

## Section 4 Adolescent Preventive Health

### D. LABORATORY TESTS

#### Health Risk Assessments

Age-appropriate health risk assessments are a required element of the laboratory component for the adolescent population and include assessment for risk of tuberculosis, elevated cholesterol and heart disease, STIs and HIV. When risk factors are identified, document counseling, and referral for testing in the medical record. If the test results are abnormal, document appropriate follow-up: counseling, further testing and/or referral to a specialist.

#### *Tuberculosis Risk Assessment*

The Maryland Healthy Kids Program requires an annual risk assessment by questionnaire instead of routine skin testing. The *Preventive Screen Questionnaire* (Refer to Section 7, Appendix II for the *English* and *Spanish* versions) may be used to assess risk for TB on every adolescent preventive care visit. Routine skin testing **is not required** and should be conducted only when a risk of exposure is determined by questionnaire. For more information refer to *Section 3, Tuberculosis Risk Assessment*).

#### *Heart Disease/Cholesterol Risk Assessment*

With the increasing concern of overweight and obesity in adolescents, assessment by questionnaire for potential heart disease is warranted. The Healthy Kids Program requires assessment for risk of heart disease and hypercholesterolemia at every adolescent preventive care visit. The *Preventive Screen Questionnaire* (Refer to Section 7, Appendix II for the *English* and *Spanish* versions) is available to assist in performing this risk assessment. Document results of the screen, and if positive, obtain a baseline blood cholesterol level. Appropriate follow-up of elevated blood cholesterol levels includes further testing, counseling and/or referral for specialty services when indicated (Refer to *Section 3, Cholesterol/Heart Disease Risk Assessment*).

Effective January 1, 2016, the DHMH added a new requirement of dyslipidemia lab tests. One test is required between the ages of 9-11, and a second one between the ages of 18-21. For more information, refer to the AAP-endorsed 2011 *Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents* at [http://www.nhlbi.nih.gov/files/docs/peds\\_guidelines\\_sum.pdf](http://www.nhlbi.nih.gov/files/docs/peds_guidelines_sum.pdf)

#### *STI/HIV Risk Assessment*

The Maryland Healthy Kids Program currently requires that primary care providers (PCPs) conduct risk assessments for Sexually Transmitted Infections and Human Immunodeficiency Virus (STI/HIV) at each preventive health care visit beginning at 12

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years of age, or younger if the adolescent is sexually active. The *Preventive Screen Questionnaire* (Refer to Section 7, Appendix II for the *English* and *Spanish* versions) is available to assist with this assessment. Document results of the assessment in the medical record. PCPs may refer their female patients to a gynecologist but are still required to obtain a STI/HIV risk assessment.

The U.S. Preventive Services Task Force recommends that PCPs counsel adolescents regarding measures to prevent STIs based on the risk factors, needs, and intellectual abilities of each patient. PCPs should also communicate effectively with patients regarding healthy sexual behaviors and risks of STIs during the annual preventive health care visit and any other clinical encounter.<sup>1</sup>

Young people (ages 15-24) are at highest risk for STIs, accounting for half (50 percent) of all new STIs, although they represent just 25 percent of the sexually experienced population. While the consequences of untreated STIs are often worse for young women (infertility, ectopic pregnancy and chronic pelvic pain), SDC surveillance data reveals that the annual number of new infections is roughly equal among young women and young men (49 percent of incident STIs occurs among young men, vs. 51 percent among young women).<sup>2</sup> Among women, adolescent females 15 to 24 years of age are at highest risk for most bacterial and viral STIs. For example, the prevalence of chlamydia in women aged 14 to 19 years is nearly 5%, the highest proportion of any age group.<sup>3</sup> Other adolescents at high risk for STIs include male homosexuals and bisexuals, adolescents with multiple sexual partners in the last three months, and adolescents with a history of drug and/or alcohol abuse. All sexually active adolescents should be counseled and tested for all STIs/HIV or referred for testing as a routine part of preventive care.<sup>4</sup>

Counseling of adolescents regarding HIV prevention includes an assessment of sexual and drug-using behaviors associated with high risk of HIV infection. Both ulcerative

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<sup>1</sup> See U.S Preventive Services Task Force. (2014). *Sexually Transmitted Infections: Behavioral Counseling*. Retrieved on 11/24/14, from <http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/sexually-transmitted-infections-behavioral-counseling1>.

<sup>2</sup> See Centers for Disease Control (CDC) (2013). *Fact Sheet: Incidence, Prevalence and Cost of Sexually Transmitted Infections in the United States*. Retrieved on 11/24/14, from <http://www.cdc.gov/std/stats/sti-estimates-fact-sheet-feb-2013.pdf>.

<sup>3</sup> See Knight, J., Roberts, T., Gabrielli, J., & Hook, S.(.). *Performing Preventive Services: A Bright Future Handbook*. Retrieved on 05/31/2015, from <https://brightfutures.aap.org/Bright%20Futures%20Documents/Screening.pdf#search=depression>

<sup>4</sup> See U.S Preventive Services Task Force. (2014). *Sexually Transmitted Infections: Behavioral Counseling*. Retrieved on 11/24/14, from <http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/sexually-transmitted-infections-behavioral-counseling1>.

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STIs such as chancroid, syphilis, and genital herpes, and inflammatory STIs such as gonorrhea, chlamydia infection and trichomoniasis, increase the risk of HIV infection. Early detection and treatment of STIs can have a major impact on sexual transmission of HIV.<sup>5</sup>

### STI and HIV Risk Reduction Messages for Sexually Active Adolescents<sup>6</sup>

- Abstinence
- Mutually monogamous relationship with an uninfected partner
  - Caution: adolescents may consider a short-term monogamous relationship to be safe – regardless of the number of relationships encountered within the year
  - Explain that serial monogamy can be very dangerous
- Reduce the number of sexual partners
  - Adolescents can't tell who has the HIV virus
  - A negative HIV screen may not be an accurate reflection of the HIV status
- Consistent use of protective barriers during sex
  - Latex condoms with water-based lubricant (oil-containing lubricants weaken condoms)
  - Use of lubricants/spermicides containing nonoxynol-9

### STI and HIV Risk Reduction Messages for Drug-Using Adolescents

- Abstinence
- Enter a drug treatment program
- Avoid sharing any drug-injecting paraphernalia
  - Disinfect needles and syringes using household bleach:
  - Draw bleach into syringe and expel (twice)
  - Draw clean water into syringe and expel (twice)
- Beware of injection “works” sold as clean on the streets
- Use protective barriers (latex condoms) during sex

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<sup>5</sup> *Ibid.*

<sup>6</sup> See CDC. *Sexually Transmitted Diseases: Prevention* at <http://www.cdc.gov/std/prevention/default.htm>

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### *HIV Testing*

CDC currently recommends routine HIV testing for all adults and adolescents 13-64 years of age in all healthcare settings. In addition, youth at high risk, which include injection-drug users and their sex partners, persons who exchange sex for money or drugs, sex partners of HIV-infected persons, and MSM or heterosexual persons who themselves or whose sex partners have had more than one sex partner since their most recent HIV test should be tested annually. The testing is performed without a separate written informed consent or pretest counseling.<sup>7</sup>

The objectives of the recommendations are to:

- Increase HIV testing of patients, including pregnant women, in health-care settings
- Foster earlier detection of HIV infection
- Identify and counsel persons with unrecognized HIV infection and link them to clinical and prevention services
- Reduce sexual and perinatal transmission of HIV in the US

### Opt-Out HIV Testing Recommendations<sup>8</sup>

Opt-out testing means performing an HIV test after notifying the patient

- The test will be performed, and
- The patient may elect to decline or defer testing

No one should ever be tested for HIV without his/her knowledge. HIV testing is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines.

There are many reasons a patient may decline an HIV test, including lack of perceived risk, fear of the disease, concerns about partner violence, potential stigma, concerns about the cost of treatment and/or discrimination. Providers should discuss and address reasons for declining an HIV test. If the patient still opts out, then he/she can be encouraged to be tested at a subsequent visit. The patient's decision should be respected and documented in his/her medical record.

Practice settings that have opt-out testing policies for pregnant women and for recipients of STI services have higher HIV testing rates than those that use opt-in policies (where

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<sup>7</sup> CDC (2006). *Revised Recommendations for HIV Testing of Adults, Adolescents and Pregnant Women in Health-Care Settings*. Retrieved on 11/25/14, from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>.

<sup>8</sup> *Ibid.*

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the patient is given the opportunity to choose the HIV test) or those that require specific counseling for testing. Patients prefer when the testing is routine and offered to everyone rather than feeling singled out for testing because they are perceived to be “at-risk.” For these reasons, CDC believes an opt-out approach provides the best opportunity for more people to know.

**Maryland law** requires a health care provider to inform a person that an HIV test will be administered and that the person may decline the test without penalty. All health care providers must provide pre-test counseling to the individual prior to obtaining informed consent. If the test is administered in a health care facility, informed consent to the test must be obtained and documented in the medical record. **However, a written, signed consent to specifically perform an HIV test is not required.** If the HIV test is ordered at a location that is not a health care facility, informed consent must be in writing and signed by the individual on an *Informed Consent for HIV Testing* document (available in English and Spanish) that is approved by the Department (Refer to Section 4, Addendum)<sup>9</sup>. For additional guidance on HIV prevention, care services, surveillance and epidemiology, contact:

- *Maryland Center for HIV Prevention and Health Services*<sup>10</sup> at **410-767-5132**
- *Maryland Center for HIV Care Services*<sup>11</sup> at **410-767-6535**
- *Maryland Center for HIV Surveillance and Epidemiology*<sup>12</sup> at **410-767-5939**

### *Anemia Testing*

Healthy adolescents are generally at low risk for iron deficiency anemia. The *Preventive Screen Questionnaire* (Refer to Section 7, Appendix II for the *English* and *Spanish* versions) can be used for anemia assessment. Adolescents who have an underlying disease associated with blood loss, or those who have used restrictive diets that are low in iron, especially obese adolescents should be screened annually for anemia. A hemoglobin or hematocrit is sufficient to screen adolescents for anemia.

### *Hemoglobinopathy Testing*

Review sickle cell trait results at 12 years of age if a negative sickle cell trait result is not documented in the child’s medical record. If the child/adolescent was born in Maryland

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<sup>9</sup> *Maryland Code of Regulations-Health-General Article 10.18.08*

<sup>10</sup> See <http://phpa.dhmh.maryland.gov/OIDPCS/CHP/Pages/Home.aspx>

<sup>11</sup> See <http://phpa.dhmh.maryland.gov/OIDPCS/CHCS/Pages/Home.aspx>

<sup>12</sup> See <http://phpa.dhmh.maryland.gov/OIDEOR/CHSE/Pages/Home.aspx>

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contact the *Maryland's Public Health State Laboratory* at **443-681-3900** for assistance in determining the results. If results are not available or the child was not born in Maryland, a hemoglobin electrophoresis is recommended, regardless of apparent racial or ethnic group. Refer the adolescent for genetic counseling if sickle cell trait is present.