



# What Is A Stroke?

*A guide for patients and  
their families from  
McLaren Bay Region's  
Primary Stroke Center*







## What is a stroke?

Stroke is a type of cardiovascular disease. It affects the arteries leading to and within the brain. A stroke occurs when a blood vessel that carries oxygen to the brain is blocked by a clot or bursts. When that happens, part of the brain cannot get the blood and oxygen that it needs, so it starts to die.

Clots that block an artery cause **ischemic** strokes. This is the most common type of stroke and accounts for 85 percent of all strokes.

**Hemorrhagic** or bleeding strokes occur when a vessel in the brain leaks or ruptures. These “bleeding strokes” account for 15 percent of all strokes. [Source: American Stroke Association, 2002].

## What is a TIA?

A **TIA** [transient ischemic attack] is a “**warning stroke.**” A TIA has the same warning signs and symptoms of a stroke, but these symptoms usually resolve within minutes and do not leave you with any permanent deficits.

Although the signs and symptoms may have resolved, you should still **call 9-1-1** and **go to the hospital.** Early care can prevent permanent damage.

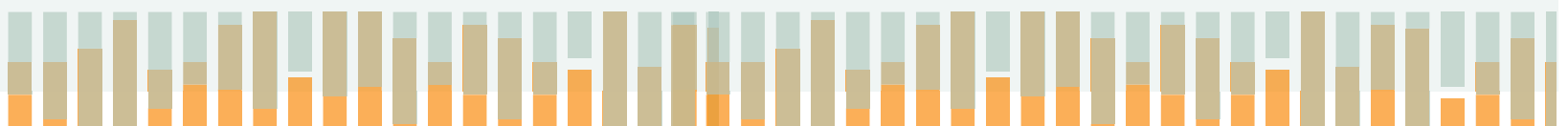
## Stroke is a medical emergency!

Call 9-1-1 if you or someone you know is experiencing any of these signs or symptoms:

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

**Note:** Not all of these warning signs occur in every stroke. If some start to occur, don't wait. Get help immediately; call 9-1-1.

**Treatment must begin within four hours of symptom onset.**



## What Increases My Chances Of Having A Stroke?

There are some stroke risk factors that you and your health care provider can control by lifestyle changes or medical treatment:

- ❖ **High blood pressure:** This is the single most important risk factor. Know your blood pressure numbers and have them checked at least once a year. It should be lower than 140/90 mm Hg.
- ❖ **Diabetes:** While diabetes is treatable, having the disease still increases your risk of stroke. Work closely with your doctor to manage your diabetes and keep blood glucose (sugar) under control. Watch your diet, take medicines as prescribed, and have some form of daily exercise. For more help, contact McLaren's Diabetes Education Coordinator, (989) 894-9528.
- ❖ **Heart disease:** People with coronary heart disease or heart failure have more than twice the risk of stroke as those with hearts that work normally. Follow your doctor's advice and take medicines as prescribed.
- ❖ **Atrial fibrillation (irregular heartbeat):** When the heart does not move blood smoothly through its chambers, the blood can pool and clot. If a clot breaks off and enters the bloodstream, it can lodge in an artery leading to the brain and cause a stroke.
- ❖ **High cholesterol and high triglycerides:** Have cholesterol levels checked by your doctor. Try to lower the fat in your diet and get regular exercise to lower cholesterol.
- ❖ **Obesity:** Overweight people are more likely to have high blood pressure, heart disease, high cholesterol and diabetes. Reaching a good body weight and exercising will reduce the risk for stroke and other diseases. Exercise at least 30 minutes most days of the week.
- ❖ **Smoking:** Smoking is the most preventable risk factor for stroke. Smoking causes your blood vessels to narrow (constrict) and also damages the walls of blood vessels. This makes blood clots more likely to form. If you smoke, follow-up with your health care provider to help you quit the habit.
- ❖ **Excessive alcohol:** If you drink more than one alcoholic drink a day for women or more than two drinks a day for men, you significantly raise your blood pressure and that can lead to stroke.
- ❖ **Illegal drug use:** Intravenous drug abuse carries a high risk of stroke. Cocaine has been linked to strokes and heart attacks. Some have been fatal even in first-time users.

### Did you know?

*Stroke is the fifth leading cause of death among Americans.*





## Risk Factors You Cannot Change Include:

- **Increasing Age:** Stroke happens to people of all ages, but the older you are, the greater your risk for stroke.
- **Sex and gender:** Stroke is more common in men than women.
- **Heredity 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 stroke than do Caucasians. This is in part because African-Americans have higher risks for high blood pressure, diabetes and obesity. These risks compound and increase the risk of stroke.
- **Prior stroke:** Someone who has had a stroke is at much higher risk of having another one.

## Effects Of Stroke

Your brain is an extremely complex organ that controls most of your body's functions. If a stroke occurs and blood flow cannot reach the region that controls a particular body function, then that part of the body will not work properly.

The effects of a stroke depend primarily on the location of the obstruction and the extent of brain tissue affected. One side of the brain controls the opposite side of the body. If the stroke occurs in the brain's right side, the left side of the body will be affected.



## Common Identifiable Changes That Can Occur With Stroke Include:

- **Speech or swallowing problems:** Each person's speech and language problem is unique. McLaren's speech language pathologists create treatment plans for each stroke patient. They can also help friends and family understand the needs of a person with dysphasia or aphasia.
  - **Dysphasia:** difficulty swallowing.
  - **Aphasia:** a total or partial loss of the ability to use words. It is most often caused by a stroke that injures the brain's language center. Some people with aphasia recover quickly and completely after a stroke. Others may have permanent speech and language problems, such as:
    - Trouble finding words to being unable to talk at all.
    - Problems understanding what others are saying.
    - Trouble with reading, writing or math.
    - Trouble talking, but able to understand what others say perfectly.
- **Hemiplegia:** Paralysis of one side of the body. Paralysis is the most visible sign of stroke.
  - **Left hemiplegia:** If the left side of the body is paralyzed (left hemiplegia), the right side of the brain is injured. The left side of the body may be affected in different degrees. The arm, leg and other parts of the body may be weak or paralyzed.
  - **Right hemiplegia:** If the right side of the body is paralyzed, the left side of the brain is injured. The right side of the body may be affected to different degrees. The arm, leg, and other parts of the body may be weak or paralyzed.
- **Sensations:** Stroke survivors may feel pain, numbness, and odd sensations on the affected side of the body. These sensations may make the survivor feel tense or uncomfortable.
- **Visual field problems:** Some stroke survivors have trouble seeing to their right or left. A survivor may also have difficulty understanding what he or she is seeing.

Contact McLaren's Speech Language Pathology department for outpatient support; call (989) 667-6600.

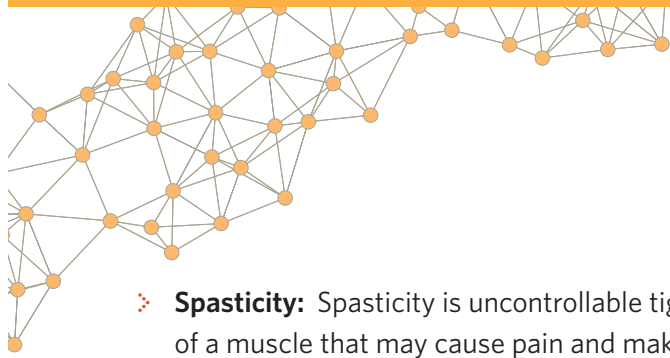
### Did you know?

About 795,000 Americans have new or recurrent strokes each year.





- ❖ **One-side neglect:** One-side neglect of the body causes survivors to ignore everything on the affected side of the body. He or she may seem strangely unaware of life on the affected side of the body, such as food on one half of the plate or an inability to recognize his or her own arm or leg on the affected side.
- ❖ **Bladder and bowel problems:** Problems with bowel and bladder function are often temporary. McLaren Rehabilitation Services are a source of help; call (989) 667-6600.
- ❖ **Tiredness or fatigue:** Tiredness may be caused by the brain injury and by more demands on the survivor's energy as he or she begins to cope with deficits from the stroke.
- ❖ **Emotional changes or breakdowns:** Survivors may have quickly changing emotions and rapid mood changes such as reflexive crying or laughing. These changes may not fit a person's mood or may last longer than seems appropriate.
- ❖ **Depression:** Post-stroke depression is characterized by feelings of sadness, hopelessness, helplessness, irritability and changes in eating, sleeping and thinking. When these changes interfere with rehabilitation efforts and life satisfaction, you should seek medical help. Prolonged depression, especially with suicidal tendencies, requires specialized treatment. Depression is a treatable illness, but it often goes unrecognized.



- ❖ **Spasticity:** Spasticity is uncontrollable tightness of a muscle that may cause pain and make deliberate movements challenging to control. The effects of spasticity can be overactive (hyper-excitabile) reflexes, increased muscle tone, clonus (cyclic and involuntary relaxation and contraction of muscles), abnormal posture, stiffness or pain.
- ❖ **Coordination:** Fine motor coordination problems can result in uncontrollable unsteadiness when completing tasks that require small, precise movements.
- ❖ **Activities of daily living (ADL):** Many stroke survivors have difficulty completing ADLs which include bathing, dressing, driving, eating, walking, hair brushing, etc.

## Prevention

- ❖ Work with your doctor to help identify, treat and control risk factors.
- ❖ Recognize and treat high blood pressure and diabetes.
- ❖ Be physically active.
- ❖ Eat a healthy diet.
- ❖ Don't drink too much alcohol.
- ❖ Avoid illegal drugs.
- ❖ Stop smoking.
- ❖ Have regular medical checkups.

### Did you know?

*Stroke is the leading cause of serious, long-term disability in the United States.*

## Additional Resources

- ❖ **McLaren Bay Region**  
Stroke Nurse Clinical Coordinator. . . (989) 894-9549  
Diabetes Education Coordinator. . . (989) 894-9528  
McLaren Rehabilitation Services. . . (989) 667-6600
- ❖ **American Stroke Association** . . . . 1 888 4 STROKE  
[www.StrokeAssociation.org](http://www.StrokeAssociation.org)
- ❖ **Bay Area Stroke Support Group**. . . (989) 667-6736  
For stroke survivors and their families and friends.
- ❖ **Caring for Others Support Group**. . (989) 667-6636  
A support group for caregivers.
- ❖ **McLaren Bay Region** offers many education programs and health screenings. For a current schedule, visit [mclaren.org/bayregion](http://mclaren.org/bayregion) and click on "Classes and Events" or call toll-free 1-877-411-2762.













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