

What are appropriate screening tests for adolescents?

EVIDENCE-BASED ANSWER

Screen all women of childbearing age, including adolescents, for rubella susceptibility (strength of recommendation [SOR]: **B**). Screen all sexually active adolescent females for chlamydia (SOR: **A**), gonorrhea

(SOR: **B**), and cervical cancer (SOR: **A**). High-risk, sexually active adolescents should be screened for HIV and syphilis (SOR: **A**). Screen all adolescents at risk for tuberculosis (TB) infection (SOR: **A**).

CLINICAL COMMENTARY

Adolescent visits also provide opportunity to educate patients on nonmedical aspects of care

Adolescent visits provide an opportunity to apply the biopsychosocial skills that enhance the care we provide as family physicians. In addition to screening for the diseases noted above, I take the opportunity to screen and educate these patients on “non-medical” aspects of care by using the HEADSSS assessment method. These

open-ended questions regarding Home environment, Educational status and goals, extracurricular Activities, Drug use, Sexual activity and relationships, Suicide/depression risk, and Safety review allow me to get to know my patient better, and hopefully set the stage for open discussion of these topics in the future.

Andrea Darby-Stewart, MD

Department of Family Medicine, Mayo Clinic Arizona

Evidence summary

The **TABLE** summarizes the recommendations of the US Preventive Services Task Force (USPSTF) with regard to adolescent screening.¹ We identified no additional evidence-based recommendations for screening tests for adolescents.

As shown in the **TABLE**, rubella susceptibility screening is recommended for all adolescent females (SOR: **B**). Sexually active adolescent females should routinely be screened for chlamydia, gonorrhea, and cervical cancer. Adolescents at risk of contracting TB, HIV, or syphilis should be screened for those diseases.

Evidence is insufficient to recommend for or against performing the following tests for adolescents: hearing loss screening, anemia screening, clinical or self breast examination, blood pressure screening, screening for overweight, screening for alcohol misuse, screening for depression, and suicide risk screening. For males, evidence is insufficient to recommend for or against: rubella screening, routine rubella vaccination, and chlamydia or gonorrhea screening for sexually active males.

Do not perform the following tests on adolescents because evidence is good that the harms outweigh the benefits: testicular

Frances E. Biagioli, MD,
Jennifer E. DeVoe, MD,
DPhil, Andrew Hamilton,
MS, MLS
Oregon Health and Science
University, Portland

TABLE

USPSTF evidence-supported screening tests for adolescents

TEST (SOR)	POPULATION	USPSTF COMMENTS	AAFP	AAP AND AMA
Routine screening				
Rubella susceptibility (B) (with history of vaccination or serology)	All females of childbearing age	History of the disease is not adequate. For nonpregnant adolescents, an acceptable alternative is to offer vaccination against rubella without screening	Strongly recommends	Recommends
Chlamydia (A)	Sexually active females*	Insufficient evidence for or against screening males	Strongly recommends	Recommends
Gonorrhea (A)	Sexually active females*	Insufficient evidence for or against screening males	Recommends	Recommends
Cervical cancer (A) (with pap smear)	Sexually active females	Indirect evidence suggests screening should begin within 3 years of onset of sexual activity	Recommends	Recommends, and add HPV screening
High-risk screening				
HIV (A)	High risk†		Strongly recommends	Recommends
Syphilis (A)	High risk‡		Strongly recommends	Recommends
Tuberculosis (A) (with PPD test)	High-risk**		Strongly recommends	Recommends

Sources: USPSTF *Guide to Clinical Preventive Services*¹; AAFP Summary of Recommendations for Clinical Preventive Services²; AAP Recommendations for Preventive Pediatric Health Care³; AMA Guidelines for Adolescent Preventive Services (GAPS)⁴.

SOR, strength of recommendation; USPSTF, US Preventive Services task Force; AAFP, American Academy of Family Physicians; AAP, American Academy of pediatricians; AM, American Medical Association

* The interval for rescreening should take into account the frequency of changes in sexual partners.

† A list of HIV risks is available at: www.ahrq.gov/clinic/uspstf05/hiv/hivrs.htm#clinical.

‡ A list of syphilis risks is available at: www.ahrq.gov/clinic/3rduspstf/syphilis/syphilrs.htm#clinical.

** A list of tuberculosis risks is available at: www.ahrq.gov/clinic/2ndcps/tubercls.pdf (pp 282–283).

cancer screening using clinical or self-testicular examination, hepatitis B screening, screening for herpes, thyroid cancer screening, screening for scoliosis, and bacteriuria screening in asymptomatic non-pregnant adolescents. Screening for lipid disorders is recommended only for those over age 20 years who have significant risks for coronary artery disease.

Recommendations from others

Several professional organizations provide recommendations for adolescent preventive services and screening tests. The American Academy of Family Physicians concurs with the USPSTF recommenda-

tions.² The American Academy of Pediatrics (AAP)³ and the American Medical Association⁴ make several recommendations beyond those put forth by the USPSTF, including screening all adolescents for hypertension, risk for hyperlipidemia and adult coronary artery disease, eating disorders/obesity, and tobacco use. They also recommend extending chlamydia and gonorrhea screening to sexually active males.

The AAP also recommends conducting vision and hearing screening, developmental and behavioral assessment, hematocrit or hemoglobin for menstruating adolescents, urine leukocyte esterase for sexually

CONTINUED ON PAGE 913

CONTINUED FROM PAGE 908

active adolescents, and pelvic exams for sexually active females.

REFERENCES

1. United States Preventive Services Task Force (USPSTF). *Guide to Clinical Preventive Services*. Available at www.ahrq.gov/clinic/cps3dix.htm. Accessed on September 6, 2006.
2. The American Academy of Family Practice (AAFP). Summary of Recommendations for Clinical Preventive Services, August 2005. Leawood, Kansas: AAFP; 2005. Available at www.aafp.org/PreBuilt/RCPS_August2005.pdf. Accessed on September 6, 2006.
3. American Academy of Pediatrics, Committee on Practice and Ambulatory Medicine. Recommendations for Preventive Pediatric Health Care, March 2000. *Pediatrics* 2000; 105:645–646. Available at: aappolicy.aap-publications.org/cgi/content/full/pediatrics;105/3/645. Accessed on September 6, 2006.
4. American Medical Association, Department of Adolescent Health. *Guidelines for Adolescent Preventive Services (GAPS)*. Recommendations Monograph 1997. Chicago, Ill. Available at: www.ama-assn.org/ama/upload/mm/39/gapsmono.pdf. Accessed on September 6, 2006.