

Stroke Prevention Fact Sheet

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Stroke ranks as the third leading killer in the United States. A stroke can be devastating to victims and their families. It is the most common cause of adult disability. According to the National Institute of Neurological Disorders and Stroke (NINDS), each year more than 700,000 Americans have a stroke, with about 160,000 of the victims dying from stroke-related causes.

What is Stroke?

Strokes are a type of cardiovascular disease. They affect the arteries leading to and within the brain. There are different types of strokes, but regardless of type, surviving a stroke can have a devastating impact, not only on the survivor, but also on everyone who cares about them.

What Causes Stroke?

Stroke can be caused either by a clot obstructing the flow of blood to the brain or by a blood vessel rupturing and preventing blood flow to the brain. When that happens, part of the brain cannot get the blood (and oxygen) it needs, so it starts to die.

Stroke Warning Signs

Stroke is a medical emergency. Know these warning signs of stroke and teach them to others. Every second counts:

- 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; or
- Sudden, severe headache with no known cause.

Call 9-1-1 immediately if you experience symptoms! Time lost is brain lost!

Doctors say everyone can recognize a stroke by asking three simple questions:

- Ask the individual to SMILE.
- Ask him or her to RAISE BOTH ARMS.
- Ask the person to SPEAK A SIMPLE SENTENCE.

If he or she has trouble with any of these tasks, call



9-1-1 immediately and describe the symptoms to the dispatcher.

Diagnosis of Stroke

When someone has shown symptoms of a stroke or a transient ischemic attack (TIA), a doctor will gather information and make a diagnosis.

What Are the Effects of Stroke?

The brain is an extremely complex organ that controls various body functions. If a stroke occurs and blood flow can't reach the region that controls a particular body function, that part of the body won't work as it should.

If the stroke occurs toward the back of the brain, for instance, it's likely that some disability involving vision will result. The effects of a stroke depend primarily on the location of the obstruction and the extent of brain tissue affected.

Reducing Risk

Knowing your risk and controlling risk factors is the best defense against having a stroke.

Stroke Risk Factors

Risk factors are traits and lifestyle habits that increase the risk of disease. Extensive clinical and statistical studies have identified several factors that increase the risk of stroke. Most of them can be modified, treated, or controlled. Some factors can't. The more risk factors you have, the higher your chances of having a stroke. The best way to prevent a stroke is to reduce your stroke risk factors. A health care provider can help you change factors that result from lifestyle or environment.

What risk factors for stroke can be controlled or treated?

- **High blood pressure** — High blood pressure (140/90 or higher) is the most important risk factor for stroke. It usually has no specific symptoms and no early warning signs. That is why you should have your blood pressure checked annually.

- **Tobacco use** — Cigarette smoking is a major, preventable risk factor for stroke. The nicotine and carbon monoxide in tobacco smoke reduce the amount of oxygen in your blood. They also damage the walls of blood vessels, making clots more likely to form. Using some kinds of birth control pills combined with smoking cigarettes greatly increases stroke risk. **If you smoke, take steps to get help or quit!**
- **Diabetes mellitus** — Diabetes is defined as a fasting plasma glucose (blood sugar) of 126 mg. or more measured on two occasions. While diabetes is treatable, having it still increases a person’s risk of stroke. Many people with diabetes also have high blood pressure, high blood cholesterol and are overweight. This increases their risk even more. If you have diabetes, work closely with your doctor to manage it.
- **Carotid or other artery disease** — The carotid arteries in your neck supply blood to your brain. A carotid artery narrowed by fatty deposits from arteriosclerosis (plaque buildups in artery walls) may become blocked by a blood clot. Carotid artery disease is also called carotid artery stenosis.
- **Peripheral artery disease** — People with **peripheral artery disease** have a higher risk of carotid artery disease, which raises their risk of stroke. Peripheral artery disease is the narrowing of blood vessels carrying blood to leg and arm muscles. It is caused by fatty buildups of plaque in artery walls.
- **Atrial fibrillation** — This heart rhythm disorder raises the risk for stroke. The heart’s upper chambers quiver instead of beating effectively, which can let the blood pool and clot. If a clot breaks off, enters the bloodstream, and lodges in an artery leading to the brain, a stroke results.
- **Other heart diseases** — People with coronary heart disease or heart failure have a higher risk of stroke than those with hearts that work normally. Dilated cardiomyopathy (an enlarged heart), heart valve disease and some types of congenital heart defects also raise the risk of stroke.
- **Transient ischemic attacks (TIAs)** — TIAs are “warning strokes” that produce stroke-like symptoms, but no lasting damage. Recognizing and treating TIAs can reduce your risk of a major stroke. It’s very important to recognize the warning signs of a TIA or stroke. Call 911 to get medical help immediately if they occur.
- **Certain blood disorders** — A **high red blood cell count** thickens the blood and makes clots more likely. This raises the risk of stroke. Doctors may treat this problem by removing blood cells or prescribing “blood thinners.”
- **Sickle cell disease** (also called sickle cell anemia) -- is a genetic disorder that mainly affects African Americans. “Sickled” red blood cells are less able to carry oxygen to the body’s tissues and organs. They also tend to stick to blood vessel walls, which can block arteries to the brain and cause a stroke.
- **High blood cholesterol** — A high level of total cholesterol in the blood (240 mg. or higher) is a major risk factor for heart disease, which raises your risk of stroke. Recent studies show that high levels of LDL (“**bad**”) **cholesterol** (greater than 100 mg.) and **triglycerides** (blood fats, 150 mg. or higher) increase the risk of stroke in people with previous coronary heart disease, ischemic stroke, or transient ischemic attack (TIA). Low levels (less than 40 mg.) of **HDL (“good”) cholesterol** also may raise stroke risk.
- **Physical inactivity and obesity** — Being inactive, obese, or both can increase your risk of high blood pressure, high blood cholesterol, diabetes, heart disease, and stroke. So go on a brisk walk, take the stairs, and do whatever you can to make your life more active. Try to get a total of at least 30 minutes of activity on most or all days.
- **Drinking alcohol** — Drinking an average of more than one alcoholic drink a day for women or more than two drinks a day for men can raise blood pressure and may increase risk for stroke.
- **Illegal drug use** — Intravenous drug abuse carries a high risk of stroke. Cocaine use has been linked to strokes and heart attacks. Some have been fatal even in first-time users.

What are the risk factors for stroke you can't change?

- **Increasing age** — People of all ages, including children, have strokes. But the older you are, the greater your risk for stroke.
- **Sex (gender)** — Stroke is more common in men than in women. In most age groups, more men than women will have a stroke in a given year. However, women account for more than half of all stroke deaths. Women who are pregnant have a higher stroke risk. So do women taking birth control pills that also smoke or have high blood pressure or other risk factors.
- **Heredity (family history)** — Your stroke risk is greater if a parent, grandparent, sister or brother has had a stroke.
- **Prior stroke or heart attack** — Someone who has had a stroke is at much higher risk of having another one. If you've had a heart attack, you're at higher risk of having a stroke, too.

Many risk factors for stroke can be managed, some very successfully. Although risk is never zero at any age, by starting early and controlling your risk factors you can lower your risk of death or disability from stroke. With good control, the risk of stroke in most age groups can be kept below that for accidental injury or death.

Remember to practice safety, don't learn it by accident.

This factsheet was published with information from the National Institute of Neurological Disorders and Stroke, the American Stroke Association, the United States Department of Health and Health Services and the Texas Department of Insurance, Division of Workers' Compensation (DWC) and is considered factual at development.