



Opt-Out Chlamydia Screening Should Be Part of Routine Adolescent Health Care Services

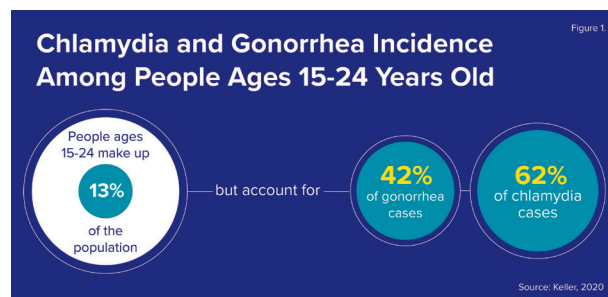
Introduction

The Centers for Disease Control and Prevention (CDC) released the latest snapshot of sexually transmitted infections (STIs) in the United States, and STI rates continue to rise at an alarming pace. In 2018, there were nearly 68 million STIs diagnosed in the United States,¹ with 1 in 5 people (20% of the US population) having an STI on any given day that year.² Equally concerning is the continued burden and ongoing disproportionate effects of STIs on certain racial and ethnic groups, as well as on young people. People aged 15 to 24 years account for almost 50% of all incident STIs, including *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections (**Figure 1**).^{2,3} This is further complicated by the fact that a large proportion of female genital chlamydia and gonorrhea infections are asymptomatic, with one study estimating that up to 84% of female patients with either infection report no symptoms.⁴ Patients with asymptomatic infections may not seek testing and are often not treated, which leads to increased transmission and increased potential complications yet screening rates remain low.

Health and economic costs of chlamydia

High rates of asymptomatic and untreated chlamydial infections along with disproportionately higher rates among adolescent and young adult women can lead to lasting

reproductive tract morbidity. Undetected infections left untreated can lead to long-term adverse health outcomes, including pelvic inflammatory disease, infertility, chronic pelvic pain, and an increased risk of HIV.⁵ As many as 24,000 women become infertile each year due to undiagnosed STIs.⁶ The adverse health outcomes related to chlamydia combined with upward trends of this treatable infection highlight the need for providers to screen all female patients.



There are also significant economic costs of STIs that support the need for improved screening. In 2018, new sexual infections cost about \$16 billion in direct lifetime medical costs, with women accounting for 25% of that total cost.¹ Chlamydia infections alone accounted for \$691 million of that total.¹

A national call to action to screen young people

According to the CDC's National Survey of Family Growth, about 20% of people aged 15 years are estimated to have engaged in sexual activity, and by the age of 18 years nearly 2/3 report sexual activity. Further, the CDC's 2019 Youth Risk Behavior Surveillance System data show that young people continue to engage in sexual behavior that puts them at risk of STI exposure.⁸ Of these sexually active young people, only 46% reported using a condom the last time they had sex.⁸

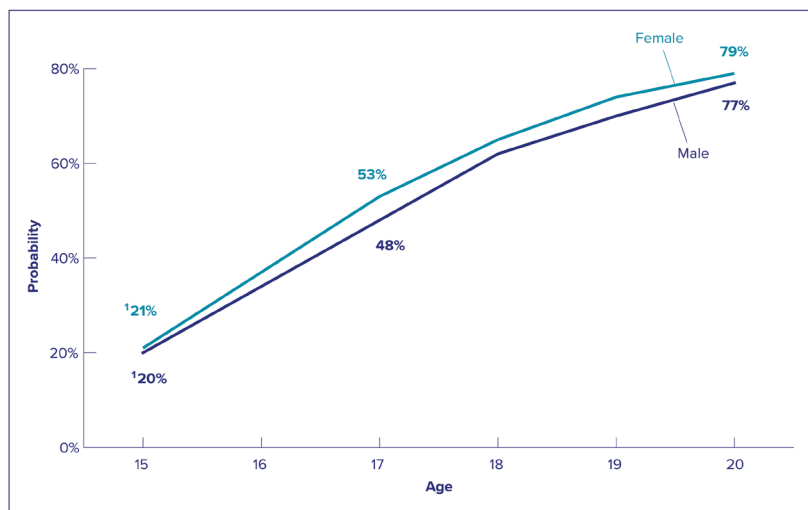
The Department of Health and Human Services recently released a national strategic plan to address the US STI epidemic.⁵ Some goals of this plan include preventing new STIs, decreasing STI-associated adverse outcomes, and decreasing STI-related disparities. Adolescents and young adults are a priority population in this plan, which includes strategies to help adolescents make informed and safe choices regarding sexual health.⁵ One specific goal of the plan is to increase annual chlamydia screening for sexually active young women 16 to 24 years of age from the current rate of 58.8% up to 76.5% by the year 2030.⁹ A strategy to accomplish this is the use of opt-out screening for chlamydia.

A review of barriers to STI screening

Despite guidelines that call for regular testing, the actual chlamydia screening rates leave much room for improvement. A national survey of pediatricians showed that only 46% offered routine STI screening for sexually active patients.¹⁰ Common provider screening barriers include lack of time, perceived lack of risk, cultural differences, discomfort with the STI topic, and adolescent concerns about confidentiality.¹¹ Another factor that contributes to difficulties with screening is patient discomfort with disclosing accurate information about sexual behavior. Inaccurate sexual activity reporting was highlighted in one study, which found that more than 10% of young adult patients who denied sexual activity in the past 12 months tested positive for an STI (6% of these patients reported a negative lifetime history of sexual activity).¹²

Communication between patient and provider is important. Multiple studies have shown that adolescents are less comfortable discussing sexual health with providers who they perceive as judgmental or when concerned about confidentiality. Laws are in place in all 50 states and the District of Columbia to protect minor

Probability of Having Had Sex by Age 15, 17, and 20 for Females and Males: United States, 2015–2017



¹Male and female teenagers had similar cumulative probabilities of having had sex at ages 15 through 20. NOTES: Estimates are based on females and males aged 15–24 at the time of the interview. SOURCE: NCHS, National Survey of Family Growth, 2015–2017.

Figure 2.

confidentiality and allow consent for their own STI testing and care.¹³ However, confidentiality issues can still be a concern for adolescents in regard to insurance companies' explanation of benefits (EOBs). Patient services or treatments may be disclosed on EOBs that could later be seen by parents/guardians.¹³ Fortunately, Medicaid and the federal Child Health Insurance Program do not send these EOB documents. In addition, many states offer Medicaid waivers or extended Medicaid eligibility for family planning services to individuals who would otherwise not be eligible to cover sexual health care costs confidentially.¹⁴

It is important to note that most adolescent patients and their parents agree that provider-adolescent discussions about STIs, HIV, and birth control are important. A national survey of parents and adolescents on sexual reproductive health discussions found that 76% of adolescents aged 15 to 17 years and 89% of parents regarded provider discussion about STIs and HIV as important.¹⁵ Despite adolescents and their parents wanting these conversations with health care providers, young patients are not having them as often as desired. The same study reported that only 14% of younger adolescents and 39% of older adolescents were asked if they were sexually active.¹⁵ The investigators also found that many patients were not alerted about patient-doctor confidentiality (76% for younger adolescents and 58% for older adolescents).¹⁵

Chlamydia screening guidelines endorse opt-out testing

The CDC updated the STI Treatment Guidelines in July 2021. As part of the guidelines, the CDC continues to recommend routine laboratory screening for common STIs in sexually active adolescents and young adults.¹³

The new guidelines now support the use of an “opt-out” chlamydia and gonorrhea screening strategy for all adolescent and young adult female patients as part of an office visit.¹³ Opt-out chlamydia testing can significantly increase screening rates, which leads to a decrease in overall chlamydia prevalence.¹⁶ One study was able to demonstrate a decrease in chlamydia prevalence of greater than 55% (2.7%-1.2%) by using an opt-out testing strategy.¹⁶ Additionally, a cost-effective analysis indicates that an opt-out testing strategy is cost saving (compared with risk-based screening) and can identify infections in patients not disclosing their sexual behavior.^{13,16}

Opt-out testing involves informing a patient that a test will be performed unless the patient declines. This form of testing is not a new concept in medicine. Most pediatricians already use the opt-out screening method when checking blood lead levels, hemoglobin, and cholesterol and lipids, so why should STI testing be any different? HIV screening in health care settings routinely uses the opt-out method, which has proved effective at increasing HIV screening and detection rates.¹⁷⁻¹⁹ Considering the stagnant progress with increasing chlamydia screening and the high rates of asymptomatic infections, opt-out screening is the best method to detect infection.

Navigating the Opt-Out Screening Conversation

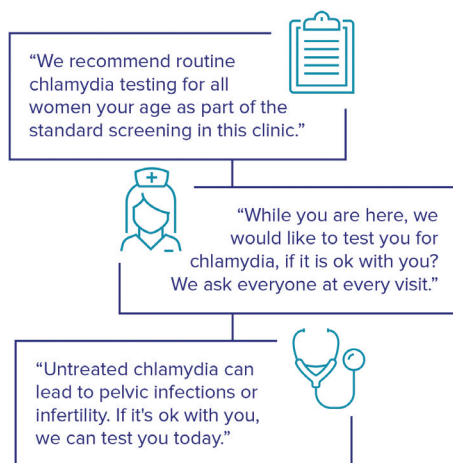


Figure 3.

What is opt-out chlamydia screening?

Opt-out chlamydia screening means notifying the patient that chlamydia testing will be performed unless the patient declines, regardless of reported sexual behavior. It is a more effective strategy for identifying infection compared with risk-based screening, which relies on the provider to obtain a sexual history and the adolescent to accurately report sexual behaviors for screening to be performed. It is important to emphasize that an opt-out screening strategy does not eliminate the patient-provider sexual health conversation. On the contrary, by including STI testing as

part of standard routine care, stigma and judgment can be avoided, which can make adolescents and providers more comfortable discussing sexual health. In fact, making STI testing routine for all patients has been shown to increase patient testing acceptance and screening rates.¹⁷ Opt-out chlamydia screening should target all adolescent and young adult female patients, without relying on their reported sexual activity.¹⁶

How to implement opt-out screening

There are 3 main discussion points in opt-out screening (**Figure 3**). First, normalize chlamydia testing. Inform the patient that chlamydia testing is part of routine clinical services. For example: “We recommend routine chlamydia testing for all women your age as part of the standard screening in this clinic.” Using normalizing language is often important, such as “We offer testing to everyone at every visit.” Second, allow patients to decline testing: “While you are here, we would like to test you, if it is OK with you” or “If you are OK with it, we can test you today.” And third, give patients information regarding chlamydia transmission and treatment. For example: “Although chlamydia usually does not cause any symptoms, it causes a lot of inflammation. Untreated infection can lead to pelvic infections or infertility. If it’s OK with you, we can test you today.” Making the patient feel comfortable and using normalizing language will make both the patient and staff more comfortable and reduce stigma.

CDC recommends extragenital gonorrhea and chlamydia screening

The updated STI treatment guidelines also recommend extragenital screening. Young men who have sex with males (YMSMs) should test for chlamydia and gonorrhea at least annually as well as screen based on sexual behavior and anatomic site of exposure (ie, urethral, pharyngeal, or rectal).¹³ The guidelines also suggest considering extragenital screening for young female patients through shared clinical decision-making between the patient and the provider. Studies have shown that genital-only testing may miss 20% to 25% and 18% to 26% of rectal chlamydia and gonorrhea infections, respectively, in women and 72% to 88% of rectal chlamydia and gonorrhea infections in MSM.^{9,20,21}

Conclusion

In the United States, almost half of all STIs occur in adolescents and young adults aged 15 to 24 years, yet screening rates among this population remain stagnant. Action is needed to improve our chlamydia screening strategy. Opt-out screening is an effective and cost-saving method for STI screening adolescents and young adults. It has been found to not only increase chlamydia screening rates but also decrease overall chlamydia prevalence rates.

Opt-out screening is simple and already routinely performed by providers to screen for other medical conditions. It can minimize screening barriers by normalizing difficult conversations and reducing the stigma many young patients associate with STI testing. With more effective screening strategies in place, women's health providers will be able identify more STIs and prevent more life-altering adverse outcomes, leading to better overall patient care.

For more information: Additional resources are available from both the National Chlamydia Coalition (chlamydiacoalition.org/for-healthcare-providers/) and the American Academy of Pediatrics (aap.org/ASH), including printable materials, continuing medical education opportunities, and information on medical care for LGBTQ adolescents, confidential adolescent care and billing, and discussing sex with younger patients.

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