



Let's Talk About Ischemic Strokes and Their Causes

Did I have an ischemic stroke?

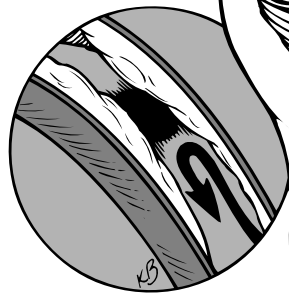
One way a stroke occurs is that blood vessels to the brain become narrowed or clogged, cutting off blood flow to brain cells. A stroke caused by lack of blood reaching part of the brain is called an ischemic (is-KEM-ik) stroke. (See figure.) High blood pressure is the most important risk factor for ischemic stroke that you can change.

You may have a few diagnostic tests before your doctor determines that you had an ischemic stroke. Ischemic strokes differ from hemorrhagic stroke in many ways:

- Ischemic strokes are the most common type of stroke and account for over 80 percent of all strokes.

- Symptoms develop over a few minutes or worsen over hours.
- Ischemic strokes are typically preceded by symptoms or warning signs that may include loss of strength or sensation on one side of the body, problems with speech and language or changes in vision or balance.
- Ischemic strokes usually occur at night or first thing in the morning.
- Often a TIA (transient ischemic attack) or "mini stroke" may give some warning of a major ischemic stroke.

Blocked artery in the brain prevents blood flow.



An ischemic stroke occurs when a clot or a mass clogs a blood vessel, cutting off the blood flow to a part of the brain.

Are all ischemic strokes the same?

There are three types of ischemic strokes.

- **Thrombotic strokes** are caused by a blood clot (thrombus) in an artery going to the brain. The clot blocks blood flow to part of the brain. Blood clots usually form in

arteries damaged by arteriosclerosis. This type of stroke accounts for about 60 percent of all strokes.

- **Embolic strokes** account for about 20 percent of all strokes. They're caused by

a wandering clot (embolus) that's formed elsewhere (usually in the heart or neck arteries). Clots are carried in the bloodstream and clog a blood vessel in or leading to the brain.

- **Systemic hypoperfusion** (low blood flow) occurs because of circulatory failure caused by the heart itself. The heart's pumping action fails and too little blood reaches the brain. This is how a heart attack may cause a stroke.

How are ischemic strokes treated?

Drugs and acute hospital care are all accepted ways to treat an ischemic stroke. Tissue plasminogen activator (tPA) and other clot-busting drugs are available for treatment,

but must be administered within a three-hour window. Medication may also be used to treat brain swelling that sometimes occurs after a stroke.






How can I learn more?

- Talk to your doctor, nurse or other healthcare professionals. Ask about other stroke topics. This is one of many *Let's Talk About Stroke* fact sheets available.
- For more information on stroke, or to receive additional fact sheets, call the American Stroke Association at 1-888-4-STROKE (1-888-478-7653) or visit us online at StrokeAssociation.org.
- If you or someone you know has had a stroke, call the American

Stroke Association's "Warmline" at 1-888-4-STROKE (1-888-478-7653), and:

- ✓ Speak with other stroke survivors and caregivers, trained to answer your questions and offer support
- ✓ Get information on stroke support groups in your area
- ✓ Sign up to get *Stroke Connection Magazine*, a free publication for stroke survivors and caregivers

What are the Warning Signs of Stroke?

-  **Sudden weakness or numbness 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 headaches with no known cause**



Learn to recognize a stroke.
Because time lost is brain lost.

Today there are treatments that can reduce the risk of damage from the most common type of stroke, but only if you get help quickly – within 3 hours of your first symptoms.

Call 9-1-1 immediately if you experience these warning signs!

Do you have questions for your doctor or nurse?

Take a few minutes to write your own questions for the next time you see your healthcare provider:

What can I do to help prevent another stroke?

The statistics in this kit were up to date at publication. For the latest statistics, see the Heart Disease and Stroke Statistics Update at americanheart.org/statistics.

The American Stroke Association is a division of the American Heart Association. Your contributions will support research and educational programs that help reduce disability and death from stroke.

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