

# Stroke

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## AHA/ASA GUIDELINE

# Guidelines for the Prevention of Stroke in Patients With Stroke and Transient Ischemic Attack

## A Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association

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**ABSTRACT:** The aim of this updated guideline is to provide comprehensive and timely evidence-based recommendations on the prevention of future stroke among survivors of ischemic stroke or transient ischemic attack. The guideline is addressed to all clinicians who manage secondary prevention for these patients. Evidence-based recommendations are provided for control of risk factors, intervention for vascular obstruction, antithrombotic therapy for cardioembolism, and antiplatelet therapy for noncardioembolic stroke. Recommendations are also provided for the prevention of recurrent stroke in a variety of specific circumstances, including aortic arch atherosclerosis, arterial dissection, patent foramen ovale, hyperhomocysteinemia, hypercoagulable states, antiphospholipid antibody syndrome, sickle cell disease, cerebral venous sinus thrombosis, and pregnancy. Special sections address use of antithrombotic and anticoagulation therapy after an intracranial hemorrhage and implementation of guidelines.

**Key Words:** AHA Scientific Statements ■ atrial fibrillation ■ carotid stenosis ■ hypertension ■ ischemia ■ ischemic attack, transient ■ prevention ■ stroke

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Each year in the United States, >690 000 adults experience an ischemic stroke.<sup>1</sup> The enormous morbidity of ischemic stroke is the result of interplay between the resulting neurological impairment, the emotional and social consequences of that impairment, and the high risk for recurrence. An additional large number of US adults, estimated at 240 000, will experience a transient ischemic attack (TIA).<sup>2</sup> Although a TIA leaves no immediate impairment, affected individuals have a high risk for future ischemic events, particularly in the days and weeks immediately after symptom resolution.<sup>3</sup> On average, the annual risk for future ischemic stroke after an initial ischemic stroke or TIA is ≈3% to 4%.<sup>4</sup> Recent clinical trials of patients with noncardioembolic ischemic stroke suggest the risk may be as low as 3%, but these data probably underestimate the community-based rate.<sup>5–9</sup> The estimated risk for an individual patient will be