressured by their partner to have sex, and if they always get to say if and when they have sex.

Tips for talking with parents of teens who are reluctant to leave the room during questions about sexual history

- Remind them: “We talk privately to teenagers about health issues that come up for many teens so they can start to learn how to take responsibility for their own health care. Our goal is that by the time they are 18 (or leave for college, if applicable) they are ready to conduct the whole visit on their own.”
- Be clear that you talk to **all** teens privately for some portion of their well visit. In other words, you haven’t singled out their child as seeming to be at high risk.
- If the parent (or teen) says, “It’s okay, we tell each other everything,” respond “That’s great! I hope after our visit your teen will share with you everything we talk about.”
- Remind them that if their teen has any health questions that might feel “embarrassing,” you (the health care provider) are a better source of information than their friends or the internet.
- Make sure they understand the limits of confidentiality: If their teen’s life were in jeopardy, you would talk with the teen about the best way for you to share that information with the parent, which you would then do.

See the National Coalition for Sexual Health website for additional recommendations for taking sexual histories.

Treatment

Goals

Eradication of infection in patient and partner(s).

Lifestyle modifications/non-pharmacologic options

Patients who have tested positive for an STI should receive counseling to abstain from sex until they and their partner(s) have completed a course of antibiotic treatment.

HIV recommendations

Refer all Washington patients with confirmed positive HIV test results to the HIV/PrEP Program. In KP HealthConnect, type **Ref HIV** to pull in the referral automatically. For information about HIV treatment, pre-exposure prophylaxis (PrEP), and post-exposure prophylaxis (PEP), see the KP Interregional HIV Treatment Practice Resource.

Pharmacologic options: infected individuals

Chlamydia: Table 8
Gonorrhea: Table 9
Syphilis: Table 10
Genital herpes: Table 11
Trichomonas: Table 12
Mycoplasma genitalium: Table 13
Hepatitis C: Table 14

Table 8.
Recommended pharmacologic options: CHLAMYDIA [1]

Eligible population	Line	Medication	Regimen
Non-pregnant patients with uncomplicated infections	1st	Doxycycline [2]	100 mg PO b.i.d. x 7 days
	2nd	Azithromycin	1 g PO (single dose)
		Levofloxacin	500 mg PO daily x 7 days
Pregnant patients with uncomplicated infections	1st	Azithromycin	1 g PO (single dose)
	2nd	Amoxicillin	500 PO t.i.d. x 7 days

[1] Treatment recommendations are for chlamydia only. If coinfection with gonorrhea cannot be ruled out, then treat with ceftriaxone plus doxycycline (see Table 9).
[2] Doxycycline is the preferred treatment option for anal rectal chlamydia, as low-quality evidence suggests doxycycline may have better efficacy against rectal chlamydia than azithromycin. Treatment decisions should take into account patient preference, as doxycycline must be taken twice per day for 7 days, while azithromycin is a one-time dose.

Table 9.
Recommended pharmacologic options: GONORRHEA

Eligible population [1]	Line	Medication	Regimen
Patients with uncomplicated infections	1st	Ceftriaxone [2,3]	Ceftriaxone 500 mg IM (weight < 330 lb)
	2nd	Cefixime [4]	Cefixime 800 mg PO (single dose)
Patients with possible chlamydia coinfection		Ceftriaxone plus doxycycline [5]	Give both ceftriaxone 500 mg IM (single dose) and doxycycline 100 mg PO twice daily for 7 days.

1 Patients with pharyngeal gonorrhea should return 14 days after treatment for a test of cure, using either culture or NAAT.

2 For persons weighing ≥ 150 kg (330 lb), a single 1 g IM dose of ceftriaxone should be given.

3 When ceftriaxone cannot be used for treating urogenital or rectal gonorrhea because of a **cephalosporin allergy**, a single 240 mg IM dose of gentamicin plus a single 2 g oral dose of azithromycin is an option, except in pregnant patients.

4 Men who have sex with men (MSM) are at higher risk of infection with cefixime-resistant gonorrheal strains, so cefixime should be avoided in the MSM population. Also, cefixime is not effective in pharyngeal infection in any patient, so ceftriaxone should be used instead.

5 A single dose (1 g PO) of azithromycin should be given instead of doxycycline when treating pregnant patients since doxycycline can accumulate in utero in developing teeth and cause permanent discoloration of teeth. Azithromycin should also be considered for patients who may have difficulty adhering to the twice-daily regimen for 7 days.

Table 10.
Recommended pharmacologic options: SYPHILIS

Eligible population [1]	Medication	Regimen
Patients with EARLY SYPHILIS (primary or secondary syphilis)	Benzathine penicillin G	2.4 million units IM (single dose)
Patients with LATE SYPHILIS (tertiary syphilis) [2]	Benzathine penicillin G	2.4 million units IM (3 doses, given at 1-week intervals)
Patients with neurosyphilis or ocular syphilis [3]	Aqueous crystalline penicillin G **OR**	18–24 million units IV per day, either 3–4 million units IV every 4 hours, or continuous infusion for 10–14 days
	Procaine penicillin G **plus** Probenecid	1.8–2.4 million units IM once daily for 10–14 days 500 mg PO 4 times per day for 10–14 days
Patients with EARLY latent syphilis	Benzathine penicillin G	2.4 million units IM (single dose)
Patients with LATE latent syphilis or syphilis of unknown duration	Benzathine penicillin G	2.4 million units IM (3 doses, given at 1-week intervals)

1 Eligible population includes pregnant patients and people with HIV.

2 Excludes patients with cerebral spinal fluid abnormalities, who should be referred to Infectious Disease.

3 Patients with suspected neurosyphilis or ocular syphilis should be referred to Infectious Disease for evaluation and treatment. Additionally, ocular syphilis should be managed in collaboration with an ophthalmologist.

Table 11.
Recommended pharmacologic options: GENITAL HERPES [1]

Eligible population	Line	Medication	Regimen
First clinical episode	1st	Acyclovir	400 mg PO t.i.d. for 7–10 days
	2nd	Acyclovir **or**	200 mg PO 5 times per day for 7–10 days
		Valacyclovir	1g PO b.i.d. for 7–10 days
Suppressive treatment for recurrent genital herpes	1st	Acyclovir	400 mg PO b.i.d.
	2nd	Valacyclovir [2]	500 mg PO once daily **or**
			1 g PO once daily
Episodic therapy for recurrent genital herpes	1st	Acyclovir	400 mg PO t.i.d. for 5 days **or**
			800 mg PO b.i.d. for 5 days **or**
			800 mg PO t.i.d. for 2 days
	2nd	Valacyclovir	500 mg PO b.i.d. for 3 days **or**
			1 g PO once per day for 5 days
Suppressive treatment for persons with HIV	1st	Acyclovir	400–800 mg PO b.i.d. or t.i.d.
	2nd	Valacyclovir	500 mg PO b.i.d.
Episodic therapy for persons with HIV	1st	Acyclovir	400 mg PO t.i.d. for 5–10 days
	2nd	Valacyclovir	1 g PO b.i.d. for 5–10 days

[1] While there is no "cure" for genital HSV infection, antiviral medications are used to manage symptomatic outbreaks and for prevention in patients with a history of frequent symptomatic outbreaks.
[2] Valacyclovir 500 mg once daily might be less effective than other valacyclovir or acyclovir dosing regimens in persons who have very frequent recurrences (e.g., ≥ 10 episodes per year).

Table 12.
Recommended pharmacologic options: TRICHOMONAS

Eligible population	Line	Medication	Regimen
Patients with trichomonas infection	1st - men	Metronidazole	2 g PO (single dose)
	1st - women	Metronidazole	500 mg b.i.d. for 7 days
	2nd – all patients	Tinidazole	2g PO (single dose)

Table 13.
Recommended pharmacologic options: MYCOPLASMA GENITALIUM

Eligible population	Line	Medication	Regimen
Patients with mycoplasma genitalium infection	1st	Doxycycline	100 mg PO b.i.d. for 7 days
		Followed by	
		Moxifloxacin	400 mg PO daily for 7 days
		Test of cure 21 days after completion of therapy	
	2nd	Doxycycline	100 mg PO b.i.d. for 7 days
		plus	
		Azithromycin	1 g PO on first day
		plus	
		Azithromycin	500 mg PO daily for 3 days
		Test of cure 21 days after completion of therapy	

Table 14.
Recommended pharmacologic options: HEPATITIS C

Eligible population	Treatment recommendations
Patients with hepatitis C infection	See KPWA Gastroenterology Quick Care Guide.

Public Health reporting and partner notification

Reportable STIs **in Washington state** include chlamydia, gonorrhea, genital herpes, HIV, and syphilis. Within KP Washington, electronic reporting is done by the lab and providers fill out and submit the case report on the Washington State Department of Health website. Patients newly diagnosed with HIV, early syphilis, or gonorrhea and men who have sex with men (MSM) diagnosed with chlamydia may be contacted by their local health department to assist with partner treatment. Public Health does not routinely contact patients with genital herpes or heterosexual patients with chlamydia.

Providers should advise patients diagnosed with any STI, whether or not it is reportable, to notify their sex partners of the diagnosis and encourage them to get treatment and abstain from sex for a full week after completing treatment. For gonorrhea and chlamydia, patients should notify any sex partners within 60 days prior to diagnosis. For HIV and syphilis, patients should notify any sex partners within 90 days prior to diagnosis.

Expedited partner therapy for chlamydia and gonorrhea

The Centers for Disease Control and Prevention recommends that all sex partners of patients infected with chlamydia or gonorrhea from the **preceding 60 days** be evaluated, tested, and treated to prevent reinfection and curtail further transmission.

Sex partners should be seen by a clinician whenever possible.

However, providers may offer all heterosexual patients medication (at no charge to the partner) to give to their sex partners if treatment cannot otherwise be ensured. With expedited partner therapy (EPT), partners may be treated without waiting for laboratory confirmation of infection.

Note: EPT is not recommended for patients or their partners who are at high risk for HIV infection.

King County Public Health recommends notifying them of MSM who test positive for chlamydia and/or gonorrhea, so these patients and their partners can be followed up, tested and treated for HIV and syphilis, and evaluated for PrEP. See DOH reporting form for King County. DOH reporting forms for all other Washington counties can be found here.

Table 15.
Recommended pharmacologic options: EXPEDITED PARTNER THERAPY

Eligible population	Medication	Regimen
Partners of patients with active CHLAMYDIA infections	Doxycycline	100 mg twice daily x 7 days (~100% effective)
	Alternative: Azithromycin	1 g PO (~74% effective)
Partners of patients with active GONORRHEA infections	Cefixime	Cefixime 800 mg PO (single dose)
Partners of patients with active GONORRHEA for whom coinfection with CHLAMYDIA cannot be excluded	Cefixime plus doxycycline	Give both cefixime 800 mg PO (single dose) plus doxycycline 100 mg PO twice daily for 7 days.

Additional EPT resources

- Use the SmartPhrase **.RXEPT** for documentation in KP HealthConnect (updated with a drop-down menu to select CT, GC, or co-occurring GC+CT).

Follow-up/Monitoring

The majority of post-treatment infections result from reinfection, frequently occurring because the patient's sex partners were not treated or because the patient resumed sex with a new partner who is infected.

Except in pregnant patients, **test of cure** (repeat testing 4 weeks after completing therapy) is **not** recommended for any STI other than pharyngeal gonorrhea.

Table 16.
Recommended FOLLOW-UP TESTING for patients treated for STIs

Eligible population	Test	Timing
Sexually active patients with chlamydia or gonorrhea [1, 2, 3]	NAAT	3 months after initial treatment
Sexually active patients with EARLY (primary or secondary) syphilis	Nontreponemal titer	6 and 12 months after treatment
Sexually active patients with genital herpes	N/A	Follow clinically until signs and symptoms have resolved
Sexually active women [4] with trichomonas	NAAT	3 months after initial treatment

1 Pregnant patients with chlamydia or gonorrhea should be re-tested by NAAT 4 weeks after initial treatment and 3 months after initial treatment. NAAT conducted less than 3 weeks after completion of therapy in persons who were treated successfully could yield false-positive results because of the continued presence of dead organisms.

2 Any person with pharyngeal gonorrhea should return 7–14 days after initial treatment for a test of cure using either culture or NAAT; however, testing at 7 days might result in an increased likelihood of false-positive tests. If the NAAT is positive, effort should be made to perform a confirmatory culture before retreatment, especially if a culture was not already collected (CDC 2021).

3 The window for detecting syphilis infection is 2–6 weeks, and the window for HIV is 3–4 weeks, so **false negatives** may occur if testing is done too early. If a patient is screened for and/or diagnosed with gonorrhea or chlamydia less than 4–6 weeks after a sexual encounter, consider repeating the HIV and syphilis tests after this window has passed in order to rule out these infections.

4 Data are insufficient to support re-testing men for trichomonas.

Confidentiality Considerations for Adolescents

Adolescents at least 14 years of age have a right to confidential STI testing and treatment without parental involvement.

To order STI testing confidentially, see the Epic Confidential Billing Tip Sheet.

For additional information, see the KPWA Teen Confidential Care Practice Resources.

Evidence Summary

The Sexually Transmitted Infection Screening, Testing and Treatment Guideline was developed using an evidence-based process, including systematic literature search, critical appraisal, and evidence synthesis.

As part of our improvement process, the Kaiser Permanente Washington guideline team is working towards developing new clinical guidelines and updating the current guidelines every 2–3 years. To achieve this goal, we are adapting evidence-based recommendations from high-quality national and international external guidelines, if available and appropriate. The external guidelines should meet several quality standards to be considered for adaptation. They must: be developed by a multidisciplinary team with no or minimal conflicts of interest; be evidence-based; address a population that is reasonably similar to our population; and be transparent about the frequency of updates and the date the current version was completed.

In addition to identifying the recently published guidelines that meet the above standards, a literature search was conducted to identify studies relevant to the key questions that are not addressed by the external guidelines.

External Guidelines Eligible for Adapting

CDC 2021 Sexually Transmitted Infections Treatment Guidelines, July 2021
CDC 2020: Update to CDC's Treatment Guidelines for Gonococcal Infection, Dec. 2020
CDC 2021: Summary of CDC Treatment Guidelines: STI Treatment Pocket Guide
USPSTF 2021: Screening for Chlamydia and Gonorrhea
USPSTF 2016: Screening for syphilis infection in nonpregnant adults and adolescents
USPSTF 2016: Serologic screening for genital herpes infection
Kaiser Permanente National 2021: HIV/STI Screening & Prevention Clinical Practice Guideline

Ad Hoc Questions: Interim Update May 2021

1. Why does the CDC no longer recommend azithromycin for gonorrhea treatment but still recommend it for treating chlamydia? (https://www.cdc.gov/mmwr/volumes/69/wr/mm6950a6.htm#F1_down).
    - While there is new evidence of azithromycin resistance in gonorrhea, there is no evidence of azithromycin resistance in chlamydia.
    - Previously, CDC recommended ceftriaxone 250 mg IM plus azithromycin 1 g PO (single dose) given concurrently for gonorrhea treatment. New evidence has suggested that the combination of azithromycin and ceftriaxone may harm the microbiome and impact other organisms, so CDC no longer recommends this combination.
    - There is no good evidence that azithromycin is less effective than doxycycline for treating vaginal, urinary tract, or throat CT infections. However, for rectal chlamydia infections, evidence suggests that doxycycline is a more effective treatment than azithromycin.

2. Is azithromycin more effective than doxycycline for the treatment of rectal chlamydial infection?

    Low-quality evidence shows that 100 mg doxycycline twice daily for 7 days may be more effective than a single 1 g dose of azithromycin for the treatment of rectal chlamydia in a predominantly asymptomatic adult population.

Guideline Development Process and Team

Development process

The STI Prevention, Screening, Testing and Treatment Guideline was developed using an evidence-based process, including systematic literature search, critical appraisal, and evidence synthesis.

This edition of the guideline was approved for publication by the Guideline Oversight Group in August 2022.

Team

The STI Screening, Testing and Treatment Guideline development process included representatives from the following specialties: adolescent medicine, gender health, infectious disease, HIV/PrEP program, and pharmacy.

Clinician lead: John Dunn, MD, MPH, Medical Director, Clinical Knowledge & Implementation
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