

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 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 healthcare 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 mm Hg or higher**) is the most important risk factor for stroke. It usually has no specific symptoms and no early warning signs. That's why everybody should have their blood pressure checked regularly.
- **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, get help to quit NOW!**
- **Diabetes mellitus** — Diabetes is defined as a fasting plasma glucose (blood sugar) of 126 mg/dL 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 atherosclerosis (plaque buildups in artery walls) may become blocked by a blood clot. Carotid artery disease is also called carotid artery stenosis.

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's 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 disease** — 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 9-1-1 to get medical help immediately if they occur.
- **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/dL 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/dL) and **triglycerides** (blood fats, 150 mg/dL 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/dL for men; less than 50 mg/dL for women) 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.
- **Excessive 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.

- **Some illegal drugs** — 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 who also smoke or have high blood pressure or other risk factors.
- **Heredity (family history) and race** — Your stroke risk is greater if a parent, grandparent, sister or brother has had a stroke. African Americans have a much higher risk of death from a stroke than Caucasians do. This is partly because blacks have higher risks of high blood pressure, diabetes and obesity.
- **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.