

Screen for *Chlamydia*? New advice for sexually active women

Principal Source: U.S. Preventive Services Task Force. Screening for chlamydial infection: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2007;147:128-34.

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Chlamydia trachomatis is the most common bacterial sexually transmitted infection (STI), with nearly 3 million new cases diagnosed annually in the United States.¹ In July 2007 the U.S. Preventive Services Task Force (USPSTF) updated its recommendation on *Chlamydia* screening of sexually active female adolescents and adults (*Table 1*).² Routine screening is not recommended for men because there is not enough data to determine the benefits and risks of screening.

Although the USPSTF recommendation targets the general population, it is important to assess each patient's sexual behavior. Women exhibiting impulsivity caused by bipolar mania, substance abuse, or personality disorders or who exchange sex for food, shelter, substances, or money are at high risk of infection (*Table 2, page 56*).^{1,2}

The new guideline introduces a screening cutoff at age 25 because women age <25 years are 5 times more likely than

women age >30 to have chlamydial infection.² In women age ≥25, yearly screening is recommended only for those at high risk as indicated by:

- previous chlamydial infection or other STIs
- new or multiple sexual partners
- inconsistent condom use
- being a sex worker (*Table 2, page 56*).²

Chlamydia screening reduces the incidence of pelvic inflammatory disease (PID) in nonpregnant adolescent and adult women, which can cause infertility, ectopic pregnancy, and chronic pelvic pain.² If untreated, the risk of PID approaches 40%.¹ In pregnant women, *Chlamydia* treatment significantly improves birth outcomes. Pregnant women should be screened during the first prenatal visit and in the third trimester if at continued risk.

Psychological implications of screening.

Address possible themes of guilt and shame with patients to clarify and alleviate the burden they may feel about STI screening and

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Table 1

U.S. Preventive Services Task Force screening recommendations for chlamydial infection

	Nonpregnant women*	Pregnant women†
Age <25	Screen	Screen
Age ≥25	Screen those at increased risk	Screen those at increased risk
Interval‡	At least annually	First prenatal visit, third trimester if at continued risk

* Grade A recommendation: high quality evidence

† Grade B recommendation: moderate quality evidence

‡ The optimal screening interval remains to be determined

Source: Reference 2

Table 2

Risks for chlamydial infection

• Sexually active women age <25 years
• History of chlamydial or other sexually transmitted infection
• New or multiple sexual partners
• Inconsistent condom use
• Exchange of sex for money, drugs, or shelter

Other demographic groups at high risk

• African-American and Hispanic women
• Incarcerated men and women
• Military recruits

Source: References 1,2

Clinical Point

Address possible themes of guilt and shame with patients to alleviate the burden they may feel about STI screening and treatment

treatment. Compared with men, women experience more stigmatization, blame, and denial about the source of infection. Women also report being more concerned about potential threats to their relationships.¹

Screening test. The Centers for Disease Control and Prevention (CDC) recommends screening with nucleic acid amplification tests (NAATs), which have high specificity (>95%) and sensitivity (80% to 93%) for chlamydial infections. Urine specimens are comparable to cervical and urethral specimens and avert the cost and patient discomfort associated with speculum exams.³ NAATs do not exclude other infections, such as trichomonas, however, and are not sufficient in patients with active urinary or vaginal symptoms.

Clinical presentation and treatment. Most persons with *Chlamydia* are asymptomatic and may infect new sexual partners. In women, chlamydial infection may cause cervicitis, urethritis, PID, chronic pelvic pain, ectopic pregnancy, miscarriage, preterm labor, and infertility. In men, chlamydial infection may cause urethritis, urethral strictures, and epididymis. In both genders, chlamydial infection increases the risk of acquiring other STIs, such as human immunodeficiency virus.⁴

The CDC recommends treating chlamydial infection with azithromycin, 1 g/d PO for pregnant and nonpregnant women. Alternatives include amoxicillin, 500 mg tid

for 7 days for pregnant women, or doxycycline, 100 mg bid for 7 days for nonpregnant women. Sexual partners of an infected individual should be treated presumptively or tested and then treated. Because *Chlamydia* NAAT is highly sensitive, patients with a negative test do not need treatment. Patients who test positive for gonorrhea and receive a negative non-NAAT (antigen-based tests that are less sensitive than NAATs) for *Chlamydia* should be treated for both.⁵

References

1. Meyers DS, Halvorson H, Luckhaupt S. Screening for chlamydial infection: an evidence update for the U.S. Preventive Services Task Force. *Ann Intern Med* 2007;147(2):135-42.
2. U.S. Preventive Services Task Force. Screening for chlamydial infection: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2007;147(2):128-34.
3. Cook RJ, Hutchison SL, Østergaard L, et al. Systematic review: noninvasive testing for *Chlamydia trachomatis* and *Neisseria gonorrhoea*. *Ann Intern Med* 2005;142(11):914-25.
4. Fleming DT, Wasserheit JN. From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect* 1999;75(1):3-17.
5. Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines 2006: dual therapy for gonococcal and chlamydial infections. Available at: <http://www.cdc.gov/std/treatment/2006/urethritis-and-cervicitis.htm#dualtherapy>. Accessed June 16, 2008.

Related Resources

- Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines. www.cdc.gov/std/treatment.
- U.S. Department of Health and Human Services. Agency for Healthcare Research and Quality. Preventive Services. www.preventiveservices.ahrq.gov.

Drug Brand Names

- Amoxicillin • Amoxil, others
- Azithromycin • Zithromax
- Doxycycline • Vibramycin

Disclosure

Dr. Xiong reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

Practice Points

- Ask female psychiatric patients about high-risk sexual behaviors, and recommend *Chlamydia* screening when appropriate.
- Recommend *Chlamydia* screening for all sexually active women age <25 years.
- *Chlamydia* screening decreases incidence of pelvic inflammatory disease, improves pregnancy outcomes, and lowers risk of other sexually transmitted infections.
- Urine nucleic acid amplification tests minimize patient discomfort and remove logistical barriers of speculum or urethra specimens.
- Evidence is insufficient to recommend screening men.