

# Stroke

## March 4, 2009

“Stroke is the third leading cause of death in America and the No. 1 cause of adult disability”

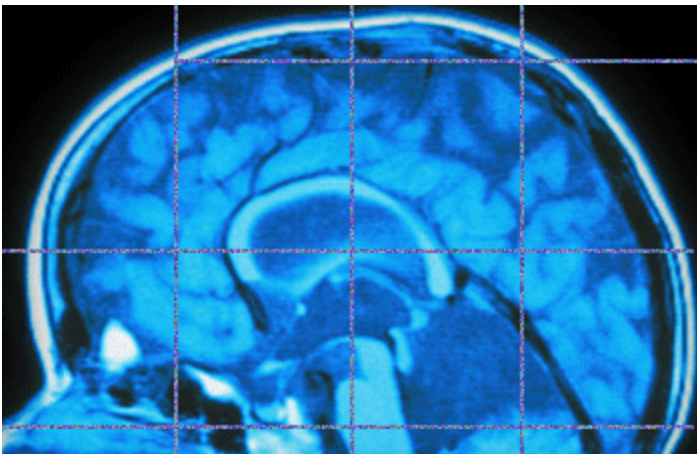
A stroke is the result of a disruption of the blood supply to the cells of the brain. The causes for this disruption can be categorized into two groups;

**Ischemic:** When there is an obstruction of blood flow to the brain, this form of stroke occurs. The blockage is a buildup of fatty deposits lining the blood vessel walls, called atherosclerosis. Obstruction that occurs because a blood clot forms in the brain is noted as a cerebral thrombosis. Cerebral embolism is an obstruction of brain blood vessels due to a clot that formed at a location outside the brain. Eighty three percent of strokes are ischemic. **Transient ischemic attacks (TIAs)** are “minor” or “warning” strokes that exhibit similar symptoms as the other strokes, but lasts for a shorter amount of time.

**Hemorrhagic:** This type of stroke occurs when a weakened blood vessel ruptures and bleeds into the brain. The accumulation of blood in the surrounding area compresses the brain tissue. When a blood vessel balloons into the surrounding tissue, it is called an aneurysm, and, if left untreated, could result in a rupture of that vessel. Malformations of blood vessel clusters could also cause ruptures and bleeding into the brain. This is called arteriovenous malformation.

There are characteristic symptoms for strokes. Sudden numbness or weakness, especially on one side of the body, sudden confusion, sudden trouble with vision and/or language skills, sudden difficulties with balance and coordination, or sudden severe headaches are all symptoms from a disruption of blood flow. Note the quick onset that these symptoms share. If the stroke affects the right brain, certain effects will be seen. There could be paralysis on the left side of the body, vision problems, quick or inquisitive behavior, or memory loss. If the left brain is affected, there could be paralysis on the right side of the body, speech or language problems, slow or cautious behavioral style, or memory loss. Vision is typically affected if the disruption occurs near the back of the brain.

There are three treatment stages for stroke: prevention, therapy immediately after the stroke, and post-stroke rehabilitation. Immediate therapy attempts to stop the effects of the stroke as it is occurring, whereas post-stroke therapy treats the disabilities that were a result of the stroke. Another treatment for stroke is drug therapy, using antithrombotics and thrombolytics.



There are many risk factors that increase the chance of a person having a stroke. These include both uncontrollable and controllable factors. Uncontrollable factors include age, gender, race, family history, and history of previous strokes or TIAs. Controllable factors include treatable diseases (**high blood pressure, atrial fibrillation, high cholesterol, and diabetes**) and lifestyle choices (**tobacco use, alcohol use, and obesity**).

**Expert on Strokes?** DSES is always looking for volunteers to help teach or give presentations!!

### Resources and Additional Information:

National Stroke Association; [www.stroke.org](http://www.stroke.org)

National Institute of Neurological Disorders and Stroke; <http://www.ninds.nih.gov/disorders/stroke/stroke.htm>

American Stroke Association; [www.strokeassociation.org](http://www.strokeassociation.org)