



## Prevention, Diagnosis and Management of Coronary Artery Disease

### **Purpose**

To identify and promote the essential elements to preventing, diagnosing, and managing coronary artery disease in adults.

### **Key Recommendations**

- Conduct aggressive risk factor management for coronary artery disease beginning at age 20.
- Advise patients about importance of lifestyle as the foundation for risk reduction prior to and during cholesterol-lowering therapy: heart healthy diet; maintenance of a healthy weight; regular aerobic physical activity; avoidance of tobacco products (including electronic nicotine delivery systems [ENDS])/cessation of tobacco use and reducing exposure to second-hand smoke.
- Initiate beta-blockers, ACE inhibitors, and antiplatelet agents. ACE inhibitors and antiplatelet agents should be considered for indefinite use if no contraindication. The duration of therapy with beta-blockers must be weighed against potential for adverse effects associated with these agents including heart failure and cardiogenic shock.
- ASA Therapy:
  - 1) *Primary Prevention* – The Food and Drug Administration does not recommend aspirin therapy as preventive medicine in people who have not already had a heart attack, stroke or other cardiovascular conditions. The USPSTF recommends low dose aspirin for persons aged 50-59 years for primary prevention of cardiovascular disease who have a 10% or greater 10 year CVD risk, are not at increased risk for bleeding, have a life expectancy of at least 10 years, and are willing to take low-dose aspirin daily for at least 10 years.  
As of 2015, the United States Preventive Services Task Force updated its 2009 recommendation for Aspirin for the Prevention of Cardiovascular Disease – Primary Prevention:

Men, Age 45-79	The USPSTF recommends the use of aspirin for 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. See the Clinical Considerations section for discussion of benefits and harms.
Women, Age 55-79	The USPSTF recommends the use of aspirin for 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. See the Clinical Considerations section for discussion of benefits and harms.
Men and Women, 80 Years and Older	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of aspirin for cardiovascular disease prevention in men and women 80 years or older. See the Clinical Considerations section for suggestions for practice regarding the statement.
Women Younger than 55 (Stroke), Men Younger than 45 (MI)	The USPSTF recommends 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.

- 2) *Secondary Prevention* – 2 or more risk factors, especially those with CHD 10 yr risk of  $\geq 10\%$ , and no contraindications, prescribe 81-162 mg/QD.
- Monitor blood pressure. Treat to blood pressure target levels: <130/80 mm Hg and <140/90 mm Hg with no diabetes and no kidney disease.<sup>a</sup>  
NOTE: The 2017 ACA/AHA Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults classifies hypertension as a BP reading of 130/80 mm Hg or higher.

a. ACC/AHA Task Force on Clinical Practice Guidelines November 13, 2017

Guidelines are intended to be flexible. They serve as reference points or recommendations, not rigid criteria. Guidelines should be followed in most cases, but there is an understanding that, depending on the patient, the setting, the circumstances, or other factors, care can and should be tailored to fit individual needs.