

UTAH PREVENTIVE CARE RECOMMENDATIONS

ADOLESCENT AGES 11-18

SCREENING

Contents

- General Instructions
- Family History
- Body Measurement
- Eating Disorders
- Lifestyle
- Blood Pressure
- Cholesterol
- Anemia
- Cervical Cancer
- Dental
- Development/Behavior
- Depression/Suicide
- Substance Use
- Spine
- Sexual Development
- Tuberculosis
- Hepatitis B
- Hepatitis C
- HIV
- Abuse
- Interpersonal Violence
- Hearing
- Vision
- Urinalysis
- Celiac Disease

GENERAL INSTRUCTIONS

Refer to Bright Futures/AAP [Recommendations for Preventive Pediatric Health Care](#) periodicity schedule.

FAMILY HISTORY

Take a careful family history for cardiovascular risk factors such as hypertension, hypercholesterolemia, heart disease, diabetes, obesity, or exposure to second-hand smoke.

Other areas of family history which may be helpful include cancer, asthma, osteoporosis, mental illness, hearing loss, etc.

BODY MEASUREMENT

Measure height, weight and Body Mass Index (BMI) kg/m^2 with each well adolescent visit. Plot to BMI percentile growth charts for [males](#) and for [females](#).

BMI-for-Age from the $\geq 85^{\text{th}}$ to $< 95^{\text{th}}$ percentiles is classified as overweight.

BMI-for-Age of $\geq 95^{\text{th}}$ percentile is classified as obese.

Use Intermountain Healthcare's [Lifestyle and Weight Management for Children and Adolescents Care Process Model](#) (CPM) as a guide for the evaluation and treatment of patients with a $\geq 85^{\text{th}}$ BMI-for-Age

percentile

Key areas of evaluation include activity level, sedentary behavior, nutrition, sleep, social support, family style, and environmental stress.

The CPM contains various tools to assist in the evaluation and treatment of overweight and obesity:

- A [Lifestyle and Health Risk Questionnaire](#)
- The [Rx to LiVe Well](#) prescription sheet provides recommendations centered around 8 evidence-based behaviors as well as provides areas for goals, referrals and follow-up dates
- Tracking and reporting progress are important steps in making a change. Give patients an [8 to LiVe By Track It! Tracker](#).
- Patient education tools include the Intermountain Healthcare [LiVe Well website](#), and the [8 to LiVe by Booklet](#).
- Order Intermountain Healthcare educational materials through [Intermountain Print It](#)

Refer patients to a dietitian at an Intermountain Healthcare facility for medical nutrition therapy (either one-on-one counseling or group class is advised), and to behavioral health specialists as needed.

EATING DISORDERS

Questions about eating patterns and satisfaction with body appearance should be asked of all preteens and adolescents as part of routine pediatric health care.

Possible signs of an eating disorder include:

- positive response to question about eating in secret in the [Lifestyle and Health Risk Questionnaire](#)
- physical signs such as significant weight loss or gain, brittle hair or nails, tooth or gum problems, irregular or absent menstrual periods, heartburn, constipation diarrhea, or stress fractures
- failure to achieve appropriate increases in weight or height in growing children
- excessive concern with weight or inappropriate dieting
- admitted use of diet pills, laxatives or diuretics

The Modified ESP (Eating Disorders Screen in Primary Care) is effective in identifying patients who require further evaluation for eating disorders.

Modified ESP questions:

1. Are you concerned with your eating patterns?
2. Do you ever eat in secret?
3. Does your weight affect the way you feel about yourself?
4. Have any members of your family suffered from an eating disorder?

Scoring:

- 0-1 "Yes" responses: Eating disorder ruled out
- ≥ 2 "Yes" responses: Eating disorder suspected, evaluate further

When an eating disorder is suspected, follow the recommendations on assessment, evaluation of

severity, and treatment found in the Intermountain Healthcare [Eating Disorders Care Process Model \(CPM\)](#)

LIFESTYLE

Assess lifestyle behaviors such as physical activity, nutrition, sleep, and social support which put patients at higher risk for disease using [Intermountain's Lifestyle and Health Risk Questionnaire](#).

Assess adolescent physical activity using the pediatric physical activity vital sign (PPAVS – days per week of at least 60 minutes of moderate to vigorous physical activity or play) at each visit.

Refer to Intermountain Healthcare's [Lifestyle and Weight Management for Children and Adolescents Care Process Model](#) (CPM) for additional information on a team based approach and resources for evaluating and counseling adolescents regarding lifestyle behaviors.

SLEEP

Assess hours of daily sleep.

Screen adolescent for snoring as an indicator for obstructive sleep apnea syndrome (OSAS). Other findings associated with OSAS include habitual snoring with labored breathing, observed apnea, restless sleep, enuresis, and daytime neurobehavioral abnormalities or sleepiness. When OSAS is suspected, refer to a sleep specialist for further testing.

BLOOD PRESSURE

Measure by auscultation or oscillometer in the right arm using standard measurement practices and an appropriate cuff size for the child's upper arm. If the patient has atypical aortic arch anatomy, use the left arm. Measure BP annually in healthy adolescents, not at every health encounter. For those with obesity, renal disease, diabetes, aortic arch obstruction or coarctation, or those taking medications known to increase BP, measure BP at every health encounter.

Use [Simplified Table of Screening BP values](#) by Age to determine those patients requiring further evaluation. The Simplified table is based on the 90th percentile BP for age and sex for adolescents at the 5th percentile of height and is only to be used to identify those needing further evaluation, not to be used for diagnosing elevated BP or HTN.

If the adolescent needs further evaluation based on the Simplified Table, then use the expanded AAP BP Percentile Tables for [boys](#) and [girls](#) according to age, sex and height

Definitions of BP Categories and Stages For children age 1-13 years

- Normal BP: <90th percentile
- Elevated BP: ≥90th percentile to <95th percentile or 120/80 mm Hg to < 95th percentile (whichever is lower)
- Stage 1 HTN: ≥95th percentile to <95th percentile + 12 mm Hg or 130/80 mm Hg to 139/89 mm Hg (whichever is lower)
- Stage 2 HTN: ≥95th percentile + 12 mm Hg or ≥140/90 mm Hg (whichever is lower)

If the initial BP is elevated, providers should perform two additional BP measurements at the same visit and average them to define BP category. When BP is measured using an oscillometer, and the average of the three oscillometric readings is $\geq 90^{\text{th}}$ percentile, then two auscultatory measurements should be taken and averaged to define the BP category.

Treat adolescents with elevated blood pressure according to the 2017 [AAP Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and Adolescents](#)

CHOLESTEROL

The American Academy of Pediatrics recommends a screening lipid profile for all children age 9 through 11 years and once between ages 17 through 21 years due to the growing epidemic of obesity in children. Assess adolescents who have not been screened for risk of hyperlipidemia. Screen adolescents determined to be at high risk. [See the Assessment and Follow-up of Lipoprotein Analysis](#) chart for further classification, treatment and testing.

High risk:

- Adolescents who have a parent or grandparent with a total cholesterol level of 240 mg/dl or greater
- Adolescents with a family history of premature cardiovascular disease (i.e. a parent or grandparent with documented cardiac or vascular disease at age 55 years or younger)
- Adolescents with risk factors for coronary disease (i.e. high blood pressure, smoking, diabetes, overweight – BMI $\geq 85^{\text{th}}$ percentile)
- Adolescents whose family history is not obtainable

ANEMIA

Screen all non-pregnant girls for anemia every 5 to 10 years. Annually screen girls with history of iron deficiency anemia or risk factors such as menorrhagia or diets low in iron.

Refer to tables listing [anemia cut points](#), [altitude correction factors](#), and examples of [local altitudes](#).

CERVICAL CANCER

Asymptomatic women younger than 21 years should not be screened for cervical cancer

DENTAL

Advise visit to dentist on a regular basis

Encourage regular brushing and flossing

Treat with Fluoride supplementation as listed below

	Concentration of Fluoride in Local Water Supply (ppm)		
	<0.3	0.3-0.6	>0.6
Daily dose of Fluoride for ages 11-16 years old	1.00 mg	0.5 mg	0 mg

Assume that your community has <0.3 PPM in its water supply unless noted as having a higher concentration by the Utah Department of Health Dental Health Program listing of [Fluoride concentrations in local water supplies](#).

A 2.2 mg sodium fluoride (NaFl) tablet contains one mg Fluoride.

If more detailed information is needed about your location contact the [Oral Health Program, Utah Department of Health](#), (801) 538-9177.

DEVELOPMENT/BEHAVIOR

Assess adolescent in the area of Cognitive Development, Social-Emotional Development, School-Vocation, and Family. See chart “[Adolescent Psychosocial Development](#)”

Evaluate adolescent for high-risk behaviors (i.e. substance use/abuse, eating disorders, violence, sexual activity, and anti-social behavior)

DEPRESSION/SUICIDE

Clinicians should be alert to signs of depression or suicide risk during each visit – Refer to [Symptoms of Major Depression](#) for more information.

Intermountain Healthcare has put together a Mental Health Integration Child/Adolescent Packet that includes useful tools for evaluating children, adolescents and their families for mental health concerns. The packet includes rating scales to evaluate anxiety and stress, developmental problems and mood problems, attention deficit and hyperactivity disorder, and home impairment.

Screen for depression using the Patient Health Questionnaire PHQ-2 or Patient Health Questionnaire for adolescents (PHQ-A).

When the adolescent screens positive for suicide on the PHQ-A (1-3 to question #9) or when there is a clinical suspicion of suicidal ideation or behaviors present, screen for suicide risk using the [Columbia Suicide Severity Rating Scale \(C-SSRS\) Adult/Adolescent Quick Screen](#). Intermountain Healthcare’s [Suicide Prevention Care Process Model \(CPM\)](#) provides guidance on the evaluation and treatment of suicide risk based on the results of the C-SSRS Quick Screen.

SUBSTANCE USE

Screen for use of tobacco, alcohol, recreational drugs, prescription drugs, performance-enhancing substances, or other substances of abuse at each. For adolescents age 12 years and older use the CRAFFT two-part screening tool. For any “yes” answers to the questions in Part A, administer Part B. If all answers to Part A are “no” then only ask question 1 of Part B.

You can download the following resources from [Crafft.org](#):

- Downloadable, self-administered version of the CRAFFT
- Order form for pocket-sized CRAFFT cards for office use
- Other language versions

Refer to the Intermountain Healthcare [Substance Use Disorder CPM](#)

For advice on where to send patients for alcohol and drug treatment in your local area:

- SelectHealth Plan Members: 1-800-876-1989 or 801-442-1989
- Non-SelectHealth Plan Members dial 211 for community resources

Naloxone hydrochloride is an emergency opioid antagonist that is FDA-approved for the treatment of opioid overdose. Naloxone is NOT a controlled substance and can be prescribed without liability. According to 2016 Utah Code, naloxone can be prescribed to any individual who is or may be at risk of opioid overdose, to a family member, friend, or other person in a position to assist an individual who is or may be at risk, or to an outreach provider. Pharmacies have collaborative agreements in place that allow patients to obtain naloxone without a prescription.

SPINE

Evaluate females twice for scoliosis by visual exam ages 10 and 12 years.

Evaluate males once at age 13 or 14 years.

SEXUAL DEVELOPMENT

Evaluate Tanner Stage each well visit. See [Tanner Stage diagrams](#)

TUBERCULOSIS

Test adolescents at **HIGH RISK** with Tuberculin Skin Test (TST) using the Mantoux Technique or with an Interferon Gamma Release Assay (IGR) tuberculosis blood test.

HIGH RISK includes adolescents:

- Born in Africa, Asia, Latin America or Eastern Europe
- Who have traveled to and stayed with friends or family members in Africa, Asia, Latin America or Eastern Europe for ≥ 1 week consecutively
- Exposed to someone with suspected or known TB disease (also report to health department)
- With close contact with a person who has a positive TB skin test
- Who spend time with persons who have been incarcerated, homeless, use illicit drugs or has HIV

TST should be read 48 to 72 hours after placement by a trained health care provider. Results should be recorded as millimeters of induration.

Definition of Positive Tuberculin Skin Test (Mantoux technique)

Induration ≥ 5 mm

- Child or adolescent in close contact with a known or suspected infectious case of TB
- Child or adolescent with suspected TB disease:
 - Finding on chest radiograph consistent with active or previously active TB
 - Clinical evidence of TB disease
- Child or adolescent who is immunosuppressed (eg, receiving immunosuppressive therapy or with immunosuppressive condition [eg, HIV infection])

- Child or adolescent at increased risk of disseminated disease:
 - Those < 4 years old
 - Those with concomitant medical conditions (eg, Hodgkin's disease, lymphoma, diabetes mellitus, chronic renal failure, or malnutrition)
- Child or adolescent with increased risk of exposure to cases of TB disease:
 - Those who were born in, who travel to, or whose parents were born in a country with a high prevalence of TB cases
 - Those frequently exposed to adults with risk factors for TB disease (eg, adults who are HIV-infected or homeless, users of illicit drugs, those who are incarcerated, or migrant farm workers)

Induration \geq 15 mm

- Children \geq 4 years old with no known risk factors

(Modified from AAP. *Red Book: 2003 Report of the Committee on Infectious Diseases*. 25th ed. Elk Grove Village, IL: AAP; 2003:642-660)

For evaluation and treatment of positive TB test, refer to Recommendations of Pediatric Tuberculosis Collaborative Group (*Pediatrics* 2004;114;1175-1201)

http://pediatrics.aappublications.org/content/114/Supplement_4/1175.full

HEPATITIS B

Screen non-pregnant asymptomatic adolescents at HIGH RISK of Hepatitis B including those who were previously vaccinated with serologic HBsAg test. Follow initially reactive tests with a confirmatory test. There is no recommended screening interval. Clinical discretion should be used for those who continue to be at risk of infection.

HIGH RISK includes those born in countries or regions with an HBsAg prevalence of 2% or greater, those born in the US who did not receive the HPV vaccine as infants and whose parents were born in regions with an HBsAg prevalence of 8% or greater, those with past or current injection drug use, men who have sex with men, and persons with HIV. Also screen sex partners, needle-sharing contacts, and household contacts of persons known to be HbsAg positive.

HEPATITIS C

Screen adolescents age 18 and older once for chronic Hepatitis C virus (HCV) infection using anti-HCV antibody testing followed by polymerase chain reaction testing for HCV RNA.

Consider screening adolescents younger than 18 if they have a history of current or past injection drug use.

HIV

Screen all adolescents ages 15 years and older once per lifetime for HIV with a serum or plasma HIV-1/2 antigen/antibody immunoassay. The interval for further screening after the initial test should be determined by the provider based on assessed risk of the patient.

Adolescents at any age who are high risk for HIV should be screened annually, including:

- Patients initiating treatment for TB
- Patients seeking treatment for STDs
- Injection-drug users and their sex partners
- Patients with multiple sex partners
- Patients who are foreign born
- Individuals entering jail

Men having Sex with Men (MSM) should be screened every 3 months.

Refer those at risk for Pre-exposure Prophylaxis (PreP).

A separate consent form for HIV screening is not recommended. Minors are allowed to consent to HIV testing.

ABUSE

Adolescents should be asked about any history of intimidation, or history of emotional, physical or sexual abuse. Questions about abuse should be addressed with adolescent when potential adult abuser (including parent) is not present

If family violence or child abuse is suspected:

- For a list of state requirements refer to the [State of Utah Child Abuse Reporting Requirements](#).
- For referral, contact Primary Children's Hospital Safe and Healthy Families (801) 662-3600.

For more information, refer to the document, "[Evaluation of Suspected Child Physical Abuse](#)" June 2007, American Academy of Pediatrics.

INTERPERSONAL VIOLENCE

The USPSTF and Intermountain's Interpersonal Violence team recommend that all female patients starting at age 14 years be screened for Interpersonal Violence and provide or refer women who screen positive to intervention services.

Only screen patient when they are alone. Post signs at front desk "We respect privacy/confidentiality and speak with each patient alone for at least part of the visit".

Provide a framing statement that introduces why you are asking the patient about partner violence. Script for framing statement – "1 in 3 women in Utah experience very unhealthy relationships with an intimate partner in their lifetime. Since this can affect health (and children's health) and identifying the problem and offering resources decreases violence and improves outcomes, we ask all female patients about this issue."

Disclose to patients that certain situations require by law that you the provider make a report to the police or DCFS. Reportable situations related to relationship violence include: treatment of an injury today that was caused by someone else, patient being threatened with a lethal weapon, or when children are experiencing or are witnessing abuse.

Screening questions and potential responses include: (written or verbal)

1. Are you in a relationship now in which you are often **emotionally hurt** by your partner such as being frequently *insulted, put down, or controlled*?

(No, Yes, Prefer not to answer, Already addressed with my provider)

2. Are you in a relationship now in which you are **physically hurt** by your partner such as being *hit, shoved, slapped, kicked, or choked*?

(No, Yes, Prefer not to answer, Already addressed with my provider)

3. Are you in a relationship now in which you are *forced* by your partner to do anything **sexually** that you do not want to do?

(No, Yes, Prefer not to answer, Already addressed with my provider)

4. [If no to all the above] **Have you ever** been in a relationship with a partner who hurt you *emotionally, physically, or sexually* in any of these kinds of ways or who otherwise scared you?
(No, Yes - *but has been dealt with previously*, Yes – *and is something I am still dealing with*)

Provide supportive messages such as, “You are not alone”, “You and your children do not deserve this”, “This is a safe place for you to get help”, “There is help available”.

Do not tell the patient that they “should leave now”. Do not imply that leaving an abusive relationship is easy. Do not recommend couple/marital counseling to someone who is being physically or emotionally abused. Do not offer to talk to the abusive partner. Do not advise the patient to stay in the relationship for the sake of their children.

Post signs in restrooms with resources such as:

- Utah Domestic Violence Coalition LinkLine 1-800-897-LINK (5465)
- [Futures Without Violence Cards](#)
- [Power and Control Wheel](#)

Document resource information given. Resources include:

- [Domestic Violence Crisis Hotline](#) (Link Line): 1-800-897-LINK (5465)
- [Referral to Advocate](#) (UDVC member program/Social worker/Care manager RN/Mental Health Integration/Behavioral Health/EAP preferably trained in **trauma focused care**)
- Statewide 24-hour Rape and Crisis Hotline: 1-888-421-1100
- [Utah 211](#): 2-1-1
- [Patient Safety Plan](#)
- Shelter

Document in **Confidential Note Type**, not in Patient Portal Note/Open Notes. These notes should not be released with Release of Information unless specific permission obtained from patient. The diagnosis/E codes/ICD-9 should NOT show up on the Problem/Diagnosis list in the Patient Portal/Open Notes. The problem/diagnosis should not appear in Billing, After Visit Summaries or Explanation of Benefits.

Intimate partner violence/sexual assault photos should be stored confidentially, not viewable in the patient portal, not viewable to providers not directly involved in care and blocked from Release of Information.

HEARING

At well-adolescent visits, ask subjective questions about hearing status.

VISION

Objective acuity testing at ages 12, 15 and 18. Subjective by history at other well-adolescent visits

URINALYSIS

- Universal screening of adolescents by urinalysis is not recommended
- Patients covered by Medicaid should be tested once during adolescence with a dipstick leukocyte esterase to screen for bacteria
- Sexually active male adolescents should be tested annually with a dipstick leukocyte esterase to screen for sexually transmitted diseases.
- See information about [DIPSTICK LEUKOCYTE ESTERASE TEST](#)

CELIAC DISEASE

Evidence is not sufficient to recommend screening for Celiac Disease in asymptomatic adolescents.