

## Stroke Symptoms?

### Symptoms & risk factors

Symptoms of stroke vary depending on what part of the brain is affected. But a quick way to remember the possible immediate effects of a stroke is the acronym F.A.S.T., according to the American Stroke Association.

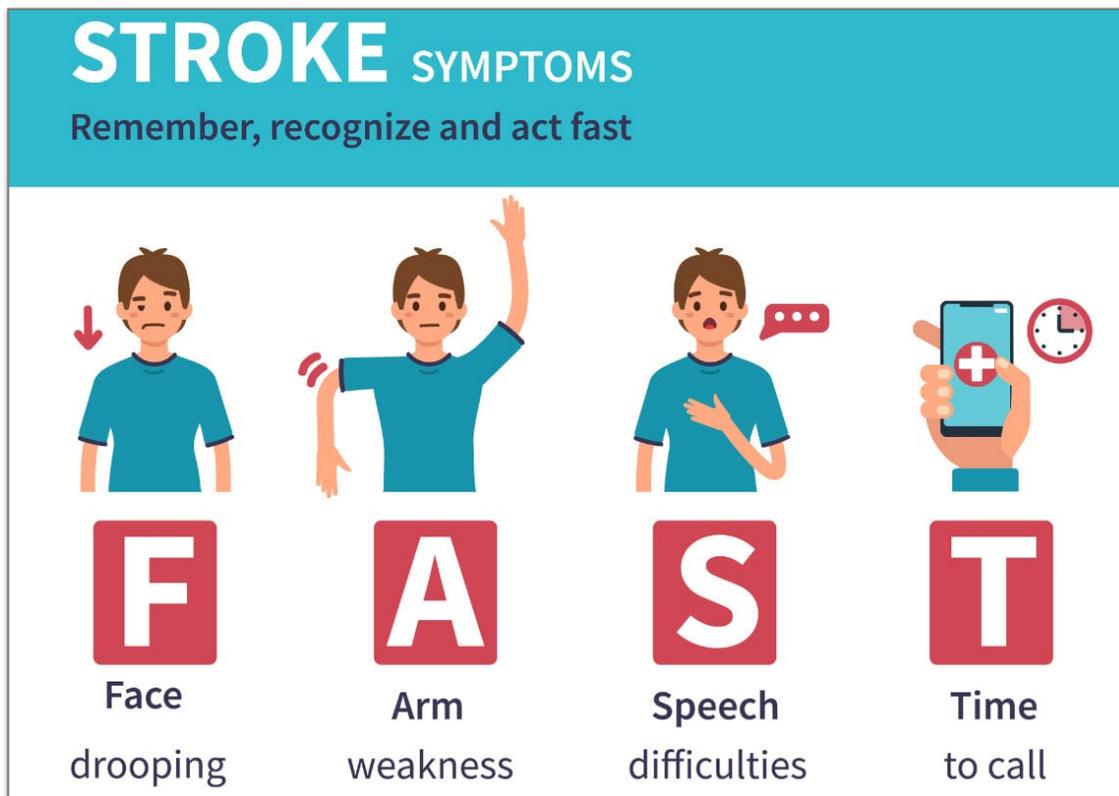
F.A.S.T. stands for:

**F**- Face drooping: One part of the face may be drooping or numb.

**A**- Arm weakness: One arm may feel weak or numb.

**S**- Speech difficulty: Speech may be slurred or slow

**T**- Time to call 911: If someone experiences these symptoms, they need medical attention immediately, even if the symptoms go away.



Pay attention to when the signs and symptoms begin. The length of time they have been present can affect your treatment options:

**Trouble with speaking and understanding.** You may experience confusion. You may slur your words or have difficulty understanding speech.

**Paralysis or numbness of the face, arm or leg.** You may develop sudden numbness, weakness or paralysis in your face, arm or leg. This often happens just on one side of your body. Try to raise both your arms over your head at the same time. If one arm begins to fall, you may be having a stroke. Also, one side of your mouth may droop when you try to smile.

**Trouble with seeing in one or both eyes.** You may suddenly have blurred or blackened vision in one or both eyes, or you may see double.

**Headache.** A sudden, severe headache, which may be accompanied by vomiting, dizziness or altered consciousness, may indicate you're having a stroke.

**Trouble with walking.** You may stumble or experience sudden dizziness, loss of balance or loss of coordination.

## How is a diagnosis made?

When an individual is brought to the emergency room with an apparent stroke, the doctor will learn as much about the patient symptoms, current and previous medical problems, current medications, and family history. The doctor also will perform a physical exam. If the patient can't communicate, a family member or friend will be asked to provide this information. Diagnostic tests are used to help the doctors determine what is the cause and how to treat the stroke.

**Lumbar puncture** is an invasive procedure in which a hollow needle is inserted into the subarachnoid space of the spinal canal to detect blood in the cerebrospinal fluid (CSF). If a hemorrhagic stroke is suspected, the doctor may perform a lumbar puncture. Computed Tomography (CT) is a scan performed for both ischemic and hemorrhagic strokes. CT is a safe, noninvasive X-ray that shows anatomical structures within the brain and whether there is any bleeding in or around the brain. CT angiography involves the injection of a contrast agent into the bloodstream, enabling doctors to view the arteries of the brain and find blockages.

**Angiogram** is an invasive procedure in which a catheter is inserted into an artery and passed through the blood vessels to the brain. Once the catheter is in place, contrast dye is injected into the bloodstream and X-ray images are taken. This test is used to diagnose and determine the location of aneurysms and AVMs.



**Magnetic resonance imaging (MRI)** is a scan and a noninvasive test that uses a magnetic field and radiofrequency waves to give a detailed view of the soft tissues of the brain. An MRA (Magnetic Resonance Angiogram) is a similar test that allows doctors to not only view soft tissues but also to examine blood vessels in the brain.