NEIGHBORHOOD HEALTH PLAN OF RHODE ISLAND	
Section: Clinical Practice Guideline	**Subject**: Adolescent Preventive Services
Effective: March 13, 2009	**Updated**: January 13, 2011

RATIONALE

Neighborhood Health Plan of Rhode Island recognizes that the most common causes of adolescent morbidity and mortality are preventable health conditions with predominantly behavioral, environmental, and social etiologies. Unintended injury, unintended pregnancy, depression, obesity, alcohol and drug abuse, sexually transmitted infections (STI's), and eating disorders are just some of the health problems faced by an increasing number of adolescents. Best-practice adolescent health care prioritizes primary and secondary prevention of theses major health threats.

This guideline covers preventive services recommendations for adolescent ages 11 through 17 though many of the recommendations might apply to those in the 18-21 age range. It is designed as a tool for health care professionals and is not meant to replace individual decision-making or practice styles.

General Recommendations for the Delivery of Health Services to Adolescents

- All visits should address biomedical and psychosocial aspects of health with sensitivity to individual and socio-cultural differences.
- A supportive and appropriately confidential environment should be created in order to foster a trusting relationship, facilitate the gathering of reliable history, and provide opportunities for effective counseling.
- Office policies regarding confidential care for adolescents and how parent/guardian(s) will be involved in that care should be well established and made clear to adolescents and their guardians.
- Many adolescent health care providers conduct the first part of a medical interview with guardian and adolescent together then request guardian and adolescent permission to conduct part of the interview in private with the adolescent.

This guideline presents recommendations on Health Guidance, Screens for conditions common to adolescents that result in significant suffering, and Immunizations - presented in graph outline followed by a more detailed review.

ANNUAL PREVENTIVE SERVICES GRAPH OUTLINE

	Age of adolescent						
	Early Adolescence				**Middle adolescence**		
Procedure	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Health guidance							
Parents*	——■——				——■——		
Development	■	■	■	■	■	■	■
Diet & physical activity	■	■	■	■	■	■	■
Oral health	■	■	■	■	■	■	■
Healthy lifestyles**	■	■	■	■	■	■	■
Injury prevention	■	■	■	■	■	■	■

	Early Adolescence				**Middle Adolescence**		
	11	**12**	**13**	**14**	**15**	**16**	**17**
Psychosocial/Behavioral Assessment				———■———		———■———	
History/ Anticipatory Guidance							
Home Life	■	■	■	■	■	■	■
Education/Employment	■	■	■	■	■	■	■
Eating disorders	■	■	■	■	■	■	■
Tobacco use	■	■	■	■	■	■	■
Alcohol, drug use	■	■	■	■	■	■	■
Sexual activity***	■	■	■	■	■	■	■
Abuse	■	■	■	■	■	■	■
Depression	■	■	■	■	■	■	■
Risk for suicide	■	■	■	■	■	■	■
Physical Exam							
Blood pressure	■	■	■	■	■	■	■
BMI/BMI Percentile	■	■	■	■	■	■	■
Vision	Visual acuity test every other year						
Hearing	Objective hearing screening every 1-2 years. Subjective hearing assessment at all other routine checkups.						
Comprehensive exam	———■———				———■———		
Dedicated reproductive health visit							
	The primary focus of the adolescent's first ob-gyn visit is to provide education and guidance and does not include a pelvic exam or a speculum exam unless it is indicated. Adolescent males and females should have their first reproductive health visit with their medical provider between the ages of 13 and 15 to help set the stage for optimal reproductive health in the years ahead.						
Tests							
Cholesterol	AAP and NCEP recommend screen with fasting lipid profile for adolescents at increased risk for CVD. † Re-screen every 3-5 years for adolescents who remain at increased risk. USPSTF finds insufficient evidence to support lipid screen. EPSDT recommends performing risk assessment annually on adolescents starting at age 11, with appropriate action to follow, if positive						
TB (ppd)	Screen if positive for: exposure to active TB, belonging to increased risk population, or lives/works with person identified as having high risk.† Testing should be done upon recognition of high-risk factors.						
Chlamydia	Regular screening. If sexually active, at least annually. If infected, rescreen in 4 months. All sexually active patients should be screened for sexually transmitted infections (STIs).						
Gonorrhea	Regular screening. If sexually active, at least annually. If infected, consider rescreening in 4 months. All sexually active patients should be screened for sexually transmitted infections (STIs).						
Syphilis	Screen if increased risk infection. †						
HIV	Annual screen for adolescents at increased risk. † Universal assessment for HIV risk factors at age 13 and above.						
Hematocrit or Hemaglobin	Perform risk assessment with appropriate action to follow, if positive						

Pap smear	Most adolescent girls should wait until they turn 21 to have their first Pap test. HIV-infected adolescent girls should have cervical screening twice in the first year after their HIV diagnosis and once a year thereafter. Adolescents who had one or more Pap tests with normal results before the guidelines changed in December 2009 should not be screened again until they reach age 21. Teens who have had a previous abnormal Pap test followed by two normal test results also should wait until age 21 to be rescreened. ACOG does not recommend HPV testing for adolescents. EPSDT recommends performing risk assessment for cervical dysplasia annually starting at age 11, with appropriate action to follow, if positive
Immunizations	
	See Rhode Island Department of Heath website for updated immunization recommendations at http://www.health.ri.gov or visit http://www.cdc.gov
Transition to Adult Services	
	Equipping an adolescent and his/her parent for the transfer from pediatric to adult health care. Physicians must play a key role in helping youth transition to adult health care. Ideally, transition planning should be a team effort between the youth, the youth's family, and the youth's health care providers.

** A parent health guidance visit is recommended during early and middle adolescence.*
*** Includes history taking and counseling regarding sexual behavior and avoidance of tobacco, alcohol, and other drug use.*
**** Includes history of unintended pregnancy and STI.*
† Conditions of increased risk are detailed below in the selected screening section.

RECOMMENDATIONS FOR HEALTH GUIDANCE

Adolescence is a time of experimentation and risk taking. Some behaviors threaten current health and other behaviors may have long-term health consequences. Parents and guardians should receive guidance to help them identify and respond appropriately to the health needs of their adolescent. Adolescents should receive health guidance at least annually to help them cope with developmental challenges, develop and maintain healthy lifestyles, improve diet and fitness, and prevent injury.

Parent/Caregiver Guidance. Parents or other adult caregivers should receive health guidance at least once during their child's early adolescence and once during middle adolescence. The information provided should include:

- Normative adolescent development - physically, sexually, emotionally
- Signs and symptoms of disease and emotional distress;
- Importance of parents discussing health-related behavior with their adolescents as well as the importance of parents acting as role models
- Methods for helping their adolescent avoid potentially harmful behaviors.
    - Monitor and manage the adolescent's use of motor vehicles, especially for new drivers.
    - Avoid keeping weapons in the home. If parents choose to have weapons in the home, adults and adolescents in the home should be counseled about the inherent risks of choosing to have weapons in the home. Recommend that the weapons and ammunition are inaccessible and that parents ensure that all adults and adolescents in the home are very knowledgeable about safety procedures and can be relied upon to always follow them.
    - Remove weapons and potentially lethal medications from the homes of adolescents who have suicidal ideation.
    - Monitor adolescent's social and recreational activities for the use of tobacco, alcohol and other drugs, and for sexual behavior.

Adolescent Guidance. All adolescents should receive health guidance annually to promote:

- A better understanding of the importance of their being actively involved in decisions regarding their health care, their physical growth, and psychosocial and psychosexual development.
- Reduction of injuries and risky behavior.

    - Do not use alcohol or other substances while using motor or recreational vehicles or where impaired judgment may lead to injury.
    - Use safety devices, including seat belts, motorcycle and bicycle helmets, and appropriate athletic protective devices.
    - Resolve interpersonal conflicts without violence.
    - Avoid the use of weapons and/or promote weapon safety.
    - Promote appropriate physical conditioning before exercise.
- Healthy food choices, good eating habits, and limits on soda and junk food. Review the benefits of a healthy diet, ways to achieve a healthy diet, and safe weight management.
- Daily physical activity. Recommend engaging in at least 60 minutes of safe physical activities on most if not all days of the week.
- Responsible sexual behaviors. Include counseling on the following.
    - Avoidance of sexual coercion and sexual exploitation
    - Inherent risks of choosing to be sexually active which include STI's and unintended pregnancy. Try to dispel common myths.
    - How HIV infection and other STI's are transmitted
    - The need to protect themselves and their partners from unplanned pregnancy, STIs including HIV, and sexual exploitation
    - Abstinence from sexual intercourse as the most effective way to prevent unplanned pregnancy and sexually transmitted infections.
    - The fact that latex condoms are helpful in preventing STIs, including HIV
    - The appropriate use of condoms and other barrier methods to minimize transmission of disease and unintended pregnancy for those who are or intend to be sexually active. Identify sources for obtaining these products and/or for family planning.
- Avoidance of tobacco, alcohol, street drugs and other substances of abuse, including anabolic steroids and diet pills and prescription medications.
- Many adolescent health care providers also find the acronym **HEADS** a very helpful mnemonic in performing psychosocial review of systems with adolescents. **H** (Home life), **E** (Education, Employment), **A** (Alcohol, Activity), **D** (Drugs, Depression), **S** (Sexual activity/identity, Suicide).[11]

RECOMMENDATIONS FOR SCREENING

UNIVERSAL Screening - All adolescents should be screened/assessed annually for:

- **Home Life** – Ask about the adolescent's home life.
    - Where and with whom does the adolescent live? Is that arrangement stable?
    - How are the adolescent's relationships with family and house members?
- **Education. Employment.** Assess school performance scholastically and behaviorally.
    - Adolescents with a history of truancy, repeated absences, or poor or declining performance should be assessed for multiple conditions such as: family dysfunction, alcohol or other drug use, learning disability, attention deficit hyperactivity disorder, depression, other mental disorders, medical problems, and abuse.
    - This assessment, and the subsequent management plan, should be coordinated with school personnel and with the adolescent's parents or caregivers.
    - Ask how work impacts adolescent's life – scholastically, socially, stress levels.
- **Eating. Overweight/Obesity/Eating Disorders** - Ask about body image and eating patterns.
    - Adolescents with BMI $\geq 95^{th}$ percentile for age/gender are *obese* and should have an in-depth dietary and health assessment to determine psychosocial morbidity and risk for future cardiovascular disease.
    - Adolescents with BMI between 85th and 94th percentile *are overweight* and should have a dietary and health assessment to determine psychosocial morbidity and risk for future cardiovascular disease should be performed on these youth if:

        - BMI has increased by two or more units during the previous 12 months;
        - There is a family history of premature heart disease, obesity, hypertension, or diabetes.
        - They express concern about their weight;
    - Assess for organic disease, anorexia nervosa, or bulimia if any of the following are found:
        - Weight loss greater than 10% of previous weight
        - Recurrent dieting when not overweight
        - Use of self-induced emesis, laxatives, starvation, or diuretics to lose weight; distorted body image; or BMI below the 5th percentile
- **Use of Tobacco Products Including Cigarettes and Smokeless Tobacco**
    - Adolescents who use tobacco products should be assessed to identify patterns of use, social contexts, triggers, and willingness to discontinue use.
    - A tobacco cessation plan should be provided.
- **Use of Abused Substances: Alcohol, Illicit Drugs, Pain Pills, Nerve Pills, Anabolic Steroids, Any Medication including Over The Counter (OTC) Taken for Non-Medical Purposes, Any Substance Used to Alter Mood or Consciousness (e.g. sniffing/huffing).**
    - Adolescents who report use/abuse of substances should have further assessment of:
        - Family history
        - Patterns of use including the circumstances surrounding use, amount/frequency of use
        - Use of other drugs
        - Functional impairment (psycho-social, school, physical)
        - Attitudes towards use; and motivation to quit and/or address use as a problem.
    - Because of the high prevalence of substance abuse in adolescents, it is very helpful to ask the adolescent about their friends' use or abuse of substances, tobacco and their sharing of prescription medications.
    - Counsel about risks and cessation. Refer for appropriate counseling and mental health treatment.
    - Adolescents who use alcohol or other drugs should also be asked about their use of tobacco products and their sexual behavior.
    - The use of urine toxicology for the routine screening of adolescents is **not** recommended.
- **Sexual Behaviors.**
    - In order to obtain a reliable sexual history, it is important to create a safe, non-judgmental, and confidential environment that is in accordance with local statutes which protect confidentiality for adolescents about their care in regards to family planning and STI screens/treatment.
    - Keep in mind that adolescence is often particularly stressful for those also experimenting or struggling with questions of gender identity or sexual orientation that may not be acceptable to family, friends, and communities.
    - Sexual identification, sexual interest and sexual behavior may not coincide.
    - Discussions about sexual interest and behavior should not make any presumptions about the adolescent's response. Questions like the following can help promote honest answers.
        - "Are you dating?"
        - "Are you romantically or sexually attracted to girls (women), boys (men), or both?"
        - "Do you have sex with girls (women), boys (men), or both?"
    - Question adolescents need for contraception
    - Sexually active adolescents should be asked about: their use and motivation to use condoms/other barrier methods, contraception, the number of sexual partners they have had in the past six months, if they have ever exchanged sex for money or drugs, and a history of prior pregnancy and STI's.
    - Adolescents at risk for pregnancy, STIs, HIV, or sexual exploitation should be counseled on how to reduce this risk.
- **Behaviors or Emotions that Indicate Risk of Suicide, Depression, or other Serious Mental Health Disorders**
    - Adolescents should be screened for the depression or suicidal risk between 12 and 18 years of age.

- Screening for depression or suicidal risk should be performed on adolescents who exhibit cumulative risk as determined by declining school grades, chronic melancholy, family dysfunction, homosexual orientation, physical or sexual abuse, alcohol or other drug use, previous suicide attempt, and suicidal plans.
- If suicidal risk is suspected, adolescents should be evaluated immediately and referred to a psychiatrist or other mental health professional, or else should be hospitalized.
- Non-suicidal adolescents with symptoms of severe or recurrent depression should be evaluated and referred to a psychiatrist or other mental health professional for treatment.
- Neighborhood adolescents have access to behavioral health services through Beacon Health Strategies. Beacon Health Strategies can be reached at 1-800-215-0058.

- **A History of Emotional, Physical, and Sexual Abuse**
    - If abuse is suspected, adolescents should be assessed to determine the circumstances surrounding the abuse and the presence of physical, emotional, and psychosocial consequences.
    - Health providers should be aware of local laws about the reporting of abuse to appropriate state officials in addition to ethical and legal issues regarding how to protect the confidentiality of the adolescent patient.
    - Adolescents who are or have been victims of abuse should be referred to a mental health professional for evaluation and treatment.

Beacon Health Strategies – Neighborhood's behavioral health provider can be reached at 1-800-215-0058.

- **Hypertension**
    - If systolic or diastolic pressures are at or above the 90th percentile for age and gender, repeat reading three different times within one month under similar conditions to confirm baseline values.
    - Adolescents with baseline BP values >95th percentile should have complete biomedical evaluation to establish treatment options.
    - Adolescents with BP values between 90th and 95th percentile should be assessed for obesity and have BP monitored every 6 months.
    - **Consensus Guidelines for Diagnosis of Hypertension in Children/Adolescents**[1]
        - "Pre-Hypertension": Systolic or diastolic BP >90th percentile or 120/80 mm Hg, whichever is less.
        - "Stage 1 Hypertension": Systolic or diastolic BP >95th percentile on 3 consecutive visits or 140/90 mm Hg, whichever is less.
        - "Stage 2 Hypertension": Systolic or diastolic blood pressure >99th percentile + 5 mm Hg or 160/110 mm Hg, whichever is less.
- **HIV**
    - Risk assessment should be universally performed on all adolescents at age 13 and above.

SELECTED Screening - Selected adolescents who are at increased risk based on criteria below should have the following screenings.

- **Cholesterol**.
    - AAP and NCEP recommend screening with a fasting lipid profile for adolescents at increased of developing hyperlipidemia and adult coronary artery disease. Risk factors include:
        - Family history (parent or grandparent) with early coronary artery disease, peripheral vascular disease, cerebrovascular disease, dyslipidemia, or sudden cardiac death at age 55 or younger.

[1] Gidding SS, Dennison BA, Birch LL, Daniels SR, Gilman MW, Lichtenstein AH, Rattay KT, Steinberger J, Stettler N, Van Horn L. Dietary recommendations for children and **adolescents**: a guide for practitioners: consensus statement from the American Heart Association. Circulation 2005 Sep 27;112(13):2061-75. [177 references] PubMed

    - Adolescent has BMI ≥85%
    - Adolescent has other cardiovascular risk factors including HTN, DM, or smoking..
    - Re-screen adolescents with the above risk factors every 3-5 years.
  - USPSTF finds insufficient evidence to support lipid screening in adolescents. AAFP concurs with USPSTF but recommends screen with TC and HDL if electing to screen.
  - **Consensus Guidelines for Diagnosis of Dyslipidemia in Children/Adolescents[2]**
    - Total Cholesterol: Borderline ≥170 mg/dL; Abnormal ≥200 mg/dL
    - LDL Cholesterol: Borderline ≥100 mg/dL; Abnormal ≥130 mg/dL
    - HDL Cholesterol: Abnormal <40 mg/dL
    - Triglycerides: Abnormal ≥ 150 mg/dL
  - **Treatment** Options are based on the average of two assessments of low-density lipoprotein cholesterol. Adolescents with values of 130 mg/dl or greater should be referred for further medical evaluation and treatment
- **Tuberculin Skin Testing for Adolescents at Increased Risk**
  - Risk factors include having spent time with someone with known or suspected TB; immigration or travel within last 5 years to endemic areas (Latin America, Asia, Africa, Middle East); stay or work in residential institution (e.g. prison, group home, shelter, nursing home); live in an area identified as high risk (by locale, ethnicity, SES) OR living with a person with the above risk factors.
  - Determine the need for repeat testing by the likelihood of continued exposure to infectious TB.
  - Adolescents with a positive TB skin test should be treated according to CDC treatment guidelines

- **STI Screening for Adolescents Who Engage In or Have Engaged in Sexual Behavior**
  - Genetic probe for Chlamydia and Gonorrhea by sampling urine (♀♂), cervical fluid, or (♀), urethral swabs (♂). For urine sampling the first void of day is preferred but not required.
  - Consider culturing for Gonorrhea (brown agar) and Chlamydia (viral culture prep) if sampling oro-pharynx or rectum or if the patient has been recently (within 3-4 weeks) treated for that infection.
  - Women should have their first cervical cancer screening at age 21 and can be rescreened less frequently than previously recommended.
  - ACOG does not recommend HPV testing for adolescents.
  - Consider evaluation for human papilloma virus by visual inspection.
  - Assess risk for Syphilis & HIV, and consider testing. See details where treated separately below.
  - If STI test is positive for active infection, a treatment plan should include:
    - Treatment according to latest CDC recommendations
    - Screening for HIV and other STI's
    - Education about consequences of untreated STI and risks of co-occurring STI's.
    - Re-screen in 4-5 months and consider test of cure in 3-6 weeks in areas of antibiotic resistance.
    - Identification and treatment of at risk partner/s
    - Practical education about the use of condoms/barrier protection and their importance in decreasing the spread of STI's. Offer products at time of visit if supplies available.
  - The frequency of screening for STI's depends on the sexual practices of the individual and the history of previous STI's.
- **HIV Screening for Adolescents**
  - HIV risk assessments should be universally performed on all adolescents age 13 years and above.
  - Education and counseling about HIV infection, HIV testing/screening, HIV transmission, and the implications of HIV infection are universally an essential component of the anticipatory guidance provided to all adolescents as part of their primary care.

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[2] *Ibid*

- Adolescents at increased risk for HIV infection should be screened annually and include:
    - IV drug users and their sex partners, adolescents who exchange sex for money/drugs, sex partners of HIV-infected persons, men who have sex with men (MSM,) and adolescents who have sex with opposite gendered persons who themselves or whose sex partners have had more than one sex partner since their most recent HIV test.
- HIV screening is recommended for all sexually active adolescents.
- In 2006 the CDC recommended HIV screening for all persons age 13-64 years at all health care settings unless the prevalence of undiagnosed HIV infection in their patients has been documented to be <1 per 1,000.
- Anonymous and confidential testing should be offered and consent should be obtained. There has been some controversy about the necessity of obtaining expressed written consent.

- **Syphilis Screening** Adolescents at risk for syphilis infection should be offered serologic testing.
    - Risk factors include: men having sex with men, engaging in high risk sexual behavior, exchanging of sex for money/drugs, incarceration in a correctional facility, living in an area endemic for syphilis, and multiple sexual partners.

    PAP Screening ACOG recommends that women should have their first cancer screening at age 21 and can be rescreened less frequently than previously recommended. Women from ages 21 to 30 be screened every two years instead of annually, using either the standard Pap or liquid-based cytology. Moving the baseline cervical screening to age 21 is a conservative approach to avoid unnecessary treatment of adolescents which can have economic, emotional, and future childbearing implications.

RECOMMENDATIONS FOR IMMUNIZATIONS

The most recent recommendations concerning immunizations are summarized in the “preventive visit” chart at the beginning of this document. Immunization recommendations are based on those issued by the Advisory Committee on Immunization Practices (ACIP).

As it is impossible to foresee all possible immunization changes and/or recommendations, we request that you visit the Rhode Island Department of Health’s website at **www.health.ri.gov** for vaccine alerts, updates and advisories periodically and when you need additional information.

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