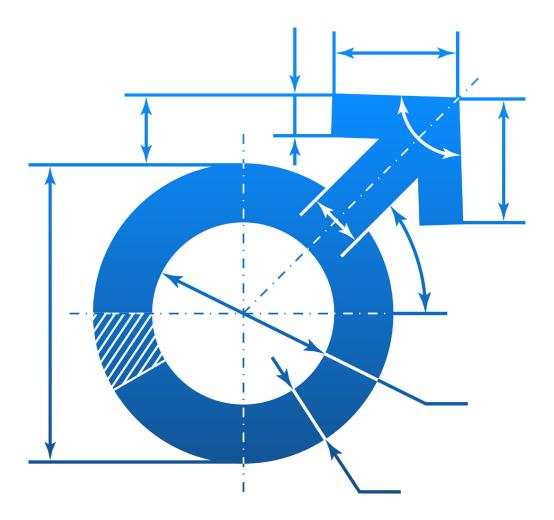
The State of Health of Adolescent and Young Adult Males in the United States

Sexual Health

The Partnership for Male Youth



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Executive Summary

This review examines issues surrounding sexual health in adolescent and young adult (AYA) males and highlights gaps in care and the need for more education about sexually transmitted infections (STIs) and HIV in this population. Studies show that about half of all new STI diagnoses are in adolescents and young adults^{-1,2} In adolescent males, according to the Centers for Disease Control and Prevention (CDC), rates of genital gonorrhea, genital chlamydia, and primary and secondary syphilis have increased in recent years.³

A major contributor to these trends is the fact that use of sexual and reproductive health care services by young males is low. The reasons are multiple, principal among them being how poorly defined the components of young men's sexual and reproductive health care are and how little attention they historically have received. Data also indicate that primary care providers are much less likely to take sexual health histories from male than female patients or to counsel them on the use of condoms. Also, STIs in males are more likely to be asymptomatic, which leads to delayed diagnosis.

The principal purpose of this review is to educate parents about the dangers to health and wellbeing that young adult males may face if they lack support and care for or education about STIs and HIV. Our goal also is to provide resources that parents can use to take action to address those gaps. A subsequent report will focus on gender identity, sexual orientation, and sex education.

Sexual Health

Introduction and Overview

Over 80% of all pediatric visits are by children under 13, and by the time most American adolescents reach their teens, they have stopped seeing a pediatrician.⁴ Studies show that fewer than half of AYA males aged 10 to 25 visit a primary care physician.⁵ Males are less likely than their female counterparts to seek such care, perhaps because for them—unlike females, who typically transition to a gynecologist—there is no continuity of care as they grow into adulthood.⁶⁻⁸ On the whole, with the exception of episodic school exams, sports physicals, and visits to the Emergency Room, once they leave the pediatrician's office, AYA males are left outside of our health care system, a pattern that may extend for years, to their detriment.

According to the CDC, AYA males are at higher risk than their female contemporaries for certain STIs, including HIV.⁹ They are also more likely than females to have multiple sexual partners. Data over a 10-year period from 2009 to 2019 show that trends in sexual behavior and high-risk substance abuse among youth—both male and female—are improving. Yet many of these young people report having multiple partners, being forced to have sex, and not using condoms. Sexual minority youth, in particular, face an increased risk of sexual assault, and in one survey, nearly 3 out of 4 transgender people reported that they had done sex work.^{10,11}

As noted by the CDC, "connectedness to family, peers, and important adults in schools and community organizations is key to protecting adolescent health." Families, in particular, are a key source of support for AYA males. They need to stay engaged with these youth and the clinicians providing care for them to ensure that AYA males have the tools and skills necessary to protect themselves from STIs and HIV and grow into healthy adulthood.

Adolescence as a key time period for males

Adolescence is a life stage punctuated by tremendous physical, psychological, and social changes in AYA males across all socio-racial strata. A substantial number of these young men report engaging in highrisk sexual behaviors. For example, of male high school students represented in the CDC's 2009-2019 Youth Risk Behavior Data Summary & Trends Report, nearly 40% reported being sexually active and 10% had sex with four or more partners during their life.¹² Some 40% said they had not used a condom the last time they had sex.¹² The good news, says the CDC, is that during the decade studied, fewer students overall had engaged in sexual activity. One population of youth that is underserved are LGBTQ teenagers and young adults. Many of them struggle with acceptance of their sexuality at the same time they face other challenges associated with adolescence.¹³ According to the CDC, All LGBTQ+ youth are more likely to engage in high-risk health behaviors and to experience negative health outcomes.¹² AYA men who have sex with men (MSM), for example, are disproportionately impacted by STIs and transgender youth are at higher risk for sexual assault.¹² The potential for serious negative outcomes in these young people underscores the importance of ensuring that all AYA males receive culturally informed care, no matter their sexual orientation or gender identity.

Gaps in healthcare for AYA males

One of the challenges that AYA males face in obtaining healthcare, including for prevention and treatment of STIs, is that pediatricians rarely bring up high-risk sexual behaviors with them during routine office visits. Studies shows that these clinicians also are very reluctant to discuss same-sex sexual behaviors, some of which are associated with increased risk of STIs.¹³ Among AYA males, receipt of care for sexual and reproductive health—including for STIs—also may vary depending clinicians' perception of their risk. Researchers from Johns Hopkins University and the CDC who surveyed AYA males in 2018 found that they were more likely to report receiving STI/HIV-focused care if they had sex with males than if they had sex with females.¹⁴ The authors speculated that heterosexual AYA males may be less proactive about seeking care than AYA MSM or that clinicians are tailoring care to the latter patients based on assessment of their past sexual histories. Factors found to be associated with a greater likelihood that an AYA male had received sexual and reproductive healthcare included having more time alone with a provider without a parent present and being seen at an STD clinic rather than in a primary care setting.¹⁴

Prevalence and impact of STIs and HIV in AYA males

Underscreening of youth for STIs is a significant problem, according to a 2020 clinical report from the American Academy of Pediatrics (AAP) specifically focused on male adolescent health care.¹³ Given that the CDC data indicate that some youth have multiple sexual partners and they may be reluctant to voluntarily disclose information about their sexuality, perhaps it should be no surprise that individuals aged 15 to 24 account for so many new STI diagnoses every year. The need clearly is great for risk-based screening for STIs in AYA males, counseling about preventive measures, and treatment when necessary to reduce incidence in this population and transmission of diseases that could have permanent health consequences.

RRisk Factors for and Identification of STIs and HIV in Male Adolescents and Young Adult Males

Adolescence is a life stage punctuated by tremendous physical, psychological, and social changes in AYA males across all socio-racial strata. By their own admission, a substantial number of these young men engage in high-risk sexual behaviors. For example, of male high school students represented in the CDC's 2009-2019 Youth Risk Behavior Data Summary & Trends Report, nearly 40% reported being sexually active and 10% had sex with four or more partners during their life.¹² Some 40% said they had not used a condom the last time they had sex.¹² Studies also show that, unfortunately, it's not uncommon for adolescents of either gender to acquire STIs repeatedly, many soon after their first such infection. Thus, recognizing the specific factors that place AYA males at risk for STIs and HIV is crucial so they can be encouraged to take preventive measures.

Behavioral factors

A number of behavioral factors are known to increase an adolescent's risk of acquiring an STI. Among them are:¹⁵

- Using alcohol or drugs;
- Having intercourse for the first time;
- Engaging in sexual activity during early and middle adolescence;
- Having more than one sexual partner, a partner who engages in sexual with multiple people, or a new partner; and
- Not using condoms consistently.

Biologic factors

In terms of transmission of STIs to a partner, AYA females are more susceptible than males as a result of their biology. Some studies suggest that if their cervixes are immature, that may leave them more vulnerable to contracting an STI, a fact about which, perhaps, AYA males should be educated.

Other risk factors

For AYA males who are transgender, engaging in sex with a person who has a penis represents a risk factor for STIs, something about which their parents and those who care for them should be aware. The practice of rectal douching or use of enemas to prepare for receptive anal sex also is a risk factor.

Regardless of their sexual orientation or whether they are transgender, minoritized youth, as a group, are at increased risk of STIs. One study showed that sexual minoritized youth were twice as likely to practice behaviors such as having sex while intoxicated as their peers who were heterosexual.¹⁶

Screening for STIs and HIV

According to the American Academy of Pediatrics (AAP), all AYA males should be assessed routinely for risk of STIs, and if necessary, tested. An AYA male who tests positive for an STI should receive appropriate treatment and his partner should receive preventive therapy.¹³

Despite these recommendations, however, AYA individuals have the highest prevalence of STIs and a national survey indicates that overall, they are not likely to receive annual screening for these diseases. Young males are even less likely to receive this critical health care service than young females. One review found that in 2018, only 6.1% of AYA males had been screened for STIs in the last 12 months, compared with 16.6% of AYA females.¹⁷

Screening for STIs involves an examination of the genitals, mouth, and anus/rectum for signs of exposure. Some STIs, such as gonorrhea, may result in a urethral discharge, whereas others may produce visible lesions on the genitalia or no symptoms. Any AYA male who is tested for an STI typically also can expect to be tested for and counseled about HIV.

STIs of Particular Concern in AYA Males

Having an understanding of each STI, its potential impact, and how it is treated, is key to supporting AYA males in their efforts to avoid contracting one of these diseases and potentially infecting others with it. In addition, to truly understand the unique burden AYA males face when it comes to healthcare—especially in gaining access to sexual and reproductive health services—it's important to understand how STIs present in them versus females and which ones are more likely to produce no symptoms.

Chlamydia trachomatis

Estimates indicate that in 2018, there were 2.4 million chlamydia trachomatis infections among those aged 15 to 39. AYA males were responsible for an estimated 56.7% of these cases. In males in particular, according to the CDC, the number of reported cases of chlamydia increased dramatically from 2015 to 2019 (CDC, National Overview, 2021). From 40% to 96% of cases of chlamydia are asymptomatic.¹⁸ Watery discharge is the symptom most often noted, and sometimes it is so limited that there is only staining of underwear.¹⁹

Gonorrhea

In 2018, AYA males aged 15 to 24, were responsible for an estimated 40% of infections with gonorrhea in the male population. Since 2013, according to the CDC, the incidence of gonorrhea has consistently been higher in males than in females.³

While MSM are disproportionately impacted by all STIs, this population is heavily burdened by gonorrhea. An analysis completed by the STD Surveillance Network on a sample of gonorrhea cases revealed that incidence of gonorrhea was 42 times higher in MSM than in men who have sex with women only (MSW).³ However, progress is being made as case rates among MSM have decreased in recent years.³ Of particular concern with gonorrhea is the increasing number of such infections that are antibiotic resistant, and there are more of these cases in MSM than MSW.²⁰

Pain while urinating and an increased need to urinate (urethritis) are typical symptoms of gonorrhea, but the infection also can be asymptomatic.²¹

Syphilis

According to recent data from the CDC, nearly 130,000 cases of syphilis were reported in 2019, nearly 40,000 of them the highly infectious primary and secondary (P&S) stage of the disease (CDC, National Overview, 2021). Overall, rates of P&S stage syphilis are higher in men than women, primarily because of the heavy burden of the disease in MSM. In 2019, 65.7% of such diseases were in MSM (CDC, National Overview, 2021). That is why screening for syphilis is recommended in MSM.²²

The classic sign of syphilis is a painless ulcer on the genitals; in later stages, a rash may appear on the trunk, extremities, palms and soles of the feet.²³

Herpes simplex virus

In 2018, there were an estimated 18.6 million prevalent infections of herpes simplex virus-2 (HSV-2) among those aged 15 to 49. Of these infections, nearly 400,000 were in AYA males.²⁴ In males, the characteristic symptoms of HSV-2 are blisters on the penis, scrotum, anus, butt, or thighs, which can occur during periodic "outbreaks." Blisters in the mouth and trouble urinating also can occur.

Human papillomavirus

Human papillomavirus (HPV) is the most common viral infection of the reproductive tract in the world.²⁵ Genital warts are the most common manifestation and there are various strains of HPV. Some, such as HPV-16 and HPV-18, are associated with a high risk of development of cancer. In men, if left untreated, these forms of the virus can lead cancers of the penis, anus, and the oropharynx. The risk of such cancers is particularly increased among MSM. Fortunately, a vaccine against four strains of HPV became available in the United States in 2006; since then, a vaccine that covers an additional five strains has been approved by the US Food and Drug Administration. However, a CDC report indicated that in 2018, only 9% of males aged 18 to 26 had received the recommended number of doses of the HPV vaccine, compared with 35.3% of females in the same age group.26 There is no approved test that can be recommended for screening AYA males to determine their HPV status.²⁷

Clearly, there is a great need to increase awareness about HPV and acceptance of the vaccine among AYA males, to protect their health and the health of their sexual partners. The vaccine is given in two separate injections, spaced 6 to 12 months apart. The CDC recommends that all adolescents receive the first dose of the HPV vaccine before they turn 15. With greater uptake of HPV vaccination, there will likely be a decline in HPV cases.

HIV

In 2018, an estimated 984,000 individuals older than age 13 were living with HIV. Of them, nearly 40,000 were AYA males. According to the CDC, most new HIV diagnoses in young males are associated with male-to-male sexual contact.²⁸ The AAP recommends routine HIV testing for sexually active adolescents and for anyone who is being treated for another STI.²⁹ Among risk factors for HIV acquisition are having anal intercourse, having multiple sexual partners, and not using condoms. Besides following safe-sex practices, two drugs for preexposure prophylaxis also are available and approved for use in adolescents to reduce the likelihood of HIV transmission.^{30,31}

Trichomoniasis

The best ways for AYA males to avoid contracting trichomoniasis are to use condoms and not engage in sex with multiple partners. Most cases of trichomoniasis in men are asymptomatic and self-limiting, but the infection can persist and result in a urethral discharge and painful urination. It also may increase an AYA male's risk of other conditions, such as prostatitis and infertility.³²

Key Points about STIs and HIV for Parents of AYA Males

- STI rates in AYA males in the United States are increasing.
- Fewer than 10% of AYA males are screened for STIs every year.
- Many AYA males engage in an alarming number of sexual behaviors that place them at high risk of STIs and HIV.
- AYA males are less likely to have symptoms from an STI than females and less likely to seek care if they think they have such a condition.

Signs that an AYA male is at increased risk of STIs and HIV

- Not using condoms, or using them inconsistently
- Having multiple sex partners
- Having sex with both males and females
- Engaging in anal sex
- Using illegal drugs or alcohol

Ways to reduce risk of STIs and HIV

- Encourage AYA males to be abstinent. It's the only 100% effective way to avoid contracting an STI. That means refraining from vaginal, anal, and oral sex.³³
- Recognize that abstinence is not realistic for most AYA males, and teach them about other prevention methods.
- Coach AYA males about how to put on condoms correctly and encourage them to use a latex one during every sexual encounter. Instructions for correct use of condoms are available on the CDC website.³⁴
- Educate AYA males about the importance of limiting their sexual partners and having an open and honest discussion about STIs and HIV with a partner before they have sex.
- Support HPV vaccination for AYA males and initiate the first dose before they reach age 15, as recommended by the CDC.³⁵

Resources for further information and support

Centers for Disease Control and Prevention: <u>www.cdc.gov/healthyyouth/healthservices</u>

Society for Adolescent Health and Medicine: www.adolescenthealth.org

FamilyDoctor.org: www.familydoctor.org

HealthyChildren.org: www.healthychildren.org

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The **Partnership for Male Youth** (PMY), a non-profit organization founded in 2013, is the only US national organization whose sole focus is on the health and wellbeing of adolescent and young adult (AYA) males, or those between the ages of 10 and 25. Its mission is "to work with and on behalf of AYA males to optimize their health and ensure that they thrive," and its activities range from research to advocacy in the realm of AYA male health. Its board is composed of nationally known leaders in the field of adolescent health and medicine.



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