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.

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**Evidence summary**

The **TABLE** summarizes the recommendations of the US Preventive Services Task Force (USPSTF) with regard to adolescent screening. 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...
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 recommendations. The American Academy of Pediatrics (AAP) and the American Medical Association 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 active males.

### TABLE

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

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

* 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/hivrs.htm#clinical.
‡ A list of syphilis risks is available at: www.ahrq.gov/clinic/syphilrs.htm#clinical.
active adolescents, and pelvic exams for sexually active females.

REFERENCES


