

## Effectiveness-Based Guidelines for the Prevention of Cardiovascular Disease in Women

The following is a synopsis of “Effectiveness-Based Guidelines for the Prevention of Cardiovascular Disease in Women 2011 Update: A Guideline from the American Heart Association,” published in the February 2011 issue of *Circulation*.



### What is already known on this topic?

In 1999, the American Heart Association (AHA) published the first set of clinical recommendations for cardiovascular disease (CVD) prevention in women. These recommendations were expanded in 2004 and then updated in 2007. Although substantial progress has been made in the awareness, treatment, and prevention of CVD in women since 1999, the burden remains considerable. In 2007, 421,918 women in the United States died from CVD, and black women remain at significantly higher risk for CVD than their white counterparts (286.1 per 100,000 persons versus 205.7 per 100,000 persons). Barriers to survival for women who experience acute cardiovascular events include lack of access to primary care services, non-adherence to therapies, and lack of health care provider knowledge and skill in implementing the AHA recommendations.

### What is added by this article?

This article highlights AHA's 2011 guidelines for the prevention of CVD in women. New guideline changes and considerations include the following:

- ▶ A new concept of “ideal cardiovascular health” is defined as “the absence of clinical CVD and the presence of all ideal levels of total cholesterol (<200 mg/dL), blood pressure (<120/80 mm Hg), and fasting blood glucose (<100 mg/dL), as well as adherence to healthy behaviors, including having a lean body mass index (<25 kg/m<sup>2</sup>), abstinence from smoking, participation in physical activity at recommended levels, and pursuit of a Dietary Approaches to Stop Hypertension [DASH]-like eating pattern.”
- ▶ Guideline adaptations reflect an understanding of the difficulty of following lifestyle and medical recommendations for many women, which limits effectiveness. Barriers to adherence include family and caretaking responsibilities, stress, sleep deprivation, fatigue, and lack of personal time.
- ▶ Antihypertensive treatments and smoking cessation appear to be cost-effective interventions for women.
- ▶ International applicability of the guidelines is critical because CVD affects women across the globe.

---

## What are the implications for public health practice?

Implementation of evidence-based guidelines is fundamental to improving CVD preventive care in women. However, adherence to CVD prevention guidelines is limited by clinician, patient, and systemic barriers. Clinician barriers include limited time for health care visits, patients with complex comorbidities, lack of staff for teaching and follow-up, lack of training in patient counseling, and lack of reimbursement for prevention and patient education. Evidence shows that interventions that are multifaceted, interactive, and incorporate decision systems and feedback are most effective.

To help identify a woman's CVD risk and determine the most effective diagnostic and preventive interventions, additional research is needed to evaluate potential exposures to CVD risk factors, specific cardiovascular events, and the varied interactions with the medical system that a woman might have

during her lifetime. In addition, further clarification is needed regarding other factors (e.g., autoimmune diseases, depression, and other psychosocial risk factors) that may contribute to CVD in women, with the aim of designing more effective interventions that may improve outcomes and adherence to therapy.

## What are the suggestions for policy change?

- ▶ Hospitals and other providers can implement interventions for health care professionals to improve adherence to CVD guidelines.
- ▶ Health care providers can adopt a policy that provides patient education using a team-based approach, which incorporates the patient and family members along with key health care professionals. Patient education should be sensitive to each individual's culture and socioeconomic status.

---

## Resources

American Heart Association  
<http://www.americanheart.org>

Office on Women's Health, National Women's Health Information Center  
*Heart Health & Stroke Web Site for Women*  
<http://www.womenshealth.gov/heart-stroke>

National Heart, Lung, and Blood Institute  
<http://www.nhlbi.nih.gov>

## Citation

Mosca L, Benjamin EJ, Berra K, Bezanson JL, Dolor RJ, Lloyd-Jones DM, et al. Effectiveness-based guidelines for the prevention of cardiovascular disease in women—2011 update: A guideline from the American Heart Association. *Circulation*. 2011;123:1–20.

National Center for Chronic Disease Prevention and Health Promotion  
Division for Heart Disease and Stroke Prevention



**For more information please contact Centers for Disease Control and Prevention**  
1600 Clifton Road NE, Atlanta, GA 30333  
**Telephone:** 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348  
**E-mail:** [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) **Web:** [www.cdc.gov](http://www.cdc.gov)