

<b>NEIGHBORHOOD HEALTH PLAN OF RHODE ISLAND</b>	
<b>Section:</b> Clinical Practice Guideline	<b>Subject:</b> Adult Routine Preventive Care
<b>Effective:</b> 3/1999	<b>Updated:</b> 7/00, 7/02 , 7/04, 7/06 , 6/08

**RATIONALE**

The aim of this guideline is to provide routine screening and immunization recommendations for adults ages 18 and over with the intent of assisting the clinician in the evaluation and treatment of patients. They are not meant to replace a physician’s judgment or to establish a specific approach toward all patients with a particular condition. Nearly every patient contact for any reason should be used to identify and address preventive service needs. Many services can be provided during routine visits. Similarly, an assessment of preventive services needs can be incorporated into any visit.

The recommendations are based on evidence that supports the value of their induction in periodic health evaluations. They target the general population of low-risk, asymptomatic, non-pregnant individuals, and they identify particular groups of individuals for more intensive screening or immunization. Not included in this guideline are screening recommendations for pregnant women (see *Prenatal Care Guidelines*).

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](http://www.health.ri.gov) for vaccine alerts, updates and advisories periodically and when you need additional information.

<b>Health Maintenance Visit</b>	<b>18-29 years</b>	<b>30-39 years</b>	<b>40-49 years</b>	<b>50-64 years</b>	<b>65+ years</b>
<ul style="list-style-type: none"> <li>• Initial/interval history</li> <li>• Age-appropriate physical exam.</li> <li>• Preventive screenings and counseling</li> <li>• Update immunizations.</li> </ul>	Annually for ages 18-21 Every 1-3 years depending on risk factors for ages 22-29	Every 1-3 years depending on risk factors	Every 1-3 years depending on risk factors	Annually	Annually
<b>Cancer Screening</b>					
<b>Breast Cancer</b>	Starting at age 20, clinical breast exam and self-exam instruction. Mammography for patients at high risk. <sup>1</sup>		Clinical breast exam and self-exam instruction. Mammogram every 1-2 yrs; risk/benefit analysis	Clinical breast exam and self-exam instruction. Mammogram every 1-2 yrs	Clinical breast exam and self-exam instruction. Mammogram every 1-2 yrs through age 74; ≥ age 75 at clinician/patient discretion.
<b>Cervical Cancer (Pelvic Exam &amp; Pap Test)</b>	Initiate Pap test and pelvic exam at 3 years after first sexual intercourse or by age 21. If under age 30, perform Pap test annually. Perform pelvic exam and Pap test every 1–3 years, depending on risk factors <sup>2</sup> and at the clinician’s discretion on a case by case basis.				Every 1-3 years at clinician discretion. <sup>3</sup>

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<b>Colorectal cancer</b>	Not routine except for patients at high risk. <sup>4</sup>			<ul style="list-style-type: none"> <li>• Colonoscopy at age 50 and then every 10 years; OR</li> <li>• Flexible sigmoidoscopy every 5 years; OR</li> <li>• Double-contrast barium enema every 5 years; OR</li> <li>• CT colonography (virtual colonoscopy) every 5 years; OR</li> <li>• Annual fecal occult blood test (FOBT) or fecal immunochemical test (FIT); OR</li> <li>• stool DNA test (sDNA), interval uncertain.<sup>5</sup></li> </ul> Screening after age 80 at clinician/patient discretion.	
<b>Prostate cancer</b>	Prostate cancer screening not routine		Digital rectal exam (DRE) for patients at high risk <sup>6</sup> PSA screening for high-risk patients at clinician/patient discretion	Digital rectal exam (DRE) Offer PSA screening at clinician-patient discretion.	
<b>Skin cancer</b>	Periodic skin exams every 3 years; Frequency of exams at clinician discretion based on risk factors. <sup>7</sup>		Periodic skin exams annually; frequency based on risk factors.		
<b>Infectious Disease Screening</b>					
<b>Sexually transmitted infections</b>	<b>Chlamydia</b> –annually until age 25 for females and males <b>Gonorrhea</b> – annually until age 25 for females at risk <sup>8</sup> <b>Chlamydia &amp; Gonorrhea</b> – annually age 25 and over if at risk <b>Syphilis</b> – test if at risk <sup>9</sup>				
<b>Hepatitis C</b>	Not routine except for patients at high risk <sup>10</sup>				
<b>HIV</b>	Routine/annual testing of all patients at increased risk. <sup>11</sup> Routine screening of all patients for HIV risk factors.				
<b>Tuberculosis</b>	Tuberculin skin test for adults at high risk for TB exposure/infection <sup>12</sup>				
<b>Sensory Screening</b>					
<b>Vision screening</b>	Test only if symptomatic				Objective vision testing every 1-2 years (Snellen chart)
<b>Hearing screening</b>	Test only if symptomatic			Ask about hearing impairment Counsel, refer as appropriate.	
<b>Other recommended screening</b>					
<b>Body Mass Index (BMI)</b>	Screen at every visit for overweight. Consult the CDC’s growth and BMI charts. Screen annually for eating disorders. Ask about body image and dieting patterns. Offer intensive counseling for adults with BMI > 30 to promote weight loss. Use waist circumference if BMI 25 -34.9 to identify increased disease risk <sup>13</sup>				
<b>Hypertension</b>	At every acute/nonacute medical encounter and at least once every 2 years.				
<b>Lipid</b>	Initial fasting lipoprotein profile ( <i>total cholesterol, LDL cholesterol, HDL cholesterol, and triglyceride</i> ) for men at age 35 and for women at age 45. Fasting lipid profile every 5 years after initial screen. Earlier and/or more routine screening for patients with high-risk at clinician discretion. <sup>14</sup>				
<b>Diabetes</b>	Screen every 3 years beginning at age 45, especially if BMI ≥ 25. Screen more often and beginning at a younger age for those who are overweight and if risk factors are present. <sup>15</sup>				

	Fasting blood sugar is the preferred diagnostic test.				
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<b>Osteoporosis</b>	Counsel about preventive measures: dietary calcium and vitamin D intake, weight-bearing exercise.				
			Consider risk of osteoporosis in all post-menopausal women. Counsel on risks/benefits of hormonal and nonhormonal therapies. Ages 60-64 – provide bone mineral density (BMD) testing for postmenopausal women who have additional risk factors for osteoporosis. <sup>16</sup>		Provide BMD testing for all women. Counsel on measures to prevent falls.
<b>Abdominal aortic aneurysm</b>					One-time screening by ultrasonography in men 65-75 who have ever smoked
<b>Depression</b>	Routine screening for depression if there are systems in place to ensure accurate diagnosis, effective treatment, and careful follow-up Use consistent screening method for all patients where any positive result triggers full diagnostic workup.				
<b>Tobacco use</b>	Assess adults for tobacco use at every visit and provide ongoing cessation services.				
<b>Alcohol, substance abuse</b>	Screen for problem drinking or drug use among adults by use of screening tools such as CAGE or AUDIT. Provide effective intervention in the primary care setting and/or refer for counseling as appropriate. Counsel against drinking and driving.				
<b>Family violence</b>	All clinicians examining adults should be alert to physical and behavioral signs and symptoms associated with abuse or neglect. Patients in whom abuse is suspected (domestic partner, older adult) should receive proper documentation of the incident and physical findings; treatment for physical injuries; arrangements for skilled counseling by a mental health professional; and the telephone numbers of local crisis centers, shelters, and protective service agencies.				
<b>General Counseling</b>					
<b>Advanced directives</b>	It is the expectation that this discussion occurs and is documented for those ages $\geq 40$ . See <a href="http://www.health.ri.gov">www.health.ri.gov</a> for further information				
<b>Aspirin chemoprevention</b>	Clinicians should discuss aspirin chemoprevention with adults who are at increased risk for coronary heart disease. <sup>17</sup> Discussions with patients should address both the potential benefits and harms of aspirin therapy.				
<b>Diet, nutrition</b>	Limit dietary fat Maintain portion-size control and caloric balance Calcium, vitamin D consumption Use of folic acid supplements for women of childbearing age. Intensive behavioral dietary counseling for adult patients with hyperlipidemia and other known risk factors for cardiovascular and diet-related chronic disease; counseling by primary care clinicians or by referral.				
<b>Family planning, preconception counseling</b>	Discuss contraceptive use, emergency contraception to prevent unintended pregnancy Discuss appropriate/safe birth intervals Encourage folate supplement (0.4 mg folate) during childbearing years Emphasize risk of alcohol, drugs, tobacco in pregnancy, even very early pregnancy Stress importance of oral health and routine dental care				
<b>Injury prevention</b>	Seatbelt use Helmet use for sports (cycling, skiing, in-line skating) Firearm risks and safety				
<b>Menopause management</b>			Counsel all women on management of menopause, including non-hormonal therapies Discuss risks and benefits of hormonal therapies for management of menopausal symptoms.		

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<b>Physical activity</b>	Discuss importance of regular physical activity including aerobic, strength, and flexibility training. Encourage nontraumatic weight-bearing exercise (e.g. walking) for osteoporosis prevention.				
<b>Sexuality, safe sex practices</b>	If sexually active, discuss pregnancy prevention, family planning, Discuss STD prevention: limit partners, use latex condoms and other barriers correctly				
<b>Immunizations</b>					
<b>Hepatitis A</b>	2 doses at least six months apart for persons who wish immunity or persons at risk <sup>18</sup> , if not previously immunized.				
<b>Hepatitis B</b>	3 doses on a 0, 1, 6 month schedule (alternative schedules 0, 2, 4m and 0, 1, 4m). Immunize all persons through age 18 if not previously immunized. Immunize persons who wish immunity and all high-risk persons <sup>19</sup> if not previously immunized.				
<b>Human papillomavirus (HPV)</b>	3 doses on a 0, 2, 6m schedule for unvaccinated females ≤ 26 yrs.				
<b>Influenza*</b>	1 dose annually (fall or winter) if at risk <sup>20</sup> or if desired by patient LAIV only for healthy, nonpregnant persons ≤ 49 years			1 dose annually, TIV only	
<b>Measles, mumps and rubella (MMR)</b>	≥ 1 dose if born in 1957 or later and have no documentation of vaccination and no laboratory evidence of immunity to measles, mumps and rubella (especially women of childbearing age) 2 doses (second dose > 4 wks after 1 <sup>st</sup> dose) for high-risk groups <sup>21</sup>			1 dose for all healthcare workers born before 1957 who have no proof of immunity (serology or vaccination)	
<b>Meningococcal conjugate (MCV4)</b>	1 dose for all persons through age 18, college freshmen living in dormitories, persons with anatomic or functional asplenia or with terminal complement component deficiencies, travelers to countries where meningitis is epidemic (e.g. sub-Saharan Africa), and laboratory workers routinely exposed to <i>N. meningitidis</i> .. If previous vaccine was MPSV4, revaccinate after 5 yrs if risk continues				
<b>Pneumococcal (polysaccharide) (MCV4)</b>	1 dose if at risk <sup>22</sup> and not previously immunized.			1 dose after 65 years of age Revaccinate if vaccinated before age 65; allow 5 year interval.	
<b>Tetanus, Diphtheria, Pertussis (Td/Tdap)</b>	For adults <65 years of age not previously vaccinated with Td: 1 dose of Tdap, followed by 2 doses of Td Td booster every 10 years. For adults <65 years of age who have not previously received a dose of Tdap, Tdap should replace a single dose of Td.			3 doses of Td if not previously immunized Td booster every 10 years	
<b>Varicella</b>	2 doses administered 4-8 weeks apart, if not previously immunized and no history of chickenpox or shingles				
<b>Zoster</b>				1 dose for all adults ≥60 years of age, regardless of history of herpes zoster.	

\* Trivalent inactivated influenza vaccine (TIV) or Live attenuated influenza vaccine (LAIV)

## REFERENCES

1. Agency for Healthcare Research and Quality, *The Guide to Clinical Preventive Services, 2007*, Recommendations of the U.S. Preventive Services Taskforce
2. American Academy of Family Physicians, *Summary of Recommendations for Clinical Preventive Services*, Revision 6.4, August 2007
3. Institute for Clinical Systems Improvement (ICSI). *Preventive services for adults*. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2007 Oct.
4. Immunization Action Coalition - Advisory Committee on Immunization Practices' (ACIP) *Summary of Recommendations for Adult Immunization*, 2008
5. Massachusetts Health Quality Partners, *Adult Routine Preventive Care Recommendations 2007/8*
6. American Diabetes Assn. *Standards of Medical Care in Diabetes – 2008; Diabetes Care* 31:S12-S54, 2008
7. American Cancer Society, *Cancer Prevention and Early Detection Worksheet for Men*, [www.cancer.org](http://www.cancer.org)
8. American Cancer Society, *Cancer Prevention and Early Detection Worksheet for Women*, [www.cancer.org](http://www.cancer.org)

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- <sup>1</sup> Risk factors include: family history of premenopausal breast cancer (*mother or sister*) and personal history of breast, ovarian, or endometrial cancer.
- <sup>2</sup> Pap test may be performed at 3-year intervals only after 3 consecutive negative results within 5 years and age 30 or older. Risk factors include: failure to receive regular Pap tests; history of cervical tumors; infection with HPV (*human papillomavirus*) or other sexually transmitted diseases; high-risk sexual behavior; and HIV/AIDS.
- <sup>3</sup> The option to omit Pap test after age 65 may be offered if there is documented evidence of consistently negative results and no new sexual partner.
- <sup>4</sup> Risk factors include: diagnosis in a first-degree relative under age 60 or 2 such relatives of any age; specific genetic syndromes; inflammatory bowel disease; and noncancerous polyps. High-risk patients should be screened more frequently using complete colonoscopy at clinician/patient discretion.
- <sup>5</sup> Each of the screening strategies has advantages and disadvantages. Screen patients after discussion of the effectiveness, strength of evidence, risks, and complexity of each testing strategy to ensure an informed choice.
- <sup>6</sup> Risk factors include family history and African-American ancestry.
- <sup>7</sup> Risk factors include: age; personal history of skin cancer or repeated sunburns early in life; family history; certain types and large number of moles; light skin, light hair, and light eye color; sun-sensitive skin; chronic exposure to sun.
- <sup>8</sup> Risk factors include: inconsistent use of condoms and new or multiple sex partners since last test; history of and/or current sexually transmitted infection; partner has other sexual partner(s).
- <sup>9</sup> Risk factors include: history of and/or current infection with another sexually transmitted infection; having more than one sexual partner within the past 6 months; exchanging sex for money or drugs; and men having sex with other men.
- <sup>10</sup> Risk factors for HCV infection include current or past intravenous drug use, transfusion before 1990, dialysis, being a child of an HCV infected mother, high-risk sexual behavior (particularly sex with someone infected with HCV) and the use of illegal drugs, such as cocaine or marijuana
- <sup>11</sup> Risk factors include: having received blood or blood products before 1985; men having sex with other men; drug abuse; history of prior sexually transmitted infections; new or multiple sex partners; and inconsistent use of condoms.
- <sup>12</sup> Persons at risk include: close contacts of persons known or suspected to have TB; having HIV infection; coming from a country where TB is very common; having injected illicit drugs; living in U.S. where TB is more common (*e.g., shelters, migrant farm camps, prisons*); health care worker; or spending time with others with these risk factors.
- <sup>13</sup> If BMI  $\geq 25$ , then as a general rule, an unhealthy waist circumference if  $>35$  in. (women) or  $>40$  in. (men)
- <sup>14</sup> High risk includes family history of premature heart disease or hyperlipidemia; hypertension; low HDL; diabetes; tobacco use; and age.
- <sup>15</sup> Risk factors include: age; first-degree relative with diabetes; physical inactivity; race/ethnicity (African American, Hispanic, Native American, Asian); high blood pressure; history of vascular disease; elevated cholesterol/lipid levels; history of gestational diabetes or birth of a baby  $> 9$  lbs; impaired glucose tolerance; or polycystic ovary syndrome.
- <sup>16</sup> Risk factors include age, lower body weight ( $< 127$  lb.), no current use of estrogen therapy, race (Caucasian, Asian)
- <sup>17</sup> Risk factors include: age & sex (men  $> 40$ , postmenopausal women), diabetes, elevated total cholesterol levels, low levels of high-density lipoprotein (HDL) cholesterol, elevated blood pressure, family history (in younger adults), and smoking
- <sup>18</sup> "At risk" includes: persons with chronic liver disease, including persons with hepatitis B and C; injecting and non-injecting drug users; men who have sex with men; persons with clotting-factor disorders; food handlers when health authorities or private employers determine vaccination to be appropriate; persons who work with hepatitis A virus in experimental lab settings.
- <sup>19</sup> High risk includes: household contacts and sex partners of HBsAg-positive persons; injecting drug users; sexually active persons not in a long-term, mutually monogamous relationship; men who have sex with men; persons with HIV or a recently diagnosed STD; persons receiving hemodialysis and those with renal disease that may result in dialysis; healthcare personnel and public safety workers who are exposed to blood; clients and staff of institutions for the developmentally disabled; inmates of long-term correctional facilities; persons with chronic liver disease; certain international travelers.
- <sup>20</sup> At risk includes: persons: with medical problems, with any condition that compromises respiratory function, living in chronic care facilities, who are working or living with at-risk people, who are healthcare personnel, who are household contacts and caregivers of children ages 0-59m, living in institutional settings (*e.g. students in dormitories*)
- <sup>21</sup> High-risk includes healthcare personnel, students entering post-secondary educational institutions, international travellers
- <sup>22</sup> Persons who have chronic illness or other risk factors, including chronic cardiac or pulmonary disease, chronic liver disease, alcoholism, diabetes, CSF leak, as well as people living in special environments or social settings (including Alaska Natives and certain American Indian populations). Those at highest risk of fatal pneumococcal infection are persons with anatomic asplenia, functional asplenia, or sickle cell disease; immunocompromised persons including those with HIV infection, leukemia, lymphoma, Hodgkin's disease, multiple myeloma, generalized malignancy, chronic renal failure, or nephrotic syndrome; persons receiving immunosuppressive chemotherapy (including corticosteroids); those who received an organ or bone marrow transplant; and candidates for or recipients of cochlear implants.