AHA/ACC Guidelines for Preventing Heart Attack and Death in Patients With Atherosclerotic Cardiovascular Disease: 2001 Update

A Statement for Healthcare Professionals From the American Heart Association and the American College of Cardiology

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Since the original publication (in 1995) of the American Heart Association (AHA) consensus statement on secondary prevention, which was endorsed by the American College of Cardiology (ACC), important evidence from clinical trials has emerged that further supports the merits of aggressive risk reduction therapies for patients with atherosclerotic cardiovascular disease. As noted in that statement, aggressive risk factor management clearly improves patient survival, reduces recurrent events and the need for interventional procedures, and improves the quality of life for these patients.

The compelling evidence from recent clinical trials was the impetus to revise the 1995 guidelines (Table). As examples, the many lipid reduction trials have generated significant changes in the National Heart, Lung, and Blood Institute’s Adult Treatment Panel III report. This report further defined target cholesterol levels, expanded indications for drug treatment, and initiated therapy earlier. Accumulating β-blocker data have resulted in broader indications for a larger patient group. The Heart Outcomes Prevention Evaluation (HOPE) trial has demonstrated the benefit of ACE inhibitor therapy in high-risk patients with cardiovascular disease without a history of an acute event. Further data from ongoing trials should provide insight into the potential benefits of treating lower risk patients with combined therapies. The Clopidogrel versus Aspirin in Patients at Risk of Ischemic Events (CAPRIE) trial has provided evidence for clopidogrel benefit in certain patients. Diabetes management recommendations have been updated to include recent guidelines from the American Diabetes Association for risk factor management of diabetics and the growing body of evidence showing diabetics at high risk for cardiovascular events. The Heart and Estrogen/progesterin Replacement Study (HERS) documented that hormone replacement therapy is ineffective for secondary prevention. The writing group revising this document also considered other important trials and reports, and they are included in the selected reading list.

In the 6 years since the guidelines were first published, 2 other developments have made them even more important in clinical care: the aging of the population continues to expand the number of patients living with a diagnosis of cardiovascular disease (now estimated at 12.4 million), and the multiple studies of the actual use of these recommended therapies in appropriate patients, while showing slow improvement, have continued to support the discouraging conclusion that a large proportion of patients in whom therapies are indicated are not receiving those therapies in actual clinical practice. The AHA and ACC continue to urge that all medical care settings in which these patients are managed organize a specific plan to identify appropriate patients, provide practitioners with useful reminder clues based on the guidelines, and continuously assess the success achieved in providing all appropriate therapies to all of the patients who can benefit from them.

Selected Reading

1. Adult Treatment Panel III, Executive summary of the third report of the National Cholesterol Education Program (NCEP) Expert Panel on...
### AHA/ACC Secondary Prevention for Patients With Coronary and Other Vascular Disease: 2001 Update

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<th>Goals</th>
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| **Smoking:**  
Goal complete cessation | Assess tobacco use. Strongly encourage patient and family to stop smoking and to avoid secondhand smoke. Provide counseling, pharmacological therapy, including nicotine replacement and bupropion, and formal smoking cessation programs as appropriate. |
| **BP control:**  
Goal <140/90 mm Hg or <130/85 mm Hg if heart failure or renal insufficiency | Initiate lifestyle modification (weight control, physical activity, alcohol moderation, moderate sodium restriction, and emphasis on fruits, vegetables, and low-fat dairy products) in all patients with blood pressure ≥130 mm Hg systolic or 80 mm Hg diastolic. Add blood pressure medication, individualized to other patient requirements and characteristics (ie, age, race, need for drugs with specific benefits) if blood pressure is not <140 mm Hg systolic or 90 mm Hg diastolic or if blood pressure is not <130 mm Hg systolic or 85 mm Hg diastolic for individuals with heart failure or renal insufficiency (<80 mm Hg diastolic for individuals with diabetes). |
| **Lipid management:**  
Primary goal LDL <100 mg/dL | Start dietary therapy in all patients (<7% saturated fat and <200 mg/d cholesterol) and promote physical activity and weight management. Encourage increased consumption of omega-3 fatty acids. Assess fasting lipid profile in all patients, and within 24 hr of hospitalization for those with an acute event. If patients are hospitalized, consider adding drug therapy on discharge. Add drug therapy according to the following guide: |

| LDL <100 mg/dL (baseline or on-treatment)  
Further LDL-lowering therapy not required  
Consider fibrate or niacin (if low HDL or high TG) | LDL 100–129 mg/dL (baseline or on-treatment)  
Therapeutic options:  
- Intensify LDL-lowering therapy (statin or resin*)  
- Fibrate or niacin (if low HDL or high TG)  
- Consider combined drug therapy (statin+fibrate or niacin) (if low HDL or high TG) |
| LDL ≥130 mg/dL (baseline or on-treatment)  
Intensify LDL-lowering therapy (statin or resin*)  
Add or increase drug therapy with lifestyle therapies |

### BP indicates blood pressure; TG, triglycerides; BMI, body mass index; HbA1c, major fraction of adult hemoglobin; MI, myocardial infarction; and CHF, congestive heart failure.

*The use of resin is relatively contraindicated when TG >200 mg/dL.
†Non-HDL cholesterol=total cholesterol minus HDL cholesterol.


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