

Screening for Sexually Transmitted Infections PRACTICE MANUAL

Table of Contents

Introduction	2	Appendix	11
Current Recommendations	3	Screening for Chlamydia	12
Implementation Considerations	3	Screening for Gonorrhea	13
Taking an Accurate Sexual History	3, 4	Screening for Hepatitis B	14, 15
Best Practices for STI Screening	5	Screening for Hepatitis C	16
Taking an Accurate Sexual History Sample Script	6	Screening for HIV	17, 18
Implementation Challenges	7	Screening for Syphilis	19
Coding and Payment	7	References	20
Disease-specific Considerations and Special Populations	7	Resources	21
Women Who Have Sex With Women (WSW)	7		
Men Who Have Sex With Men (MSM)	7		
Adolescents	9		
Individuals Who Are Transgender and Gender Diverse	9		
Individuals Who Are Pregnant	10		
Individuals in Correctional Facilities	10		



Copyright 2019 American Academy of Family Physicians

The development of these tools was supported by a grant from Quest Diagnostics.

HOP19060802

Introduction

Sexually transmitted infections (STIs) are a major public health concern in the United States. STIs are frequently asymptomatic and can lead to significant morbidity if left untreated. In recent years, the prevalence of STIs has risen significantly.¹ The Centers for Disease Control and Prevention (CDC) reports that in 2017 there were nearly 2.3 million cases of chlamydia, gonorrhea, and syphilis, which represents a sustained increase over the past four years. Chlamydia was the most common STI diagnosed with 1.7 million cases in 2017.¹ The number of gonorrhea and syphilis cases increased by 67% and 76%, respectively, from the previous year.¹ New syphilis cases were mostly primary and secondary syphilis, when the disease is most infectious. Newly emerging strains of azithromycin-resistant gonorrhea are also on the rise, with an increase from 2.5% in 2013 to 4.4% in 2017.¹

Screening guidelines, recommendations, and programs have been developed with the goal of identifying and treating individuals with STIs in order to limit transmission, reinfections, and complications.¹ Though the prevalence of STIs is increasing, screening rates remain lower than desired with less than 50% of sexually active women age 16-24 being screened for chlamydia in 2015, reported by Medicaid and commercial insurance plans.²

Lower than desired screening rates for STIs may be the result of several factors, including stigma associated with these diseases; lack of physician knowledge or confidence in providing screening and counseling; lack of time for this service; and an unwillingness of some payers to cover STI screening.^{3,4} Based on a 2019 survey of 268 members of the American Academy of Family Physicians (AAFP), the primary barrier identified for family physicians to address STIs with their patients was the lack of time to discuss the topic in a regular health exam (47%).⁵ Other barriers cited included: reimbursement restrictions (19%), not a high priority in their practice (15%), screening recommendations are not comprehensive (13%), and lack of patient-education resources (12%).⁵

Family physicians and other primary care providers are in an ideal position to help address the low-screening rates for STIs and aid in early detection of these diseases, thereby preventing transmission and future complications for patients who are affected. In the 2019 AAFP survey, 80% of family physicians do screen their patients for STIs, highlighting the important role of family physicians in detecting and treating STIs.⁵ The survey also showed that three-fourths of respondents discuss risk factors for STIs with their patients.⁵

While the majority of respondents use documentation through electronic health records (EHRs) instead of paper forms,⁵ there was a need for sample sexual history questionnaires to aid in accurately identifying patients who are at risk. Survey respondents also wanted additional resources, such as comprehensive clinical guidance, work flow charts/diagrams, and patient-education materials.⁵ The information highlighted in the survey, in addition to gaps identified in the literature, were used to inform this practice manual.

Current Recommendations

Current recommendations for STI screening are population and risk based, which increases the complexity for physicians.

Table 1 below includes recommendations for individual STIs, along with the preferred testing modality.

Table 1. Current Recommendations and Testing Methods for STIs*			
STI	Testing method	Population	Additional Considerations
Gonorrhea	Nucleic acid amplification test (NAAT) preferred from a urine sample or a vaginal/oropharyngeal/rectal swab	Women <25 years who are sexually active, older women at risk, pregnant women if at risk, men who have sex with men (MSM) if at risk, all HIV+ individuals*	Testing should be performed at each anatomic site where exposure may have occurred
Chlamydia	Nucleic acid amplification test (NAAT) preferred from a urine sample or a vaginal/oropharyngeal/rectal swab	Women <25 years who are sexually active, older women at risk, pregnant women if at risk, MSM if at risk, all HIV+ individuals*	Testing should be performed at each anatomic site where exposure may have occurred with the exception of oropharyngeal testing, which is not recommended for chlamydia ⁶
Syphilis	Serum nontreponemal antibody test, such as the rapid plasma reagin (RPR) test, confirmed by serum fluorescent treponemal antibody (FTA) test	Nonpregnant adults and adolescents at increased risk, pregnant individuals, MSM if at risk, all HIV+ individuals*	
Hepatitis B	Serum hepatitis B surface antigen (HbsAg)	Individuals at increased risk, pregnant individuals, and annual screening in HIV+ individuals*	
Hepatitis C	Serum hepatitis C virus (HCV) antibody	Individuals at high risk for infection, annual screening in HIV+*	
HIV**	Serum HIV	Adolescents and adults ages 15 to 65 years for HIV infection; younger adolescents and older adults who are at increased risk should also be screened	
HSV	Type specific serum immunoglobulin G (IgG) antibody only if diagnosis uncertain, swab of lesion with polymerase chain reaction is more specific in patients with symptoms	Based on clinical history, routine screening of asymptomatic patients is not recommended	
HPV	Cytology, human papillomavirus (HPV) alone, or co-testing	Any patient with a cervix 21-29 years old – cytology; 30-65 years old cytology + HPV every 5 years or HPV alone every 5 years	Insufficient evidence to recommend for or against anal pap smears ⁷
* Guidelines for HIV+ and MSM are based on the CDC guideline (2015). All other recommendations are based on the United States Preventive Services Task Force (USPSTF)/ American Academy of Family Physicians (AAFP).			
** See additional considerations on screening age from the AAFP.			
** The AAFP guidelines differ from the USPSTF guidelines for screening age for HIV. ⁷			

Implementation Considerations

Taking an Accurate Sexual History

The first step in screening patients for STIs is to obtain a complete sexual health history and risk assessment. Taking a sexual history provides an important opportunity to offer education and risk-reduction counseling; screen for intimate partner violence; identify contraceptive needs; and address concerns that the patient may not have felt comfortable bringing up on their own. A sexual history should be obtained at the initial visit, annual preventive visit, and whenever a patient presents with a sexual health concern. Since behaviors can change significantly over time, it is important to repeat the history periodically, especially after a major life event, such as a divorce, move, or travel. Many physicians avoid obtaining a

complete sexual history due to discomfort with the subject or the incorrect perception that patients do not wish to discuss matters pertaining to their sexual health. In reality, the majority of patients are interested in speaking with their physicians about sexual concerns.⁸

Sexual history may be obtained entirely by the physician, another member of the care team, or completed in advance by the patient through a paper or electronic form for review with the clinician during the visit. We recommend using a standardized approach to the sexual history, both to normalize the practice, and to ensure that it is done correctly and completely each time. It is helpful to start by explaining why the

information is being collected and assuring the patient that it is confidential. For example, the physician might say, “I am going to ask you a few questions about your sexual health and sexual practices. I understand that these questions are very personal, but they are important for your overall health.”⁹

Confidentiality has some notable exceptions when working with minors and vulnerable adults. It is critical to know local laws related to consenting to asking about sexual activity and to inform the patient that some disclosures may require mandated reporting. It is also important to provide information to minors about whether legal guardian(s) may have access to their medical record.

Generally, a sexual history starts with the question, “Are you currently or have you ever been sexually active?”

For patients who answer affirmatively, additional questions are indicated. For patients who answer no or decline to answer, it is important to explore whether they have any questions

or concerns related to their sexual health. The CDC has developed a framework, called The Five P’s of Sexual Health,⁹ which are five domains that the clinician should consider when eliciting a complete sexual history. These are:

- Partners
- Practices
- Protection from STIs
- Past history of STIs
- Prevention of pregnancy⁹

The domains and sample questions are listed below in **Table 2.** When asking about the five Ps, tailor the questions to the information that the patient provides so not to ask irrelevant or unnecessary questions. However, care must be taken to not miss information about behaviors that may not be obvious based on common assumptions. For example, if a cisgender female patient discloses that her partner is also female, it is important to clarify whether she ever has male partners so not to make any assumptions about contraceptive needs.

Table 2. The Five P’s of Sexual Health⁹

Partners	Practices	Protection from STIs	Past History of STIs	Prevention of Pregnancy
<ul style="list-style-type: none"> • Are your partners women, men, or both? • What is the gender of your partner(s)? • Do your partners have vulvas and vaginas? Penises? • In the past year, how many partners have you had? • What is your relationship with your partner(s)? • Do you or your partners have other partners? • Have you experienced physical, sexual, or emotional abuse from a partner? 	<ul style="list-style-type: none"> • What kinds of sex are you having? For example, have you had oral sex, vaginal sex, anal sex, sharing of sex toys? • How old were you the first time you had sex? • Where do you usually meet your sexual partners? • Have you ever exchanged sex for money, drugs, shelter, or food? • Have you ever been forced to do something sexually that you did not want to do? • Do you ever have sex while under the influence of drugs or alcohol? • Do you or any of your partners inject drugs? 	<ul style="list-style-type: none"> • Do you use anything to protect against sexually transmitted infections? • How many times in the last year have you had sex without a condom? • When do you use condoms? With which partners do you use condoms? • Do any of your partners have an STI, such as HIV? • Do you know about pre-exposure prophylaxis (PrEP)? • When you do not use a condom, what prevents you from doing so? 	<ul style="list-style-type: none"> • Have you ever been diagnosed with an STI? • Have any of your partners ever been diagnosed with an STI? • Do you think you may have been exposed to an STI? • Have you ever been tested for STIs before? When? 	<ul style="list-style-type: none"> • Are you currently trying to get pregnant? • Would you or your partner(s) like to become pregnant in the next year? • Is anyone forcing you or pressuring you to get pregnant or not stay pregnant? • Are you doing anything to prevent pregnancy?

Best Practices for STI Screening

Asking sexual history questions is not a useful practice if patients do not feel comfortable giving accurate information about their behaviors. Many patients choose not to disclose information until they have developed a relationship with their health care provider and are satisfied that they will not face discrimination or judgment.

There are several steps that clinicians can take to ensure that they are creating an environment that engenders trust and allows for disclosure, as well as opportunities to ask questions. For example, it is important for offices to use intake and medical history forms that allow for documentation of diverse gender identities, sexual orientations, and sexual behaviors. Clinic staff should be trained to address patients by their preferred name and pronouns, treat sexual history information just like any other health information, and use language that does not imply any judgment. Clinicians should strive to avoid assuming anything about a person's gender identity, sexual orientation, or sexual practices.

Questions about sexual health and history should be asked using neutral language, in a way that allows for disclosure of all practices. Consider the following patient scenarios:

- Married couple who are polyamorous and therefore request frequent STI screenings
- Woman who has been abused and is unable to negotiate condom use in her relationship
- Elderly widow who has a new partner
- Woman who is HIV-positive and is planning a pregnancy with her spouse who is HIV-negative
- Teenager who is homeless and engages in survival sex

In each of these cases, the clinician cannot properly address STI screening without first understanding the patient's situation and the context of their behavior.

We recommend using standardized, easy-to-understand language to ask sexual history questions and ask those questions in the same way each time. If someone other than the physician—such as a medical assistant or nurse—is obtaining the sexual history, they should be trained in the standardized approach. Consider adding sexual history questions to your EHR templates to ensure standardization of phrasing.

Taking an Accurate Sexual History

Sample Script

Obtaining an accurate and detailed sexual history is essential for proper screening for sexually transmitted infections (STIs). While this conversation may be uncomfortable for both physician and patient, a comprehensive sexual history should be part of routine, preventive health care. The conversation starter and sample questions below can help physicians with a standardized approach to obtaining a sexual history.



1 Step 1: Set the Stage

Begin the conversation with the following:

“ I am going to ask you a few questions about your sexual history. I ask everyone these questions, as they are important to understand your health. Everything you tell me is confidential. ”

2 Step 2: Five Questions to Ask Every Patient

1. Have you ever been sexually active?
2. What is/are the sex and gender of your partner(s)?
3. How many partners have you had in the last 12 months?
4. What types of sexual activity do you have (oral/anal/vaginal/use of sex toys/other)?
5. When was the last time you got tested for STIs?

BEST PRACTICE TIP:

It is important to recognize that sometimes taking a sexual history will lead to a longer discussion about sexual health and related issues.

3 Step 3: Respond to the History

Based upon the patient's answers, determine if a more detailed risk assessment is needed.

Use the 5 P's approach:

- Partners
- Practices
- Protection from STIs
- Past history of STIs
- Prevention of pregnancy

BEST PRACTICE TIP: Language is important

AVOID	INSTEAD USE
Are you married?	What is your current relationship status?
You're married so you don't need STI testing, right?	Have you had any new sexual partners in the last year?
Do you think your partner is cheating on you?	Does your partner have other partners?
Do you sleep with a lot of people?	How many sexual partners have you had?
Are you an IV drug user?	Have you ever injected drugs?

Implementation Challenges

Health care providers often cite a lack of time as a barrier to implementing evidence-based STI screening in their practices. Good utilization of team-based care may lessen the time impact of screening. For example, through the creation of standing orders, staff can initiate screening for properly-identified patients during triage for a routine medical visit.

Consider creating a standing order for urine chlamydia and gonorrhea testing in all sexually active patients under the age of 25 who have not had testing in the last year. Staff can facilitate this screening by obtaining a urine sample, oropharyngeal swab, or patient-collected rectal swab prior to the visit and placing the order in the chart. Some clinics have implemented standing orders for screening whenever a threshold of risk is reached. For example, if the patient reports on an intake questionnaire that they have had unprotected intercourse with a new partner since their last screening, they are automatically offered STI testing by the medical assistant.

The EHR may also facilitate streamlined screening practices. Order sets and templates can be helpful for quick ordering of customized screening panels, such as a “high-risk sexual behavior” panel that includes multi-site gonorrhea/chlamydia, RPR, and HIV testing. Many EHRs can also be configured to alert clinicians when routine screening is due, or if a risk threshold—such as a certain number of sexual partners within a given timeframe—has been reached.

Another challenge to STI screening comes in the form of patient access. For some patients, requiring a trip to a clinical lab for a blood draw or sample collection may be a significant barrier. Screening rates can be improved by offering on-site testing and collection of biological samples. Consider offering point-of-care testing, such as the clinical laboratory improvement amendments (CLIA)-waived rapid HIV test, which has the additional advantage of providing the result in a few minutes.

Coding and Payment

Starting in 2014, the Patient Protection and Affordable Care Act (ACA) required insurance plans to cover many clinical preventive services, including screening for chlamydia, gonorrhea, hepatitis B virus, hepatitis C virus, HIV, and syphilis.¹⁰ Coding information is provided in the appendix.

As a best practice, it is important to work with those in your office who are involved with billing and other staff to ensure appropriate documentation.

Disease-specific Considerations and Special Populations

Certain populations may present unique challenges or have separate recommendations for STI screening. These considerations are outlined below.

Women Who Have Sex With Women (WSW)

There is limited evidence on sexual risk in WSW to inform screening guidelines specific to this group. However, they are still at risk for STI.¹¹ Family physicians should screen WSW according to current recommendations for all females, in addition to taking an accurate history to identify risk factors and provide counseling to reduce that risk.¹² WSW may be at risk for bacterial, viral, and protozoal STIs, and can transmit STIs through mucosal contact, vaginal fluids, menstrual blood, and by sharing sex toys.¹² Bacterial vaginosis (BV) is common in WSW,¹² although currently the AAFP and USPSTF do not have screening recommendations for BV in non-pregnant women. Family physicians should consider discussing vaginal symptoms and proper hygiene, in addition to strategies for reducing infection transmission, such as the use of dental dams, gloves, and condoms.

Men Who Have Sex With Men (MSM)

STIs are often asymptomatic in men,¹³ therefore screening in MSM should be based on risks and include physical examination of the pharynx, rectum, urethra, and testicles, as appropriate based on sexual history.¹³ [The AAFP and USPSTF recommends](#) HIV screening at least annually for those at high risk, in addition to screening for syphilis, hepatitis B, and hepatitis C infection in high-risk persons. Since sexual behaviors can vary over time, clinicians should reassess history and risks at subsequent visits.

MSM may have increased risk of certain STI pathogens, such as HIV.¹³ Additional potential risk factors prevalent in this population include: multiple sex partners, substance use, and sexual network dynamics of MSM. While there was a decrease in unsafe sexual practices and the reported rates of STDs in the 1980s and 1990s following the outbreak of HIV, there has recently been an increase in rates of early syphilis, gonorrhea, and chlamydia correlating with higher rates of sexual risk behaviors documented among MSM in the U.S.¹⁴ Two-thirds of cases of primary and secondary syphilis diagnoses in the U.S. are in MSM, and largely affect those in ethnic minority groups.¹⁵

Insertive oral sex has been associated with urethral gonorrhea and receptive oral sex with pharyngeal gonorrhea.¹⁶ Rectal gonorrhea infection rates are increasing among MSM with HIV infection.¹⁷ Taking a current sexual history and asking about specific risks, such as anonymous sex and substance use are critical for screening.

The following screening tests should be performed at least annually for sexually active MSM and are highlighted below in **Table 3.**¹²

- HIV serology, if HIV status is unknown or negative and the patient or his sex partner(s) has had more than one sex partner since most recent HIV test
- Syphilis serology to establish whether persons with reactive tests have untreated syphilis, have partially treated syphilis, are manifesting a slow serologic response to appropriate prior therapy, or are serofast (defined as a <4-fold [2 dilution] decline in nontreponemal antibody titers at 6-12 months or as persistently low titers after treatment)
- Urethral infection with *N. gonorrhoeae* and *C. trachomatis* in men who have had insertive intercourse during the

preceding year (testing of the urine using NAAT is the preferred approach)

- Rectal infection with *N. gonorrhoeae* and *C. trachomatis* in men who have had receptive anal intercourse during the preceding year (NAAT of a rectal specimen is the preferred approach)
- Pharyngeal infection with *N. gonorrhoeae* in men who have had receptive oral intercourse during the preceding year (NAAT of a pharyngeal specimen is the preferred approach); testing for *C. trachomatis* pharyngeal infection is not recommended¹²

Although anal Papanicolaou (Pap) testing is available, due to insufficient evidence, the USPSTF and CDC do not provide recommendations for or against anal Pap smears. The CDC states that an annual digital anorectal examination for HIV-positive MSM and HIV-negative MSM with a history of receptive anal intercourse might detect masses that could be anal cancer. The New York State Department of Health recommends baseline cytology and annual anal cancer screening for MSM who are HIV-positive.¹⁸

Table 3. Screening Recommendations for Men Who Have Sex With Men (MSM)

Condition	Intervention	Centers for Disease Control and Prevention	United States Preventive Services Task Force (USPSTF)/American Academy of Family Physicians (AAFP)
Chlamydia	Pharyngeal nucleic acid amplification testing (NAAT) NAAT of rectal swab NAAT of urine sample	Not recommended Annually in men who have had receptive anal intercourse in previous year Annually in men who have had insertive intercourse in previous year	No recommendation due to insufficient evidence
Gonorrhea	Pharyngeal NAAT NAAT of a rectal swab NAAT of urine sample	Annually in men who have had receptive oral intercourse in previous year Annually in men who have had receptive anal intercourse in previous year Annually in men who have had insertive intercourse in previous year	No recommendation due to insufficient evidence
Hepatitis B	Serum hepatitis B surface antigen (HbsAg)	Recommended	Recommended
Hepatitis C	Serum hepatitis C virus (HCV) antibody	Recommended for individuals with HIV infection and those who have injected drugs	Recommended for individuals at high risk
Herpes simplex virus	Type specific serum immunoglobulin G (IgG) antibody only if diagnosis uncertain, swab of lesion with polymerase chain reaction is more specific in patients with symptoms		Not recommended for asymptomatic patients
HIV	Screening—serum	At least annually	One-time screening and at least annually individuals at very high risk
Syphilis	Serum nontreponemal antibody test (RPR) confirmed by serum fluorescent treponemal antibody (FTA) test	Annually	Recommended for MSM who engage in high-risk sexual behavior; no evidence as to screening frequency

Table adapted with permission from *American Family Physician*.¹²

Adolescents

Adolescents have unique needs in terms of screening for STIs and maintaining confidentiality. Access to confidential health care is important for adolescent health and well-being.¹⁹ Clinicians should be familiar with their state's and community's standards regarding adolescent confidentiality. State laws vary, but in general, in areas of care where the adolescent has the legal right to give consent to health services, confidentiality must be maintained. All 50 states and the District of Columbia allow minors to self-consent for their own health services for STIs.²⁰

Some states do restrict a minor's ability to provide consent on the basis of age or service type (i.e., treatment versus preventive). Protection of confidentiality for STI care, particularly for adolescents with private health insurance plans, presents multiple challenges. After a claim has been reported, many states mandate that health plans provide a written statement to the beneficiary indicating the service performed, which might allow unintended disclosure to parents.

Despite the high rates of STIs in the adolescent population, clinicians frequently fail to inquire about sexual behaviors, assess risks, and offer risk-reduction counseling. Discussions concerning sexual behaviors must be tailored to the patient's developmental level. Careful, nonjudgmental, and thorough counseling is particularly vital for adolescents' care.

Table 4. Screening Recommendations for Adolescents^{7,21} (AAFP and USPSTF)

Syphilis	Recommended for adolescents at increased risk
Hepatitis B	Recommended for adolescents at increased risk
Hepatitis C	Recommended for adolescents at increased risk
HIV	Recommended screening beginning at age 15 and younger for those at increased risk*
Gonorrhea	Recommended for sexually active females aged 24 years and younger
Chlamydia	Recommended for sexually active females aged 24 years and younger
Human papillomavirus	Screening recommended beginning at age 21
Herpes simplex virus	Routine screen not advised
Trichomonas	Routine screen not advised

*See additional considerations on screening age from the AAFP

** The AAFP guidelines differ from the USPSTF guidelines for screening age for HIV.⁷

Individuals Who Are Transgender and Gender Diverse

Persons who are transgender identify as being of a gender incongruent with their gender assigned at birth. Women who are transgender (i.e., transwomen, transgender male to female, transfeminine) identify as women despite being born with male anatomy). Men who are transgender (i.e., transmen, transgender female to male, or transmasculine) identify as men having been born with female anatomy. Many persons who are transgender use different and often fluid terminology to refer to themselves throughout life. Sexual orientation and gender identity are distinct entities, and transgender persons may have sex with men, women, or both and consider themselves to be heterosexual, gay, lesbian, or bisexual.

Large studies indicate that among women who are transgender in the U.S., the prevalence of HIV infection is 27.7%, with a prevalence of 56.3% among black women who are transgender.²² Further research suggests high rates (19%) of HIV infection worldwide among women who are transgender.²³

Clinicians should evaluate STI- and HIV-related risks for transgender persons based on current and recent sexual practices and anatomy. Experiences regarding surgical affirming procedures, hormone use, and their patterns of sexual behavior vary widely, so clinicians must remain aware of symptoms consistent with common STIs and screen for asymptomatic STIs on the basis of sexual practices. Due to the diversity of experiences and practices it would be overly simplistic to create a guideline that proposes to adequately address STI screening for all transgender persons in a clinically meaningful way.

Individuals Who Are Pregnant

Perinatal STI transmission can exert severely debilitating effects on pregnant women and newborns. All pregnant women and their sexual partners should be screened for STIs, counseled on the possibility of perinatal infections, and provided access to treatment. Recommendations on perinatal STI screening are based on disease severity and sequelae, population prevalence, and cost effectiveness of screening.

Table 5. Screening Recommendations for Individuals Who Are Pregnant²⁴ (AAFP and USPSTF)	
Syphilis	All pregnant persons
Hepatitis B	All pregnant, 1st prenatal visit
Hepatitis C	Screen only if at risk
HIV	All pregnant persons
Gonorrhea	Screen if at risk
Chlamydia	Screen if at risk
Human papillomavirus	Screen based on general guidelines, not specifically during pregnancy
Herpes simplex virus	Routine screen not advised
Trichomonas	Routine screen not advised

Individuals in Correctional Facilities

Although no comprehensive national guidelines exist regarding STI care for correctional populations, in jurisdictions utilizing comprehensive screening, more chlamydial and gonorrheal infections among females (and males if screened) have been detected and treated in the correctional setting than any other single reporting source. Universal screening for chlamydia and gonorrhea in women ≥ 35 years entering juvenile and adult correctional facilities has been a long-standing recommendation.¹⁶

Detection and treatment of early syphilis in correctional facilities might impact rates of transmission. Syphilis seroprevalence rates indicating previous or current infection are considerably higher among adult men and women than in adolescents.¹²

While several studies indicate a high prevalence of trichomonas among incarcerated persons, none have shown the impact of screening trichomonas in correctional facilities. Vaginal discharge among women should be tested and treated as indicated.¹⁶

Appendix

The following information about United States Preventive Services Task Force (USPSTF) recommendations; Centers for Medicare and Medicaid Services (CMS) eligibility/frequency; and Current Procedural Terminology (CPT)/Healthcare Common Procedure Coding System (HCPCS)/ICD-10 coding come from the following sources:

[United States Preventive Services Task Force – Published Recommendations](#)

[Centers for Medicare and Medicaid Services – Sexually transmitted infections screening & counseling](#)

[Current Procedural Terminology Codes/Healthcare Common Procedure Coding System](#)

[ICD-10 Codes](#)

Appendix Contents

Screening for Chlamydia	12
Screening for Gonorrhea.	13
Screening for Hepatitis B	14, 15
Screening for Hepatitis C	16
Screening for HIV	17, 18
Screening for Syphilis	19

Screening for Chlamydia

USPSTF

The USPSTF assigns screening for chlamydia in sexually active women age 24 years and younger and in older women who are at increased risk for infection a B-rating. They state there is insufficient evidence to assess the benefits and harms of screening for chlamydia in men. In terms of frequency, the USPSTF states, “in the absence of studies on screening intervals, a reasonable approach would be to screen patients whose sexual history reveals new or persistent risk factors since the last negative test result.”

CMS eligibility

Certain Medicare beneficiaries are eligible when all of the following are true:

- Sexually active adolescents and adults at increased risk for STIs
- Referred for this service by a primary care provider and provided by a Medicare-eligible primary care provider in a primary care setting

CMS frequency

- One annual occurrence of screening for chlamydia, gonorrhea, and syphilis in women at increased risk who are not pregnant
- Up to two occurrences per pregnancy of screening for chlamydia and gonorrhea in pregnant women who are at increased risk for STIs and continued increased risk for the second screening

CPT/HCPCS codes	Description
86631	Antibody; chlamydia
86632	Antibody; chlamydia, immunoglobulin M (IgM)
87110	Antibody; chlamydia, IgM
87270	Infectious agent antigen detection by immunofluorescent technique; chlamydia trachomatis
87320	Infectious agent antigen detection by immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative, multiple-step method; chlamydia trachomatis
87490	Infectious agent detection by nucleic acid (DNA or RNA); chlamydia trachomatis, direct probe technique
87491	Infectious agent detection by nucleic acid (DNA or RNA); chlamydia trachomatis, amplified probe technique
87810	Infectious agent antigen detection by immunoassay with direct optical observation; chlamydia trachomatis
87800	Infectious agent detection by nucleic acid (DNA or RNA), multiple organisms; direct probe(s) technique Use 87800 when performing combined chlamydia and gonorrhea testing

ICD-10 codes	Description
Z11.3	Encounter for screening for infections with a predominantly sexual mode of transmission
Z11.59	Encounter for screening for other viral diseases
Z34.00	Encounter for supervision of normal first pregnancy, unspecified trimester
Z34.01	Encounter for supervision of normal first pregnancy, first trimester
Z34.02	Encounter for supervision of normal first pregnancy, second trimester
Z34.03	Encounter for supervision of normal first pregnancy, third trimester
Z34.80	Encounter for supervision of other normal pregnancy, unspecified trimester
Z34.81	Encounter for supervision of other normal pregnancy, first trimester
Z34.82	Encounter for supervision of other normal pregnancy, second trimester
Z34.83	Encounter for supervision of other normal pregnancy, third trimester
Z34.90	Encounter for supervision of normal pregnancy, unspecified, unspecified trimester
Z34.91	Encounter for supervision of normal pregnancy, unspecified, first trimester
Z34.92	Encounter for supervision of normal pregnancy, unspecified, second trimester
Z34.93	Encounter for supervision of normal pregnancy, unspecified, third trimester
Z72.51	High-risk heterosexual behavior
Z72.52	High-risk homosexual behavior
Z72.53	High-risk bisexual behavior
Z72.89	Other problems related to lifestyle
009.90	Supervision of high-risk pregnancy, unspecified, unspecified trimester
009.91	Supervision of high-risk pregnancy, unspecified, first trimester
009.92	Supervision of high-risk pregnancy, unspecified, second trimester
009.93	Supervision of high-risk pregnancy, unspecified, third trimester

Screening for Gonorrhea

USPSTF

The USPSTF assigns screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection a B-rating. They state there is insufficient evidence to assess the benefits and harms of screening for gonorrhea in men. In terms of frequency, the USPSTF states, “in the absence of studies on screening intervals, a reasonable approach would be to screen patients whose sexual history reveals new or persistent risk factors since the last negative test result.”

CMS eligibility

Certain Medicare beneficiaries are eligible when all of the following are true:

- Sexually active adolescents and adults at increased risk for STIs
- Referred for this service by a primary care provider and provided by a Medicare-eligible primary care provider in a primary care setting

CMS frequency

- One annual occurrence of screening for chlamydia, gonorrhea, and syphilis in women at increased risk who are not pregnant
- Up to two occurrences per pregnancy of screening for chlamydia and gonorrhea in pregnant women who are at increased risk for STIs and continued increased risk for the second screening

CPT/HCPCS codes	Description
87590	Neisseria gonorrhoeae, direct probe technique
87591	Neisseria gonorrhoeae, amplified probe technique
87580	Neisseria gonorrhoeae, quantification
87800	Infectious agent detection by nucleic acid (DNA or RNA), multiple organisms; direct probe(s) technique Use 87800 when performing combined chlamydia and gonorrhea testing

ICD-10 codes	Description
Z11.3	Encounter for screening for infections with a predominantly sexual mode of transmission
Z11.59	Encounter for screening for other viral diseases
Z34.00	Encounter for supervision of normal first pregnancy, unspecified trimester
Z34.01	Encounter for supervision of normal first pregnancy, first trimester
Z34.02	Encounter for supervision of normal first pregnancy, second trimester
Z34.03	Encounter for supervision of normal first pregnancy, third trimester
Z34.80	Encounter for supervision of other normal pregnancy, unspecified trimester
Z34.81	Encounter for supervision of other normal pregnancy, first trimester
Z34.82	Encounter for supervision of other normal pregnancy, second trimester
Z34.83	Encounter for supervision of other normal pregnancy, third trimester
Z34.90	Encounter for supervision of normal pregnancy, unspecified, unspecified trimester
Z34.91	Encounter for supervision of normal pregnancy, unspecified, first trimester
Z34.92	Encounter for supervision of normal pregnancy, unspecified, second trimester
Z34.93	Encounter for supervision of normal pregnancy, unspecified, third trimester
Z72.51	High-risk heterosexual behavior
Z72.52	High-risk homosexual behavior
Z72.53	High-risk bisexual behavior
Z72.89	Other problems related to lifestyle
009.90	Supervision of high-risk pregnancy, unspecified, unspecified trimester
009.91	Supervision of high-risk pregnancy, unspecified, first trimester
009.92	Supervision of high-risk pregnancy, unspecified, second trimester
009.93	Supervision of high-risk pregnancy, unspecified, third trimester

Screening for Hepatitis B

USPSTF

The USPSTF assigns screening pregnant women for hepatitis B (Hep B) an A-rating. They recommend screening for the hepatitis B virus (HBV) by testing for the hepatitis B surface antigen (HBsAg). This should be performed in each pregnancy, regardless of previous hepatitis B vaccination or previous negative HBsAg test results.

A test for HBsAg should be ordered at the first prenatal visit with other recommended screening tests. At the time of admission to a hospital, birth center, or other delivery setting, women with unknown HBsAg status or with new or continuing risk factors for HBV infection (such as injection drug use or evaluation or treatment for a sexually transmitted disease) should receive screening.

The USPSTF assigns screening for high-risk adults a B-rating. Periodic screening may be useful in patients with ongoing risk for HBV transmission (e.g., patients from countries with a high prevalence of HBV, active injection drug users, men who have sex with men, household contacts of persons with HBV infections, and patients receiving hemodialysis or who are immunosuppressed) who do not receive vaccination. Clinical judgment should determine screening frequency, because the USPSTF found inadequate evidence to determine specific screening intervals.

CMS eligibility

Certain Medicare beneficiaries are eligible who fall into either of the following categories:

- Asymptomatic, nonpregnant adolescents and adults at high risk for HBV infections
- Pregnant women

CMS frequency

- One screening for asymptomatic, nonpregnant adolescents and adults who do not meet the high-risk definition
- Annually only for those with continued high risk who do not receive Hep B vaccination
- One screening for pregnant women at the first prenatal visit for each pregnancy and rescreening at the time of delivery for those with newer continued risk factors

This includes screening during the first prenatal visit in subsequent pregnancies, regardless of previous HBV vaccination or previous negative HBsAg test results.

CPT/HCPCS codes	Description
G0499 (Use for non-pregnant Medicare patients) See CPT codes below for pregnant patients	Hep B screening in non-pregnant, high-risk individual includes HBsAg, followed by a neutralizing confirmatory test for initially reactive results, and antibodies to HBsAg (anti-HBs) and Hep B core antigen (anti-HBc)
Use for pregnant Medicare patients, and other patients	
CPT/HCPCS codes	Description
86704	Hepatitis B core antibody (HBcAb); total
86706	Hepatitis B surface antibody (HBsAb)
87340	Infectious agent antigen detection by immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative, multiple-step method; hepatitis B surface antigen (HBsAg)
87341	Infectious agent antigen detection by immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative, multiple-step method; hepatitis B surface antigen (HBsAg) neutralization

For persons with end-stage renal disease (ESRD)	
ICD-10 codes	Description
Z11.59	Encounter for screening for other viral diseases
N18.6	End-stage renal disease (ESRD)
For asymptomatic, nonpregnant adolescents and adults at high risk:	
Z11.59	Encounter for screening for other viral diseases
Z72.89	Other problems related to lifestyle
For asymptomatic, nonpregnant adolescents and adults, subsequent encounter:	
ICD-10 codes	Description
Z11.59	Encounter for screening for other viral diseases
And one of these:	
ICD-10 codes	Description
F11.10-F11.99	Opioid-related disorder
F13.10-F13.99	Sedative, hypnotic, or anxiolytic-related disorders
F14.10-F14.99	Cocaine-related disorders
F15.10-F15.99	Other stimulant-related disorders
Z20.2	Contact with and (suspected) exposure to infections with a predominantly sexual mode of transmission
Z20.5	Contact with and (suspected) exposure to viral hepatitis
Z72.52	High-risk homosexual behavior
Z72.53	High-risk bisexual behavior
For pregnant women	
ICD-10 codes	Description
Z11.59	Encounter for screening for other viral diseases
And one of these:	
Z34.00	Encounter for supervision of normal first pregnancy, unspecified trimester
Z34.01	Encounter for supervision of normal first pregnancy, first trimester
Z34.02	Encounter for supervision of normal first pregnancy, second trimester
Z34.03	Encounter for supervision of normal first pregnancy, third trimester
Z34.80	Encounter for supervision of other normal pregnancy, unspecified trimester
Z34.81	Encounter for supervision of other normal pregnancy, first trimester
Z34.82	Encounter for supervision of other normal pregnancy, second trimester
Z34.83	Encounter for supervision of other normal pregnancy, third trimester
Z34.90	Encounter for supervision of normal pregnancy, unspecified, unspecified trimester
Z34.91	Encounter for supervision of normal pregnancy, unspecified, first trimester
Z34.92	Encounter for supervision of normal pregnancy, unspecified, second trimester
Z34.93	Encounter for supervision of normal pregnancy, unspecified, third trimester
009.90	Supervision of high-risk pregnancy, unspecified, unspecified trimester
009.91	Supervision of high-risk pregnancy, unspecified, first trimester
009.92	Supervision of high-risk pregnancy, unspecified, second trimester
009.93	Supervision of high-risk pregnancy, unspecified, third trimester

Screening for Hepatitis C

USPSTF

The USPSTF assigns screening high-risk individuals for hepatitis C (Hep C) a B-rating. They recommend screening strategies targeting persons with risk factors for the hepatitis C virus (HCV). These include persons who: have past or present injection drug use; had sex with a person who has past or present injection drug use; or had a blood transfusion before 1992. Anti-HCV antibody testing is associated with high sensitivity (>90%) and small numbers needed to screen to identify one case of HCV infection (<20 persons). Anti-HCV antibody testing remains highly accurate in low-prevalence populations, although the numbers needed to screen to detect one case of HCV infection are higher.

Individuals who are at continued risk (persons who inject drugs) should be screened annually.

CMS eligibility

Certain Medicare beneficiaries are eligible who fall into at least one of the following categories:

- High risk for HCV infection
- Born between 1945 and 1965
- Had a blood transfusion before 1992

CMS frequency

- Once for Medicare beneficiaries born from 1945 through 1965 or not considered high risk (use ICD-10 Z11.59)
- Initial screening for Medicare beneficiaries, regardless of birth year, for adults at high risk, that is, beneficiaries who had a blood transfusion before 1992 and beneficiaries with a current or past history of illicit drug use
- Annually only for high-risk Medicare beneficiaries with continued illicit injection drug use since the prior negative (HCV) screening test

CPT/HCPCS codes	Description
G0472 (Use for Medicare patients)	Hep C antibody screening, for individual at high risk and other covered indication(s)

Use 86803 for screening non-Medicare patients.

Codes for other CPT screening and diagnostic tests	
86803	Hep C antibody
86804	Hep C antibody; confirmatory test (e.g., immunoblot)
87520	Hep C, direct probe technique
87521	Hep C, amplified probe technique, includes reverse transcription when performed
87522	Hep C, quantification, includes reverse transcription when performed
87902	Infectious agent genotype analysis by nucleic acid (DNA or RNA) Hep C virus
86038	Antinuclear antibodies (ANA)

ICD-10 codes	Description
Z72.89	Other problems related to lifestyle
F19.20	Other psychoactive substance dependence, uncomplicated

Screening for HIV

USPSTF

The USPSTF assigns screening for HIV for ages 15-65, for younger or older if at risk and for pregnant women an A-rating. Current CDC guidelines recommend testing for HIV infection with an antigen/antibody immunoassay approved by the U.S. Food and Drug Administration that detects HIV-1 and HIV-2 antibodies and the HIV-1 p24 antigen, with supplemental testing after a reactive assay to differentiate between HIV-1 and HIV-2 antibodies. If supplemental testing for HIV-1/HIV-2 antibodies is nonreactive or indeterminate (or if acute HIV infection or recent exposure is suspected or reported), an HIV-1 nucleic acid test is recommended to differentiate acute HIV-1 infection from a false-positive test result.

Antigen/antibody tests for HIV are highly accurate with reported sensitivity ranging from 99.76% to 100% and specificity ranging from 99.50% to 100%, and results can be available in two days or less. Rapid antigen/antibody tests are also available.

When using a rapid HIV test for screening, positive results should be confirmed. Pregnant women presenting in labor with unknown HIV status should be screened with a rapid HIV test to get results as soon as possible.

CMS eligibility

Certain Medicare beneficiaries are eligible without regard to perceived risk or who are at increased risk for HIV infection, including anyone who asks for the test, or pregnant women.

CMS frequency

- Annually for Medicare beneficiaries between the ages of 15 and 65 without regard to perceived risk
- Annually for Medicare beneficiaries younger than 15, and adults older than 65 who are at increased risk for HIV infection
- For Medicare beneficiaries who are pregnant, three times per pregnancy:
 - First, when a woman is diagnosed with pregnancy
 - Second, during the third trimester
 - Third, at labor, if ordered by the woman's clinician

Screening for Medicare patients	
CPT/HCPCS codes	Description
G0432	Infectious agent antibody detection by enzyme immunoassay (EIA) technique, HIV-1 and/or HIV-2, screening
G0433	Infectious agent antibody detection by enzyme-linked immunosorbent assay (ELISA) technique, HIV-1 and/or HIV-2, screening
G0435	Infectious agent antibody detection by rapid antibody test, HIV-1 and/or HIV-2, screening
G0475	HIV antigen/antibody, combination assay, screening
80081	Obstetric panel (includes HIV testing)

Codes for other CPT screening and diagnostic tests	
86689	HTLV or HIV antibody, confirmatory test (e.g., Western Blot)
	Antibody
86701	HIV-1
86702	HIV-2
86703	HIV-1 and HIV-2, single result
	(For HIV-1 antigen(s) with HIV-1 and HIV-2 antibodies, single result, use 87389)
	(When HIV immunoassay [HIV testing 86701-86703 or 87389] is performed using a kit or transportable instrument that wholly or in part consists of a single use, disposable analytical chamber, the service may be identified by adding modifier-92 to the usual code)
	Infectious agent detection by nucleic acid (DNA or RNA)
87534	HIV-1, direct probe technique
87535	HIV-1, amplified probe technique, includes reverse transcription when performed
87536	HIV-1, quantification, includes reverse transcription when performed
87357	HIV-2, direct probe technique
87538	HIV-2, amplified probe technique, includes reverse transcription when performed
87539	HIV-2, quantification, includes reverse transcription when performed
	Infectious agent antigen detection by immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative, multiple-step method
87389	HIV-1 antigen(s), with HIV-1 and HIV-2 antibodies, single result
87390	HIV-1
83391	HIV-2

Increased risk factors not reported	
ICD-10 codes	Description
Z11.4	Encounter for screening for HIV
Increased risk factors reported	
ICD-10 codes	Description
Z11.4	Encounter for screening for HIV
And one of these:	
Z72.51	High-risk heterosexual behavior
Z72.52	High-risk homosexual behavior
Z72.53	High-risk bisexual behavior
Z72.89	Other problems related to lifestyle
Pregnant women	
ICD-10 codes	Description
Z11.4	Encounter for screening for HIV
And one of these:	
Z34.00	Encounter for supervision of normal first pregnancy, unspecified trimester
Z34.01	Encounter for supervision of normal first pregnancy, first trimester
Z34.02	Encounter for supervision of normal first pregnancy, second trimester
Z34.03	Encounter for supervision of normal first pregnancy, third trimester
Z34.80	Encounter for supervision of other normal pregnancy, unspecified trimester
Z34.81	Encounter for supervision of other normal pregnancy, first trimester
Z34.82	Encounter for supervision of other normal pregnancy, second trimester
Z34.83	Encounter for supervision of other normal pregnancy, third trimester
Z34.90	Encounter for supervision of normal pregnancy, unspecified, unspecified trimester
Z34.91	Encounter for supervision of normal pregnancy, unspecified, first trimester
Z34.92	Encounter for supervision of normal pregnancy, unspecified, second trimester
Z34.93	Encounter for supervision of normal pregnancy, unspecified, third trimester
009.90	Supervision of high-risk pregnancy, unspecified, unspecified trimester
009.91	Supervision of high-risk pregnancy, unspecified, first trimester
009.92	Supervision of high-risk pregnancy, unspecified, second trimester
009.93	Supervision of high-risk pregnancy, unspecified, third trimester

Screening for Syphilis

USPSTF

The USPSTF assigns screening for syphilis an A-rating. They recommend screening for persons who are at increased risk for syphilis, including men who have sex with men (MSM), and women living with HIV. They advise clinicians to be aware of the prevalence of syphilis in their community, and say the optimal screening frequency is not well established: “Men who have sex with men or persons living with HIV may benefit from more frequent screening. Initial studies suggest that detection of syphilis infection in MSM or persons living with HIV improves when screening is performed every 3 months compared with annually.”

CMS eligibility

Certain Medicare beneficiaries are eligible when all of the following are true:

- Sexually active adolescents and adults at increased risk for STIs
- Referred for this service by a primary care provider and provided by a Medicare-eligible primary care provider in a primary care setting

CMS frequency

- One annual occurrence of screening for chlamydia, gonorrhea, and syphilis in women at increased risk who are not pregnant
- One annual occurrence of screening for syphilis in men at increased risk
- One occurrence per pregnancy of screening for syphilis in pregnant women:
 - Up to two additional occurrences in the third trimester and at delivery if at continued increased risk for STIs

CPT/HCPCS codes	Description
86592	Syphilis test, non-treponemal antibody; qualitative (e.g., VDRL, RPR, ART)
86593	Syphilis test, non-treponemal antibody, quantitative
86780	Antibody; <i>treponema pallidum</i>

ICD-10 codes	Description
Z11.3	Encounter for screening for infections with a predominantly sexual mode of transmission
Z11.59	Encounter for screening for other viral diseases
Z34.00	Encounter for supervision of normal first pregnancy, unspecified trimester
Z34.01	Encounter for supervision of normal first pregnancy, first trimester
Z34.02	Encounter for supervision of normal first pregnancy, second trimester
Z34.03	Encounter for supervision of normal first pregnancy, third trimester
Z34.80	Encounter for supervision of other normal pregnancy, unspecified trimester
Z34.81	Encounter for supervision of other normal pregnancy, first trimester
Z34.82	Encounter for supervision of other normal pregnancy, second trimester
Z34.83	Encounter for supervision of other normal pregnancy, third trimester
Z34.90	Encounter for supervision of normal pregnancy, unspecified, unspecified trimester
Z34.91	Encounter for supervision of normal pregnancy, unspecified, first trimester
Z34.92	Encounter for supervision of normal pregnancy, unspecified, second trimester
Z34.93	Encounter for supervision of normal pregnancy, unspecified, third trimester
Z72.51	High-risk heterosexual behavior
Z72.52	High-risk homosexual behavior
Z72.53	High-risk bisexual behavior
Z72.89	Other problems related to lifestyle
009.90	Supervision of high-risk pregnancy, unspecified, unspecified trimester
009.91	Supervision of high-risk pregnancy, unspecified, first trimester
009.92	Supervision of high-risk pregnancy, unspecified, second trimester
009.93	Supervision of high-risk pregnancy, unspecified, third trimester

References

1. Centers for Disease Control and Prevention. Sexually transmitted disease surveillance 2017. www.cdc.gov/std/stats17/default.htm. Accessed July 18, 2019.
2. Centers for Disease Control and Prevention. Chlamydia screening percentages reported by commercial and Medicaid plans by state and year. www.cdc.gov/std/chlamydia/chlamydia-screening-2014.htm. Accessed July 18, 2019.
3. Nimalasuriya, KS. Screening for STIs. www.medscape.org/viewarticle/746453_3. Accessed July 18, 2019.
4. Hull S, Kelley S, Clarke JL. Sexually transmitted infections: compelling case for an improved screening strategy. *Popul Health Manag*. 2017;20(S1):S1-S11.
5. American Academy of Family Physicians. Sexually transmitted infections (STI) survey report. May 2, 2019. Unpublished.
6. Centers for Disease Control and Prevention. 2015 sexually transmitted diseases treatment guidelines. Screening. www.cdc.gov/std/tg2015/qa/screening-qa.htm. Accessed July 18, 2019.
7. American Academy of Family Physicians. Clinical preventive service recommendation. HIV screening, adolescents and adults. www.aafp.org/patient-care/clinical-recommendations/all/hiv-screening.html. Accessed July 18, 2019.
8. Marwick, C. Survey says patients expect little physician help on sex. *JAMA*. 1999;281(23): 2173-2174.
9. Centers for Disease Control and Prevention. A guide to taking a sexual history. U.S. Department of Health and Human Services. www.cdc.gov/std/treatment/SexualHistory.pdf. Accessed July 18, 2019.
10. Centers for Disease Control and Prevention. Prevention of HIV/AIDS, viral hepatitis, STDs, and TB through health care. STD preventive services. www.cdc.gov/nchstp/preventionthroughhealthcare/preventiveservices/std.htm. Accessed July 18, 2019.
11. Marrazzo JM, Gorgos LM. Emerging sexual health issues among women who have sex with women. *Curr Infect Dis Rep*. 2012;14(2):204-211.
12. Workowski KA, Bolan GA, Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015. *MMWR Recomm Rep*. 64(RR-03):1-137.
13. Knight DA, Jarrett D. Preventive health care for men who have sex with men. *Am Fam Physician*. 2015;91(12):844-852.
14. Mayer KH. Sexually transmitted diseases in men who have sex with men. *Clin Infect Dis*. 2011. 53 Suppl 3:S79-S83.
15. Centers for Disease Control and Prevention. Sexually transmitted disease surveillance 2017. Syphilis. www.cdc.gov/std/stats17/syphilis.htm. Accessed July 18, 2019.
16. Centers for Disease Control and Prevention. 2015 sexually transmitted diseases guidelines. Special populations. www.cdc.gov/std/tg2015/specialpops.htm. Accessed July 18, 2019.
17. Barbee LA, Khosropour, Dombrowski JC, Golden MR. New HIV diagnosis independently associated with rectal gonorrhea and chlamydia in men who have sex with men. *Sex Transm Dis*. 2017. 44(7):385-389.
18. New York State Department of Health AIDS Institute. Anal dysplasia and cancer guideline. www.hivguidelines.org/hiv-care/anal-dysplasia-cancer/#tab_2. Accessed July 18, 2019.
19. American Academy of Family Physicians. Adolescent health care, confidentiality. www.aafp.org/about/policies/all/adolescent-confidentiality.html. Accessed July 18, 2019.
20. Guttmacher Institute. An overview of consent to reproductive health services by young people. www.guttmacher.org/print/state-policy/explore/overview-minors-consent-law. Accessed July 18, 2019.
21. American Academy of Family Physicians. Adolescent health clinical recommendations & guidelines. www.aafp.org/patient-care/browse/topics.tag-adolescent-health.html. Accessed July 18, 2019.
22. Herbst JH, Jacobs ED, Finlayson TJ, et al. HIV/AIDS Prevention Research Synthesis Team. Estimating HIV prevalence and risk behaviors of transgender persons in the United States: a systemic review. *AIDS Behav*. 2008. 12(1):1-17.
23. Human Rights Campaign. Transgender people and HIV: what we know. www.hrc.org/resources/transgender-people-and-hiv-what-we-know. Accessed July 18, 2019.
24. Lee KC, Ngo-Metzger Q, Wolff T, et al. Sexually transmitted infections: recommendations from the U.S. Preventive Services Task Force. *Am Fam Physician*. 2016. 94(11):907-915.

Resources

[American Academy of Family Physicians – Sexually Transmitted Infections](#)

[American Academy of Family Physicians – Clinical Preventive Service Recommendations](#)

[American Family Physician – Sexually Transmitted Infections](#)

[Centers for Disease Control and Prevention – A Guide to Taking a Sexual History](#)

[FamilyDoctor.org – Sexually Transmitted Infections \(STIs\)](#)

[Gay & Lesbian Medical Association – Guidelines for Care of Lesbian, Gay, Bisexual, and Transgender Patients](#)

[U.S. Preventive Services Taskforce – Recommendations](#)

