This guideline targets asymptomatic adults seeking health care who would benefit from preventive services. This resource is intended to assist in the prioritization of screening maneuvers, tests and counseling opportunities. It is not intended to diagnose or treat any condition. Nothing in these guidelines is meant to preclude more extensive screening for people with higher than average risks. These guidelines are not a substitute for clinical judgment.

### ALL ADULTS

**History & Physical**

| All CCHP Members | need an Initial Health Assessment (IHA) within 120 days of enrollment, which includes 1) complete History and Physical, 2) preventive care, 3) education, 4) counseling, and 5) health risk assessment using the “Staying Healthy” Assessment tool, available in English, Spanish, Chinese, Hmong, Lao, Russian, and Vietnamese, at [http://www.dhcs.ca.gov/formsandpubs/forms/Pages/StayingHealthy.aspx](http://www.dhcs.ca.gov/formsandpubs/forms/Pages/StayingHealthy.aspx) (accessed 1.25.2011) |

**Height, Weight, BMI, and BP**

| All Adults | Height once, weight annually. Screen for obesity using BMI (Body Mass Index). USPSTF 2003 (B). Screen blood pressure annually age 18 and older. USPSTF 2007 (A). |

**Alcohol Use**

| All Adults | Screen and offer behavioral counseling interventions to reduce alcohol misuse. USPSTF 2004 (B). |

**Aspirin**

- Men age 45 to 79 years when the potential benefit due to a reduction in myocardial infarctions outweighs the potential harm due to an increase in gastrointestinal hemorrhage. USPSTF 2009 (A). Women age 55 to 79 years when the potential benefit of a reduction in ischemic strokes outweighs the potential harm of an increase in gastrointestinal hemorrhage. USPSTF 2009 (A).
- Recommend against the use of aspirin for stroke prevention in women younger than 55 years and for myocardial infarction prevention in men younger than 45 years. USPSTF 2009 (D).

Aspirin provides differential benefits for men as compared to women. Primary prevention studies of aspirin have found the following:

<table>
<thead>
<tr>
<th>Aspirin use in <strong>men</strong></th>
<th>Aspirin use in <strong>women</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>32% relative risk reduction for MI</td>
<td>17% relative risk reduction for strokes</td>
</tr>
<tr>
<td>No effect on stroke or all-cause mortality</td>
<td>No effect on MI or all-cause mortality</td>
</tr>
</tbody>
</table>

**MI Risk Factors for Men:**

| Age. |
| Diabetes. |
| Total cholesterol level. |
| High density lipoprotein (HDL) cholesterol level. |
| High blood pressure. |

**Stroke Risk Factors for Women:**

| Age. |
| Atrial fibrillation. |
| Coronary heart disease. |
| Left ventricular hypertrophy. |
| High blood pressure. |
| Smoking. |

**Tool to calculate 10-year coronary heart disease (CHD) risk in men:**


**Tool to calculate 10-year stroke risk in women:**

[http://www.westernstroke.org](http://www.westernstroke.org)
Harms from aspirin include the risks of serious upper GI bleeding and hemorrhagic stroke. An individual's risk for GI bleeding from aspirin increases with age:

<table>
<thead>
<tr>
<th>Age</th>
<th>Risk of serious upper GI complications over 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
</tr>
<tr>
<td>&lt;60</td>
<td>8/1,000</td>
</tr>
<tr>
<td>60-69</td>
<td>24/1,000</td>
</tr>
<tr>
<td>70-79</td>
<td>36/1,000</td>
</tr>
</tbody>
</table>

The concomitant use of nonsteroidal antiinflammatory drugs (NSAIDs) with aspirin increases the risk of serious GI complications by a factor of 3-4. Prior GI ulcer, GI bleeding, or GI pain also increases risk by a factor of 2-3.

Aspirin increases the risk of hemorrhagic stroke in men by a factor of 1.7 but does not appear to increase this risk in women. This risk does not increase with age.

10-year CHD risk levels at which the number of cardiovascular disease events prevented is closely balanced to the number of serious bleeding events:

<table>
<thead>
<tr>
<th>Age</th>
<th>Men 10-Year CHD Risk, %</th>
<th>Age</th>
<th>Women 10-Year CHD Risk, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>45-59 y</td>
<td>≥4</td>
<td>55–59 y</td>
<td>≥3</td>
</tr>
<tr>
<td>60–69</td>
<td>≥9</td>
<td>60–69 y</td>
<td>≥8</td>
</tr>
<tr>
<td>70–79</td>
<td>≥12</td>
<td>70–79 y</td>
<td>≥11</td>
</tr>
</tbody>
</table>

Shared decision making is strongly encouraged with persons whose risk is close to (either above or below) these estimates of 10-year risk levels. As the potential cardiovascular disease reduction benefit increases above harms, the recommendation to take aspirin should become stronger. Accessed 10 February 2011 at [http://www.ahrq.gov/clinic/pocketgd1011/gcp10s2afig2.htm](http://www.ahrq.gov/clinic/pocketgd1011/gcp10s2afig2.htm)

- Risk assessment for coronary heart disease should include ascertainment of risk factors: age, diabetes, total cholesterol levels, high-density lipoprotein cholesterol levels, blood pressure, and smoking. Available tools provide estimations of coronary heart disease risk (such as the calculator available at [http://hp2010.nhlbihin.net/atpiii/calculator.asp](http://hp2010.nhlbihin.net/atpiii/calculator.asp)).

**Cholesterol**

**Men**: age ≥35, **Women**: ≥45: Screen cholesterol. USPSTF 2008 (A).

**High Risk Men and Women 20 and above**: Screen cholesterol. USPSTF 2008 (B).

1. **Screen Coronary Heart Disease (CHD)** Risk equivalent patients who have the following conditions:
   - Abdominal aortic aneurysm
   - Clinical CHD
   - Diabetes
   - Symptomatic carotid artery disease
   - Peripheral arterial disease
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2. Calculate risk in adults with 2 or more of the following Major Risk Factors:
   - Age (men 45 years; women 55 years)  
   - Cigarette smoking  
   - Family history of premature CHD (CHD in male first degree relative <55 years; CHD in female first degree relative <65 years)  
   - Hypertension (BP 140/90 OR on treatment with antihypertensive medication)  
   - Low HDL cholesterol (<40)
      - HDL < 60 mg/dL counts as a "negative" risk factor

**Screen**
- High risk every ≤ 1 year, Moderate risk q 2 years, Low risk q 5 years. NCEP 2002 (expert opinion).

- Risk assessment for coronary heart disease should include ascertainment of risk factors: age, diabetes, total cholesterol levels, high-density lipoprotein cholesterol levels, blood pressure, and smoking. Available tools provide estimations of coronary heart disease risk (such as the calculator available at [http://hp2010.nhlbihin.net/atpiii.calculator.asp](http://hp2010.nhlbihin.net/atpiii.calculator.asp)).
- Drug therapy is usually more effective than diet alone in improving lipid profiles, but choice of treatment should consider overall risk, costs of treatment, and patient preferences. Guidelines for treating lipid disorders are available from the National Cholesterol Education Program of the National Institutes of Health: [http://www.nhlbi.nih.gov/about/ncep/](http://www.nhlbi.nih.gov/about/ncep/)

| Colon Cancer | All adults age 50-75: recommending screening for colorectal cancer (CRC) using fecal occult blood testing, sigmoidoscopy, or colonoscopy ages 50-75 years. The risks, benefits, and appropriate screening intervals of these methods vary. USPSTF 2008 (A)  
**Adults age 76-85:** screening decision depends on life-expectancy and risk. USPSTF 2008 (C).  
**Adults older than 85:** recommend against screening. USPSTF 2008 (D).  
**High risk adults:** first degree relative with colon cancer before age 60, or 2 first degree relatives with colon cancer at any age start screening earlier. |
| Depression | All adults: screen for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow-up. USPSTF 2009 (B) |
| Diabetes Screen | Adults with sustained blood pressure (either treated or untreated) greater than 135/80 mm Hg: screen for type 2 diabetes. USPSTF 2008 (B) |
| HIV | **All ages 13-64:** Screen normal risk adults regardless of risk factors. CDC 2006. (C)  
**Adults at High risk for HIV infection:** Screen annually. USPSTF 2006 (A).  
**Pregnant women:** Screen at entry to prenatal care. USPSTF 2006 (A). |
| Hepatitis B | **Pregnant women:** Screen at entry to prenatal care. USPSTF 2009 (A).  
**Adults at High Risk for Chronic Hepatitis B, CDC 2008 (Expert Opinion):**  
  - persons born in geographic regions with HBsAg prevalence of ≥2% (Asia, Africa, Eastern Europe, the Middle East, and the Pacific Islands)  
  - US born persons not vaccinated as infants whose parents were born in geographic regions with HBsAg prevalence of ≥8%  
  - injection-drug users  
  - men who have sex with men  
  - persons with elevated ALT/AST of unknown etiology  
  - persons with selected medical conditions who require immunosuppressive therapy  
  - household contacts and sex partners of HBV-infected persons  
  - persons who are a source of blood or body fluid exposures that might warrant postexposure prophylaxis (e.g., needlestick injury to a health care worker)  
  - persons infected with HIV  
**NOTE:** Screen Adults with high risk for Hepatitis B with HepB surface antigen (HBsAg) If screen negative, assess for immunity with HepB surface antibody. If high risk adults lack immunity, the CDC/ACIP recommends vaccinating them with the 3 dose series of Hepatitis B vaccine. |
| Tobacco Use | **All Adults:** Screen all adults and provide tobacco cessation interventions, especially for pregnant women. Document Tobacco use status. Counsel current and recent tobacco users periodically about quitting. USPSTF 2009 (A). |
| Tuberculosis | **Adults at High Risk:**  
  - Risk of recent TB infection:  
    1. Contact to active infectious TB case (confirm with CC Public Health TB Control 925-313-6745)  
    2. Immigration from high incidence country within past 5 yrs (Africa, Asia, SE Asia, Pacific Islands, Eastern Europe, Central America, most of S. America)  
    3. Travel to high incidence country for > 1 month within past 5 years. |
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4. Homeless within past year
5. Incarceration in correctional facility with past year
6. Residence in congregate living facility including residential drug treatment program
7. Street drug use
8. Health care/correctional facility worker with patient contact
   o Risk of progression to active TB
     1. HIV infection
     2. Lymphoma, leukemia
     3. Renal insufficiency
     4. Immunosuppressive therapy
     5. Poorly controlled diabetes mellitus
     6. Rapid weight loss, gastric bypass surgery, malnutrition
   o Choice of test
     A. Quantiferon (QFT) preferred:
        1. History of BCG vaccination, birth in country in which BCG vaccination is routine (QFT preferred as initial test; if TST positive, order QFT as confirmatory test)
        2. Unable, inconvenient, unlikely or costly to return for TST reading
        3. Last prior TB test was a QFT
     B. TST preferred:
        1. Children < 5 years age

CDC 2005 (expert opinion).

IMMUNIZATIONS

Influenza
All adults, especially those 50 and older, all prenatal patients, and those at high risk (those with chronic disease such as asthma, diabetes, heart disease, BMI ≥ 40, those in contact with children under 5 years, especially parents of newborns, and those in contact with people at high risk, such as caregivers and healthcare workers): Offer Influenza (Flu) vaccine annually. CDC/ACIP 2010 (expert opinion).

Measles, Mumps, Rubella (MMR)

Pneumonia (Pneumovax)
All adults 65 and older, and to all adults at increased risk for pneumococcal disease, including all people who use tobacco, or who have asthma, chronic renal disease, HIV, malignancies, or are on steroid treatment: Offer 23 valent Pneumovax. CDC/ACIP 2010 (expert opinion).

Tetanus–Diphtheria (Td)
Td–acellular Pertussis (Td=Adacel/Boostrix)
All Adults: Complete primary series of Tetanus toxoids (Td). Give tetanus boosters every 10 years or once at age 50. Pregnancy is not a contraindication to Tdap. Give Td rather than Tdap if Tdap is not available, and for adults who already received Tdap
All persons ages 11 and above: Offer a SINGLE one-time dose of Tdap (ADACEL or BOOSTRIX) to substitute for one of the Td boosters, especially persons in contact with newborns. May give Tdap at any interval after last Td booster as brief as 1-18 months. California Department of Public Health, Immunization Branch 2010 (expert opinion).

Varicella and Shingles (Varivax & Zostavax)
All persons born in the United States after 1979, without evidence of immunity to varicella: give varicella vaccine.
Evidence of immunity includes any of the following:
- Documentation of two doses of varicella vaccine
- Blood tests that confirm immunity to varicella
- Born in the United States before 1980

Exceptions:
- Healthcare personnel (HCP) born in the U.S. before 1980 who do not meet any of the criteria above should be tested or given the 2-dose vaccine series. If testing indicates they are not immune, give the 1st dose of varicella vaccine immediately. Give the 2nd dose 4–8 wks later.
- Pregnant women born in the U.S. before 1980 who do not meet any of the criteria above should either 1) be tested for susceptibility during pregnancy and if found susceptible, given the 1st dose of varicella vaccine postpartum before hospital discharge, or 2) not be tested for susceptibility and given the 1st dose
## 2011 Prevention Guidelines For Adults

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<table>
<thead>
<tr>
<th>WOMEN</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breast Cancer - Mammography</strong></td>
<td><strong>Women ages 50-74:</strong> Screening mammography every 2 years, with or without Clinical Breast Exam (CBE). The decision to start regular, biennial screening mammography before the age of 50 years should be an individual one and take patient context into account, including the patient’s values regarding specific benefits and harms. Continue &gt;74 depending on risks and life expectancy. USPSTF 2009 (B). [NOTE: DHCS recommends clinical breast exams annually for women ≥40 years of age.]</td>
</tr>
<tr>
<td><strong>Breast Cancer – BRCA Mutation Genetic Counseling</strong></td>
<td><strong>Women with family history associated with high risk for BRCA 1 or BRCA 2 genes:</strong> Refer for genetic counseling and evaluation for BRCA test.</td>
</tr>
<tr>
<td></td>
<td>▪ Breast cancer diagnosed at an early age</td>
</tr>
<tr>
<td></td>
<td>▪ Bilateral breast cancer</td>
</tr>
<tr>
<td></td>
<td>▪ History of both breast and ovarian cancer</td>
</tr>
<tr>
<td></td>
<td>▪ Presence of breast cancer in one or more male family members</td>
</tr>
<tr>
<td></td>
<td>▪ Multiple cases of breast cancer in the family</td>
</tr>
<tr>
<td></td>
<td>▪ Both breast and ovarian cancer in the family</td>
</tr>
<tr>
<td></td>
<td>▪ One or more family members with two primary cancers</td>
</tr>
<tr>
<td></td>
<td>▪ Ashkenazi Jewish background.</td>
</tr>
<tr>
<td></td>
<td><strong>Normal risk women:</strong> Screening not recommended. USPSTF 2005 (B).</td>
</tr>
<tr>
<td><strong>Cervical Cancer - Pap Smear</strong></td>
<td><strong>Women age 21-65:</strong> Pap smears every 2 years age 20-29. Repeat every 3 years above age 30. May stop in women age &gt; 65 with 3 consecutive normal results or after hysterectomy for benign indications. USPSTF 2006 (A). ACOG 2009</td>
</tr>
<tr>
<td><strong>Chlamydia</strong></td>
<td><strong>All sexually active women age ≤25:</strong> Screen for Chlamydia. Use urine testing if the patient is not scheduled for pelvic examination. USPSTF 2007 (A), CDC - STD 2006.</td>
</tr>
<tr>
<td><strong>Human Papilloma Virus Vaccine (HPV)</strong></td>
<td><strong>Females age 9 through 26:</strong> Offer to those who have not been previously vaccinated or who have not completed the full series. CDC/ACIP 2010 (expert opinion).</td>
</tr>
<tr>
<td><strong>Osteoporosis</strong></td>
<td><strong>All women aged ≥ 65 and in younger women whose fracture risk is equal to or greater than that of a 65-year-old white woman who has no additional risk factors:</strong> Determine risk using online FRAX calculator at <a href="http://www.shef.ac.uk/FRAX/">http://www.shef.ac.uk/FRAX/</a>. High Risk= FRAX risk for fracture in 65 year old woman with no other risk factors is 9.3%. Screen using DEXA or bone densitometry testing. USPSTF 2011 (B).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEN</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abdominal Aortic Aneurysm (AAA)</strong></td>
<td><strong>Men aged 65 to 75 who have ever smoked:</strong> Screen once for Abdominal Aortic Aneurysm with ultrasonography. USPSTF 2005 (B).</td>
</tr>
<tr>
<td><strong>Prostate Cancer</strong></td>
<td><strong>Men younger than age 75:</strong> No recommendation. Evidence insufficient that screening or treatment benefits men with prostate cancer. Discuss and document discussion of prostate cancer screening with men 50 years or older, and earlier with high risk patients as appropriate. USPSTF 2008 (I).</td>
</tr>
<tr>
<td></td>
<td><strong>Men age ≥75: Recommend against screening.</strong> USPSTF 2008 (D)</td>
</tr>
</tbody>
</table>
USPSTF grades its recommendations according to one of five classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms). CCHP and CCRMC generally recommend interventions with grade A or B ratings, and recommend against interventions with grade D ratings.

A.— The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.

B.— The USPSTF recommends that clinicians provide [the service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

C.— The USPSTF makes no recommendation for or against routine provision of [the service]. The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.

D.— The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.

I.— The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that [the service] is effective is lacking, of poor quality, or conflicting and the balance of benefits and harms cannot be determined.

REFERENCE CITATIONS

ADULT PREVENTION GUIDELINES GROUP

The Prevention Guidelines for Adults Group consisted of CCRMC primary providers and CCHP medical consultants.

Participants included: Judith Bliss MD, Joseph Carey MD, Jan Diamond MD, Erika Jenssen RN, Troy Kaji MD, John Lee MD

Reviewers included: CCRMC Ambulatory Policy Committee 17 February 2011, CCHP Quality Council 24 February 2011

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