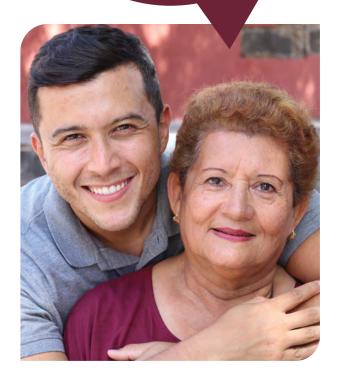
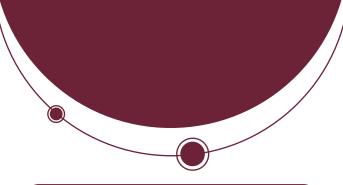
## IDENTIFY SYMPTOMS OF STROKE WITH THE F.A.S.T. METHOD:

- Face drooping
- Arm weakness
- Speech difficulty
- Time to call 911





FDA encourages diverse participation in clinical trials.

If you think a clinical trial may be right for you, talk to your health care provider.

You can also search for clinical trials in your area at **www.clinicaltrials.gov**.



# **U.S. FOOD & DRUG**

# UNDERSTANDING STROKE TREATMENT



FDA Office of Minority Health and Health Equity





## What is a stroke?

Stroke is the fifth leading cause of death and a leading cause of serious disability in the United States. A stroke happens when brain cells die because they are no longer receiving oxygen and nutrients after a sudden interruption in the blood supply or bleeding into or around the brain.

There are various types of stroke. An **ischemic stroke** happens when a blood vessel in the brain becomes blocked. A **hemorrhagic stroke** happens when a blood vessel in the brain bursts and causes bleeding. A **transient ischemic attack (TIA)**, also known as a mini-stroke, has the same symptoms of a massive stroke, but blood flow to the brain is blocked for only a short time—usually no more than 5 minutes.

#### CALL 911 IMMEDIATELY IF YOU EXPERIENCE ANY OF \_\_\_\_\_ THE FOLLOWING SYMPTOMS:

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

### How are strokes treated?

It is important to call 911 as soon as symptoms are noted as a stroke can cause permanent damage within minutes to hours. The main goal of treatment is to try to stop a stroke while it is happening by quickly dissolving or removing the blood clot causing the ischemic stroke or by stopping the bleeding of a hemorrhagic stroke.

#### **Ischemic Stroke Treaments**

- **Antithrombotics** are medications that include antiplatelet drugs and anticoagulants, both of which reduce blood clotting.
- **Thrombolytics** are medications that break up and dissolve blood clots that are blocking blood flow.
- A **catheter** is a long tube that may be threaded through an artery in the groin to remove blood clots in the brain.



#### Hemorrhagic Stroke Treatments

- Emergency drug therapy is used to counteract the effects of blood thinners if necessary, lower the pressure in your brain (intracranial pressure), lower your blood pressure, prevent spasms of your blood vessels, and prevent seizures.
- A **catheter** may be threaded through a major artery in the leg or arm to the weak spot or break in a blood vessel to install a device, such as a coil, to repair the damage or prevent bleeding.
- **Surgical procedures** may be used to manage bleeding by removing damaged blood vessels or cutting off their blood supply, such as with a metal clip.



Post-stroke rehabilitation helps stroke survivors improve their physical functioning and well-being. Therapy may involve relearning motor activities such as walking and sitting, everyday activities such as eating and dressing, as well as language and speaking skills.

One in four people who recover from their first stroke will have another stroke within five years. To help prevent another stroke from happening in the future, your health care provider will treat your specific risk factors such as high blood pressure (hypertension), an irregular heartbeat (atrial fibrillation), and diabetes.

