

## Stroke: The Basics

### WHAT IS STROKE?

There are two types of stroke: ischemic and hemorrhagic. Ischemic stroke is caused by blockage of a blood vessel supplying the brain. Hemorrhagic stroke is caused by bleeding into or around the brain. About 795,000 Americans experience a new or recurrent stroke each year.

### WHAT ARE THE WARNING SIGNS?

- ▶ Sudden numbness or weakness of the face, arm, or leg, especially on one side of the body
- ▶ Sudden confusion, trouble speaking or understanding
- ▶ Sudden trouble seeing in one or both eyes
- ▶ Sudden trouble walking, dizziness, loss of balance or coordination
- ▶ Sudden, severe headache with no known cause

Call 911 immediately if you are or someone you know is showing signs of having a stroke.

### WHAT ARE THE RISK FACTORS?

Risk factors that can be treated, changed, or controlled include high blood pressure, cigarette smoking, diabetes, carotid or other artery disease, peripheral artery disease, atrial fibrillation (irregular heartbeat), heart failure, sickle cell anemia, high cholesterol, poor diet, physical inactivity, and obesity. The following risk factors cannot be changed:

- ▶ **Prior stroke, transient ischemic attack (TIA), or heart attack:** The risk of stroke for someone who has already had one is many times that of a person who has not. A TIA produces stroke-like symptoms that may last from a few minutes to a few hours and resolve in less than 24 hours; it is also a predictor of stroke. And if you have had a heart attack, you are at higher risk of having a stroke.
- ▶ **Age:** The chance of having a stroke approximately doubles for each decade of life after age 55.
- ▶ **Sex:** Stroke is more common in men than in women. However, more than half of total stroke deaths occur in women. Use of birth control pills and pregnancy pose special stroke risks for women.
- ▶ **Race:** Compared to white Americans, African Americans are nearly twice as likely to have a first stroke, partly because they have higher risks of high blood pressure, diabetes, and obesity. Hispanic Americans' risk falls between the two. African Americans and Hispanics are more likely to die following a stroke than are whites.
- ▶ **Family history:** Stroke risk is greater if a parent, grandparent, sister, or brother has had a stroke. Rarely, strokes may be symptoms of genetic disorders, such as cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL).

### WHAT TREATMENTS ARE AVAILABLE?

The best treatment for stroke is prevention. That means treating underlying risk factors such as high blood pressure, atrial fibrillation, and diabetes. Otherwise, therapy involves quickly dissolving the blood clot if it's an ischemic stroke or stopping the bleeding if it's hemorrhagic. For certain types of stroke, catheter- or IV-based treatments or minimally invasive surgery to remove blood clots may help improve the chances of a positive recovery, if treatment is administered in a timely fashion.

### WHAT RESEARCH IS BEING DONE?

Current research by the National Institute of Neurological Disorders and Stroke ([ninds.nih.gov](http://ninds.nih.gov)) includes how risk factors contribute to stroke, how stroke damages the brain, the genetics of stroke, and ways to help the brain repair itself after stroke.

For more *Neurology Now* articles on stroke, go to [bit.ly/NN-Stroke](http://bit.ly/NN-Stroke).

For more resources and support, contact:

- ▶ American Stroke Association/American Heart Association: [strokeassociation.org](http://strokeassociation.org); 888-4-STROKE
- ▶ National Aphasia Association: [aphasia.org](http://aphasia.org); [naa@aphasia.org](mailto:naa@aphasia.org)
- ▶ National Stroke Association: [stroke.org](http://stroke.org); 800-STROKES (787-6537)

SOURCES: NATIONAL LIBRARY OF MEDICINE; NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE; NEUROLOGY NOW.