Each year an estimated 795,000 U.S. citizens suffer a new or recurrent stroke and about 144,000 of those people die as a result of their stroke. When considered separately from other cardiovascular diseases, stroke ranks number three among all causes of death. Only diseases of the heart and cancer cause more deaths. In addition to stroke’s tremendous morbidity and mortality, it is also a leading cause of serious, long-term disability.

The American Heart Association/American Stroke Association works to create and implement the components of coordinated statewide stroke systems of care to improve the treatment of stroke patients nationwide. Time is of the essence in stroke treatment because lost time relates directly to diminished capacity related to brain function. A system approach, once fully implemented, means that patients will have access to the most advanced treatment in centers best designed and equipped to deal with the critical and time-sensitive needs of stroke patients. The formation of a stroke system of care in every state will eventually provide uniform statewide care systems that will serve to reduce death and disability from this devastating disease.

Major advances in stroke prevention, treatment and rehabilitation have been made in recent decades but unfortunately, significant barriers exist to translating these advances into actual patient care. The goal of a stroke system of care is to help eliminate these barriers through the coordination of stroke care along an entire continuum of care, from primary prevention to rehabilitation. The key elements of a stroke system of care, as set forth in the association’s Recommendations for the Establishment of Stroke Systems of Care, include:

- Primordial and primary prevention;
- Community education;
- Notification and response of emergency medical services for stroke;
- Acute treatment for stroke;
- Sub-acute stroke care and secondary prevention for stroke;
- Rehabilitation of stroke patients; and
- Continuous quality improvement initiatives.

A stroke system of care provides each patient seamless transition from one stage of care to the next with the highest quality at each step, including the ability to overcome barriers that might interfere with stroke care. By employing a systems approach to stroke care statewide, it becomes possible to analyze data from each step of the continuum of care and determine what measures of care work best. It is then possible to apply these findings across the region to improve care for all patients.

The association continues to coordinate state stroke systems implementation in each of the 50 states. This effort includes working with partners and stakeholders involved in stroke care to assess each state’s current level of stroke care, evaluate available resources, identify opportunities for improvement and implement needed improvements. Here are a few highlights of successful activities this past year:

- **In Arkansas**, the Acute Stroke Task Force, in coordination with the Arkansas Department of Health, approved utilizing Get With The Guidelines-Stroke as the state’s stroke registry. The state will allocate $180,000 in 2011 to implement the registry.
- **In Kentucky**, Senate Bill 1 was signed into law which requires the Cabinet for Health and Family Services to designate hospitals that have been certified by the Joint Commission as Primary Stroke Centers.
- **Massachusetts** advocates secured funding for the STOP Stroke program, a campaign to help raise awareness about the signs and symptoms of stroke.
- **In Montana** a model stroke telemedicine project was implemented which works to link rural hospitals to major stroke centers so rural patients will be able to receive care from stroke specialists.
- **Clark County, Nevada** approved stroke protocols, that adhere to American Stroke Association national recommendations, which include hospital designation based on joint commission certification and EMS training and transport protocols that will ensure that all stroke patients utilizing EMS services will be taken to the nearest primary stroke center.
- **Policies for data collection related to tracking stroke patient outcomes went into effect for all comprehensive and primary stroke centers in New Jersey.**
- **The Texas Department of State Health Services enacted regulations recognizing Primary Stroke Centers that are certified by the Joint Commission.**
- **Standardized pre-hospital EMS standing orders for stroke were created in the state of Vermont, which require that the same stroke scale be used statewide.**
- **Virginia enacted legislation that requires insurers to cover telemedicine services so those Virginians without local access to medical expertise in stroke will be able to receive assistance remotely.**

Implementation of stroke systems of care across the country will lead to improved stroke care assessment, treatment, prevention and awareness of stroke—all important efforts at reducing the third cause of death in this country and improving the health of Americans from coast to coast.