# Warning Signs of a Stroke

**A stroke happens when part of the brain is damaged because of either the blockage of a blood vessel or the rupture of a blood vessel in the brain.**

## What Causes a Stroke?

A stroke can happen in one of 2 ways: a blood vessel in the brain can either get blocked (cutting off blood flow; called **ischemic stroke**) or start bleeding (called **hemorrhagic stroke**). Strokes caused by blockage are much more common than strokes caused by bleeding. Things that increase the risk of having a stroke include high blood pressure, high cholesterol, diabetes, smoking, an abnormal heart rhythm called **atrial fibrillation**, and lack of physical activity. Therefore, maintaining a healthy lifestyle and taking medications for any of these other medical conditions will lower your risk of stroke.

## What Are the Signs and Symptoms of a Stroke?

When the brain does not get enough blood flow, many different signs and symptoms can occur. The amount and type of symptoms depend on what part of the brain is involved.

Some of the common signs of stroke include

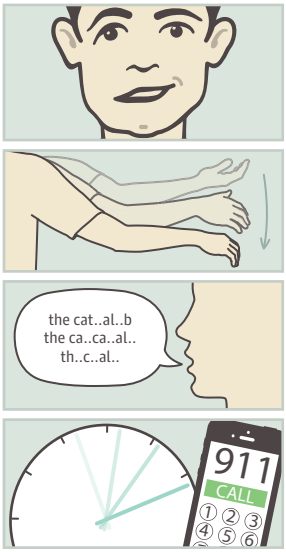
- Asymmetry in the face or a droop on one side of the face
- Weakness on one side of the body (such as an arm, leg, or both)
- Numbness or unusual sensations on one side of the body
- Trouble speaking (speech is slurred; cannot repeat a simple phrase)

## What Should I Do If I Notice Warning Signs?

Time is the most important factor if you think you are having a stroke. The faster you can get to a hospital, the better your chances of recovery. Therefore, you should call the paramedics right away if you have any of the above warning signs—*do not* "wait it out" to see if the symptoms get better on their own.

The reason that time is very important is that for some strokes, a medication that dissolves blood clots can be given through the bloodstream as treatment. This medication only works during the first few hours after a stroke. After that it is no longer effective and can even cause harmful side effects. Therefore, it is very important, when possible, to record the exact time that you or someone around you first noticed symptoms and the time that you were last well without symptoms.

F.A.S.T. Stroke Recognition and Response




**F** FACIAL WEAKNESS
Ask the person to smile.
Is one side of the face drooping?

**A** ARM WEAKNESS
Ask the person to raise both arms. Does one arm drift downward?

**S** SPEECH PROBLEMS
Ask the person to repeat a simple sentence. Is the person unable to speak or is speech strange or slurred?

**T** TIME TO ACT
Act fast. Call 911 if the person shows any of these symptoms.

In the April 23/30, 2014, issue of *JAMA*, an article discusses a study that was done to try to improve the time delay in giving clot-dissolving medications for stroke. The idea was to give the clot-dissolving medication in the ambulance on the way to the hospital instead of after arriving at the hospital, and this study showed some promising early results.

**FOR MORE INFORMATION**

- Centers for Disease Control and Prevention
  *www.cdc.gov/stroke*

+ To find this and previous JAMA Patient Pages, go to the Patient Page link on *JAMA*'s website at *jama.com*. Many are available in English and Spanish.

**Author:** Jill Jin, MD, MPH
**Source:** Centers for Disease Control and Prevention

The JAMA Patient Page is a public service of *JAMA*. The information and recommendations appearing on this page are appropriate in most instances, but they are not a substitute for medical diagnosis. For specific information concerning your personal medical condition, *JAMA* suggests that you consult your physician. This page may be photocopied noncommercially by physicians and other health care professionals to share with patients. To purchase bulk reprints, call 312/464-0776.



Copyright 2014 American Medical Association. All rights reserved.

Downloaded From: http://jama.jamanetwork.com/ on 04/26/2017