

Sentara Stroke Education

LIVING WELL AFTER A STROKE

Caring for you and your brain



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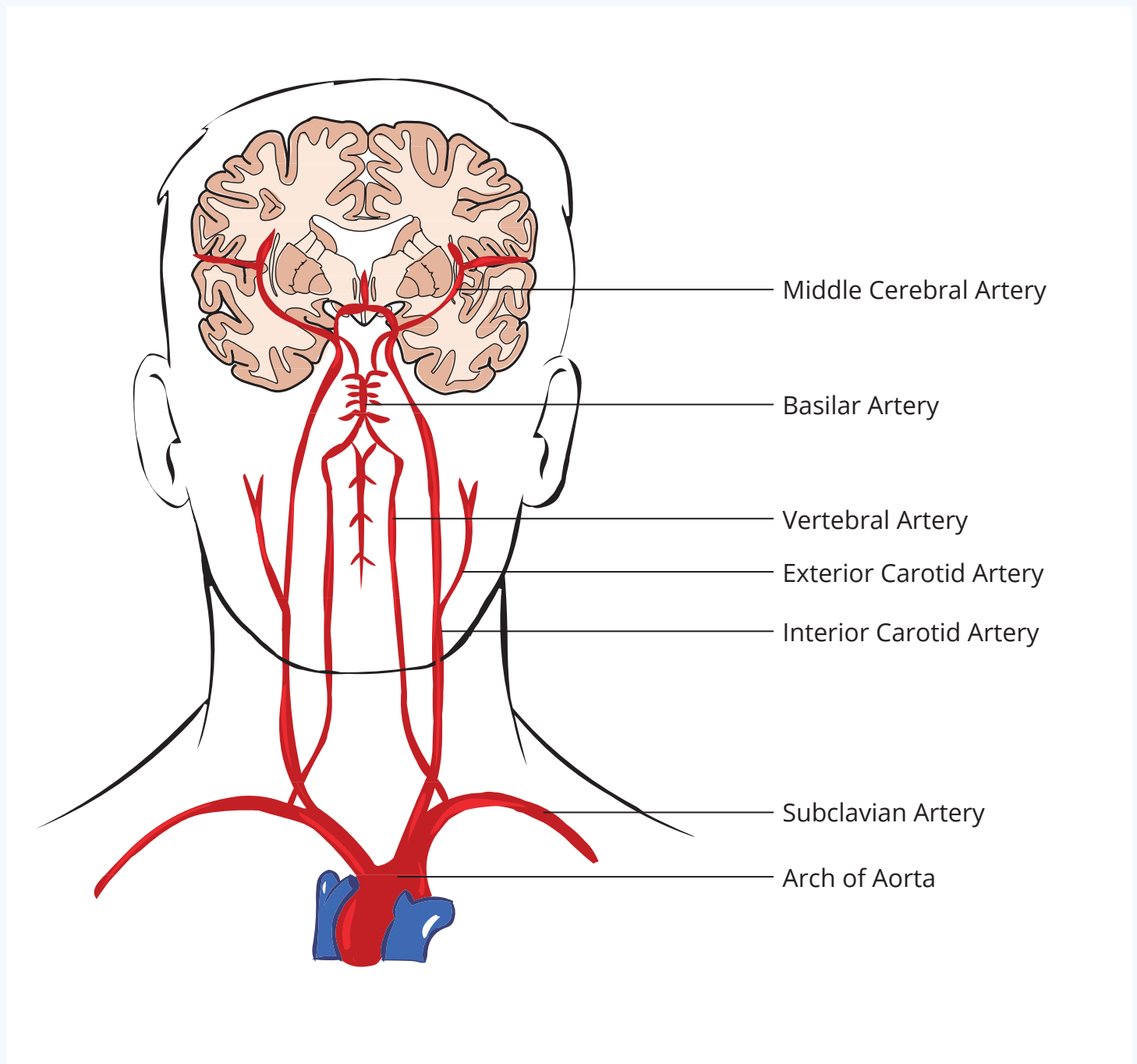


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HOW YOUR BRAIN WORKS

Your brain controls all the functions of your body including movement, thinking, talking, breathing, and the beating of your heart. Your brain receives a constant supply of blood that is filled with the oxygen and nutrients needed to keep your brain healthy. This blood is supplied by blood vessels called the carotid and vertebral arteries. These vessels are located in your neck and brain.



WHAT IS A STROKE?

A stroke is the rapid loss of brain function caused by some type of disturbance in the blood supply to the brain. As a result, the part of the brain that does not receive blood starts to die.

There are two kinds of stroke: ischemic and hemorrhagic.

An ischemic (ih-skee-mik) stroke occurs when blood vessels become blocked. This blockage can be caused by plaque buildup over time, also called atherosclerosis (ath-er-o-skler-O-sis), or when a blood clot breaks loose and travels through the blood vessel and eventually becomes stuck in a smaller blood vessel. Once this blood vessel becomes blocked, any healthy brain tissue past that point does not receive the oxygen and nutrients it needs to live, therefore it will die.

A hemorrhagic (hem-uh-raj-ik) stroke occurs when a blood vessel breaks causing bleeding either within the brain (Intracerebral Hemorrhage) or around the brain (Subarachnoid Hemorrhage). Intracerebral hemorrhage is often related to uncontrolled high blood pressure (hypertension), a blood clotting disorder or an abnormality of a blood vessel that supplies the brain with oxygen and nutrients (arterial-venous malformation). Subarachnoid hemorrhage is most commonly caused by trauma or the rupture of an aneurysm (a weakening of a blood vessel wall).

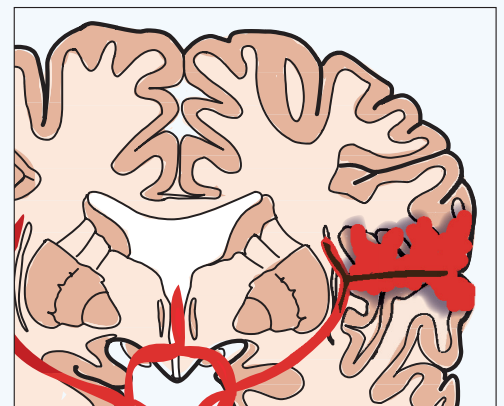
With either type of stroke, seeking emergency medical services is critical to obtaining fast treatment and improving chances of recovery. Delay in seeking medical attention rapidly decreases your options for treatment and recovery. Once brain tissues die, they cannot be recovered.

Ischemic stroke



Blood clot stops blood flow to the brain

Hemorrhagic stroke



Blood vessel breaks and blood leaks into the brain



TRANSIENT ISCHEMIC ATTACK (TIA) VS. STROKE

Transient Ischemic Attack (TIA), frequently referred to as a mini-stroke, is caused by a clot causing a temporary disruption of blood flow in the brain similar to a stroke. There is no permanent brain tissue damage. The definition of a stroke is prolonged or permanent blockage of blood supply to the brain, resulting in brain tissue death. TIAs and strokes have similar symptoms, such as paralysis, sudden numbness or weakness in the face, arm or leg, dizziness or trouble walking, trouble speaking,

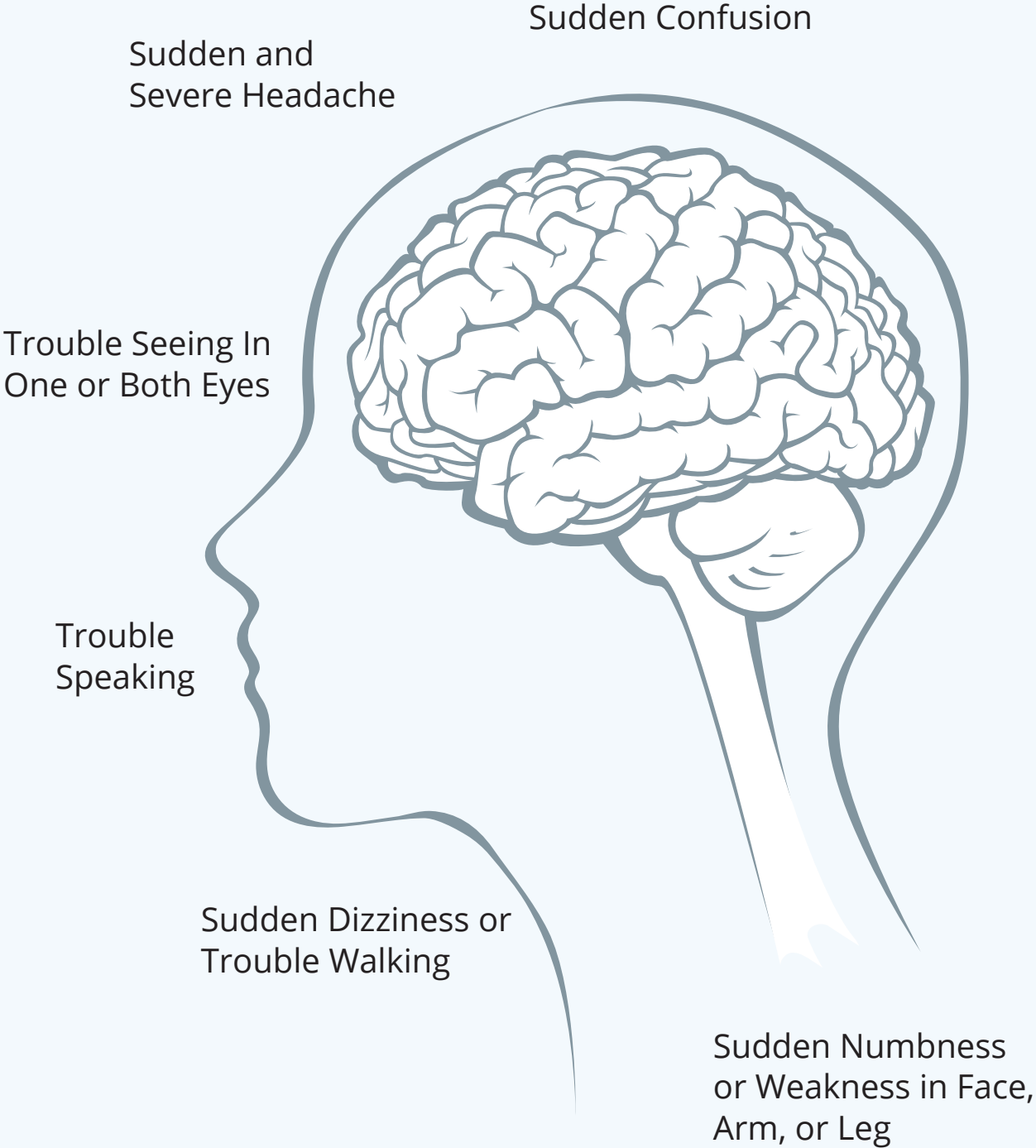
trouble seeing in one or both eyes, and confusion. TIA typically last for a few minutes up to 24 hours. However you can not tell which is a TIA or a stroke, without physician exam or testing. TIA can be a warning sign for a future stroke. Preventing an actual stroke from occurring requires aggressive stroke risk factor management.

Time Loss is Brain Loss!

This table describes the common signs and symptoms of TIA and stroke in both men and women.

	TIA	STROKE
Definition	Temporary lack of blood flow to the brain; no permanent brain tissue damage.	Prolonged or permanent blockage of blood supply to the brain, resulting in brain tissue death.
Locations affected	Varies for both, depends on what area of the brain is being affected. See symptoms page for more details.	
Symptoms are SUDDEN	Weakness or numbness typically on one side of the body, confusion, vision problems (e.g., loss of vision and/or double vision), speech problems, walking problems, dizziness.	Same symptoms as seen with a TIA; also sudden onset of severe headache (typical of subarachnoid hemorrhage).
When to seek medical attention	IMMEDIATELY Call 9-1-1	
How long it lasts	Minutes to hours, with symptoms that usually go away within 24 hours.	Even though your stroke symptoms can go away, the damage to the brain is permanent.

SYMPTOMS OF STROKE AND/OR TIA



WHAT TO DO

Quick treatment can save your life and prevent further brain damage. Strokes and TIAs start suddenly and those symptoms can get progressively worse as time passes and additional brain tissue dies.



NEVER wait to call 9-1-1!

Even if your symptoms go away or if you are experiencing any of the symptoms of TIA or stroke.



1. Call 9-1-1 immediately!

DO NOT drive yourself to the hospital or delay by calling your healthcare provider first.



2. Look at the time.

Note when the stroke-like symptoms begin so you can tell the Emergency Department staff.

TREATMENT OF A STROKE

You and your healthcare provider will determine which treatments are best for you. Your treatment may consist of medication, interventional neuroradiology (techniques to open the blood vessels in the brain), or carotid endarterectomy (fixing carotid arteries so blood can move smoothly to the brain). Remember that it is critical to seek medical assistance as soon as you begin to experience any stroke symptoms.

	Treatment	What It Does
Non-Surgical	Tissue Plasminogen Activator	A medication that dissolves blood clots. It is called a thrombolytic agent or more commonly referred to as the “clot buster”. Used to treat ischemic strokes. The sooner the medicine is given the more likely it is to help. Medication can be given within the first 4.5 hours of symptom(s) onset.
	Aspirin and other antiplatelet medications	Prescribed to decrease the blood’s ability to clot and can play an important role in reducing the risk of future strokes.
Surgical	Neuro Interventional Radiology (IR)	The use of radiology-guided tiny catheters to remove the blood clot and/or the use of radiology-guided balloon catheters that are used to widen the narrow area(s) of the artery.
	Carotid Angioplasty/ Stents	Surgery to clear blood vessels; a surgical operation to clear a narrowed or blocked artery.
	Carotid Endarterectomy	Surgery to remove plaque buildup in the carotid artery.

COMMON TESTING

Diagnostic Test

What It Does

Computerized Tomography (CT) Scan or CT angiogram	<p>Imaging that utilizes x-rays to look for abnormalities in the brain such as ischemic stroke or bleeding.</p> <p>A CT angiogram can find abnormalities such as narrowing in the blood vessels that supply blood, oxygen, and nutrients to the brain.</p>
Electrocardiogram (EKG)	<p>Records the heart's activity by measuring the electrical current through the heart muscle. Changes can show if there is an abnormal heart rhythm (such as atrial fibrillation) blockage of a heart artery or heart damage.</p>
Lab Work	<p>Cholesterol level, diabetes (sugar) test, and coagulation (clotting) levels.</p>
Magnetic Resonance Imaging (MRI) or MR angiogram	<p>A test that uses magnetic fields and pulses of radio wave energy to take pictures of your brain. An MRI following a stroke can identify which parts of your brain may be damaged. MR angiogram (MRA) images the blood vessels of the neck and/or brain to look for abnormalities such as narrowing.</p>
Echocardiogram (Echo)	<p>Uses high-frequency sound waves, called ultrasound, to examine the size, shape, function and motion of the heart.</p>
Blood Flow Test(s)	<p>Several of these tests (such as carotid ultrasound) can show any problem(s) that can cause changes in blood flow to the brain.</p>



Your stay in the hospital is only the start of your recovery.

YOUR BRAIN AFTER A STROKE

Once a stroke has occurred, getting medical treatment right away is critical in order to save as much brain tissue and body function as possible. Depending on how much brain tissue has been damaged, rehabilitation services may be the key to making the most of your recovery and helping you regain lost functions.

The most common complications after a stroke can include: swallowing problems, communication and speech problems, walking difficulties, double vision and/or loss of vision, memory and/or other cognitive problems, arm and/or leg weakness or numbness, and depression. As a stroke survivor, your symptoms after a stroke are directly related to the area of brain tissue that has been damaged.

CHALLENGES AFTER A STROKE

Many people face some type of challenge in their recovery after a stroke. Remember, you are not alone in your journey. Some symptoms can go away with time. Talking with others about how you feel can help give you the support you need and help you know that

you are not alone in your recovery. It helps to reach out to your friends or family, a qualified counselor, or a stroke support group. It is normal to feel anxious, upset, and even angry after a stroke.

Cognitive Problems

Most stroke survivors will suffer from some type of brain damage. This damage can include the way you understand the world around you and how you remember events. You may also find you are more easily distracted.

Meeting new people in a similar situation can be a great way to gain support and increase your confidence. Support groups are an excellent place to start.

Communication Problems

About one-third of stroke survivors have some difficulty with speaking or understanding what others say. If a stroke has damaged the parts of your brain responsible for language there can be problems communicating with those around you. If you have this trouble, you are not alone.

Aphasia (uh-**fey**-zhuh) is when you have difficulty speaking, reading, writing, or remembering words.

Dysarthria (dis-**ahr**-three-uh) is a condition in which the muscles in the mouth, face and respiratory system that help produce speech become weak, move slowly, or not move. This makes it very difficult to pronounce words and results in slurred or slow speech that can be difficult to understand.

Apraxia (ap-**prax**-see-uh) is the inability to perform learned purposeful movements, despite having the desire and the physical capacity to perform the actions. This is caused by damage to specific areas of the brain.

Depression

Around one-half of stroke survivors suffer from depression in the first year following their stroke. It can be mild or severe, and last a few days or much longer. If you think you may be depressed, speak to your doctor. The sooner you receive help and support, the sooner you are likely to feel better.

Personality Changes

A stroke can cause changes to your personality so that to others you may seem like a different person altogether. You are likely to feel some anger and frustration after a stroke. It is a normal part of the recovery process - a sign that you are aware of the changes the stroke has caused to your everyday life. If you find that you are experiencing anger more frequently, speak to your doctor.

Physical Problems

The most common effects of stroke are physical limitations, such as weakness, numbness, and stiffness. Weakness of an arm and/or leg is the most common and widely recognized effect of a stroke. Some people have very mild weakness in one part of their body, but others can have one whole side of their body affected.

Following a stroke, muscles can feel stiff and tight, and sometimes become painful. If you think this is happening, talk to your doctor about what to do. She or he may suggest how best to position your limbs to increase muscle tone, and may suggest some exercises.

Problems with Walking

After a stroke, your toes may catch on the ground as you walk. This is known as 'foot drop'. Walking can be more difficult and you may be more likely to trip or fall. You might feel unsteady on your feet and struggle to find your balance. A special type of foot brace can improve your walking speed, stability, and balance; physical therapy may also help.

Fatigue

Fatigue is one of the most common effects of stroke. It can make you feel unwell and as if you are not in control of your recovery. After a stroke, you may feel as though you lack energy or strength and feel constantly weary or tired. Post-stroke fatigue is not like typical tiredness. There is no specific medication to treat post-stroke fatigue. However, there are a lot of things you can do to manage this condition. Getting a proper diagnosis and finding out if there are any specific causes for your fatigue is the first step. Your doctor can check if there are any medical conditions that could be affecting your energy.

Visual Problems

Visual problems can be common after a stroke and often resolve themselves with time as the brain recovers. These problems can fall into several categories, depending on exactly where in the brain the stroke occurred.

With visual problems such as inability to recognize colors, faces, objects, complex scenes or text, it is important to use adaptive strategies such as using other senses (for example, touch or hearing) to process the same information in a different way.

Remember that your recovery team is here to help you.

You are not alone.

If You Have Difficulty Swallowing

Many stroke survivors have difficulty with swallowing. There are more than 30 muscles used when you swallow. The type of swallowing problem you might have depends on which muscles have been affected by your stroke. Aspiration (when inhaling food or drink that enters the airway and lungs rather than the stomach) may cause pneumonia (AHA). Notify your physician if you experience shortness of breath and coughing after eating.

The tips below may help:

- Sit up straight in a chair or bed.
- Put only a small amount of food in your mouth at one time.
- Clear your mouth after each bite.
- Eat soft, smooth foods, such as yogurt, or pudding.
- Mash or blend foods, or moisten dry foods with broth, sauce, butter, or milk. Using a blender can make food easier to swallow.
- Try thickening liquids by adding gelatin, tapioca, baby rice cereal, or commercial thickening products. Thicker liquids are often easier to swallow.



If You Have Difficulty Swallowing

- Eat foods that are cold or at room temperature.
- Avoid straws to prevent aspiration.
- Take small bites, and chew slowly and thoroughly.
- Avoid dry, coarse, or hard foods and foods that need a lot of chewing.
- Meet with a registered dietitian for additional advice on eating a balanced diet. Ask your doctor for a consultation.

STROKE MANAGEMENT

Medications that your healthcare provider may prescribe after your stroke:

Types of medications	What they do for you
Anti-platelets	Prevent platelets (tiny blood cells) from sticking together to form blood clots.
Blood Pressure Lowering Medications	Can improve blood flow to the brain and decrease how hard the heart needs to work. Controlling your blood pressure will reduce your risk of having another stroke.
Cholesterol Lowering Medications	Reduce the amount of cholesterol in the blood and that is built up on your artery walls to lower risk of having another stroke. These medications help to lower the amount of “bad” cholesterol (LDL) in your blood and increase the amount of “good” cholesterol (HDL) in your blood.
Anticoagulants (Blood Thinners)	Reduce blood clot formation and prevent existing blood clots from getting bigger in the blood vessels and heart. Most commonly prescribed to stroke patients with a history of atrial fibrillation (irregular, rapid heart rhythm).



Please see the Appendix on page 33 for common medications in each class and their side effects.

RISK FACTORS

There are certain risk factors associated with strokes that may be prevented, changed, or improved over time.



RISK FACTORS THAT IMPROVE WITH TREATMENT:

- High Blood Pressure
- Diabetes
- Treating Atherosclerosis, which is a collection of fat, cholesterol or other sticky material (called plaques) in the heart and other arteries of the body such as the legs and neck.
- Atrial fibrillation or Atrial flutter (Irregular heart rhythm that causes the blood to pool in the heart and cause clot formation).
- Sleep Apnea (Stop breathing periodically while you sleep).
- Heart failure has 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. *(Source: American Heart Association)*

Sickle cell disease, a genetic disorder that mainly affects African-American and Hispanic children. “Sickled” red blood cells are less able to carry oxygen to the body’s tissues and organs. These cells also tend to stick to blood vessel walls, which can block arteries to the brain and cause a stroke. *(Source: American Heart Association)*

Risk Factors You CAN Change:

Being overweight or obese

Having poor eating habits

Diets high in saturated fat can cause blood vessel damage.

High salt (sodium) intake elevates blood pressure levels.

Using cocaine or other recreational drugs

Controlling your diabetes

Smoking or current exposure to second-hand smoke

Physical inactivity, or lack of routine exercise

Excessive alcohol intake

Risk Factors You CANNOT Change:

Family history and genetics (if there is a history of the following):

Stroke

Diabetes

High blood pressure

High cholesterol

Chronic kidney disease

Gender, Age and Ethnicity

Previous Stroke or TIA



PREVENTION OF A STROKE



Control Your Blood Pressure

While there are medications to control hypertension (high blood pressure), lifestyle changes can help keep blood pressure down.



Lose Weight

You might be surprised at how easy some of the suggestions listed on the following pages for a healthy diet are to incorporate into your life. Not only can you find yourself losing weight, but by eating slower and being more mindful about your food choices, you may enjoy your meal much more.



Stop Smoking

Smoking not only increases the risk of stroke, it is estimated to subtract 10 years from one's lifespan.



Manage Your Diabetes

People with diabetes are at a higher risk of having a stroke than the average person. This risk increases when diabetes is poorly managed and blood glucose levels are elevated over prolonged periods. It is important to take diabetes seriously (even if you do not feel "bad").

Following your treatment plan will go a long way towards reducing your risk of stroke, and will also reduce other risks to your health.

Get Active

We all know we should be exercising, but many of us simply do not like it. Instead of finding reasons NOT to exercise, try finding simple ways to incorporate activity into your daily life, like walking around your yard, parking a little farther from the store, or joining a mall walking club.



Improve Your Diet

There are many opinions about what constitutes a healthy diet, which often leaves the average person confused and ready to give up. However, there are some things that are pretty universal more vegetables, less fats, and fewer trips to fast food restaurants.



Limit Alcohol

Clearly, drinking heavily is bad for your health, but a lot of research shows that 2 or fewer drinks per day can actually be good for you, especially red wine. Any more than that will increase your health risks.



While this list may look overwhelming, taking things a little at a time can lead to huge improvements in your health, including a reduction in your risk for stroke. By taking steps to improve in these areas, you will also feel better along the way.

After Having a Stroke



1 Stay positive and manage stress.



2 Do not drive until your healthcare provider tells you it is safe.

Choose a Healthy Diet

In addition to managing your medications and staying active, there are simple changes you can make to your diet to help reduce your risk for future strokes. Eating a variety of foods from all food groups is the best way to stay healthy. Planning healthy meals is good for the whole family.



Fresh or frozen fruits



Fresh or frozen vegetables



Whole grains and high-fiber foods



Healthy fats: olive oil and canola oil, nuts





3 Ask your healthcare provider about attending a rehabilitation program.

Try to Eat Less Salt and Fat By Reading Food Labels

Remember, label information is for the serving size listed, not always for the whole container.

Nutrition Facts	
Serving Size 3 oz. (85g)	
Amount Per Serving	As Served
Calories 38	Calories from Fat 0
	% Daily Value
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0g	0%
Sodium 0g	2%
Total Carbohydrate 0g	3%
Dietary Fiber 0g	8%
Sugars 0g	

Step 1:

Look at the Serving Size. If you eat more than one serving, you get more calories and nutrients.

Step 2:

Look at the total Sodium, Cholesterol and Saturated Fat per serving.

Step 3:

Choose foods with less than:

- 140 mg sodium per serving,
- 5 g of total fat per serving.
- 3 g of saturated and trans fat per serving (Read the ingredients: if a food contains partially hydrogenated oils, then it has trans-fat.)

Limit the amount of cholesterol you eat to less than 200 mg per day.



Lean cuts of meat or fish



Ask your healthcare provider or dietitian about sugar substitutes.

Facts About Salt

Salt is also called “sodium” and is found in many foods. Reading the label will help you make smart choices for your health.

Most foods you eat have salt even if you cannot taste or see it.

Salt acts like a sponge and causes your body to retain water. This causes your heart to work harder to get oxygen and nutrients to your body.

Eating too much salt can lead to weight gain and cause swelling in your ankles, legs, feet, and abdomen. This is your body trying to balance itself and compensate for the salt intake.

How to Eat Less Salt

Limit your salt intake to less than one teaspoon a day. Even though that seems like such a tiny amount, it equals 2000 mg!

Choose fresh foods instead of canned or processed foods.

HOW TO EAT LESS SALT

Avoid the “Salty Six”



Breads and Rolls

Some foods that you eat several times a day, such as bread, add a lot of sodium even though each serving may not seem high in sodium.



Cold Cuts and Cured Meats

One 2oz serving (6 thin slices) of deli meat can contain as much as ½ of your daily recommended serving of dietary sodium.



Pizza

A slice of pizza with several toppings can contain more than ½ your daily recommended serving of dietary sodium. Limit cheese and add more veggies to your next slice.



Poultry

Sodium levels in poultry can vary based on preparation methods. You will find a wide range of sodium in poultry products, so it is important to choose wisely.



Soup

Sodium in one cup of canned soup can range from 100 to as much as 940 milligrams of sodium! That is more than ½ of your daily recommended serving of dietary sodium.



Sandwiches

A sandwich can contain more than your entire daily recommended serving of dietary sodium! Try half a sandwich with a side salad instead.

REMEMBER: Check the labels and make wise choices.
You CAN do it! One meal at a time.

HOW TO EAT WELL WITHOUT SALT

Explore your spice rack! Instead of using salt, try using different herbs and spices to season your foods.



Common Seasonings	Foods to Season	Tips
Basil	Pork, veal, potatoes, vegetables, rice, bread	Basil has a sweet aroma and flavor and is a great seasoning to use with tomato products.
Garlic, fresh or powdered	Any meat, fish, vegetables soups, bread, rice	Use garlic powder, not garlic salt.
Lemon, fresh or bottled	Chicken, fish, vegetables	Fresh lemon juice adds flavor that can mimic the taste of salt. Sprinkle lemon juice on fish or add lemon juice to vegetables as they cook.
Onion, fresh or powdered	Any meat, fish, soups, vegetables, rice	Use onion powder, not onion salt.
Oregano	Pork, potatoes, rice, veal, vegetables	Oregano is often used in sauces made with tomatoes.
Sage or Thyme	Beef, chicken, turkey, pork, rice, vegetables	Sage and/or Thyme can be used when cooking vegetables and other foods instead of pork fat.

Avoid MSG, baking soda, baking powder, soy sauce and Worcestershire sauce.

HEALTHY FOOD CHOICES

- Make your own or choose low sodium sauces, salad dressings, breads, and desserts.
- Stay away from “instant foods” that come in a bag or a box.
- Rinse canned foods before cooking and eating them.
- Read food labels and choose foods that have less than 140 mg of sodium per serving.
- Stick to the outside aisles in the grocery stores: fresh and non-processed foods are usually found here.



WHEN EATING OUT

- Take half of your meal home in a “to-go box”.
- Sea Salt has the same amount of sodium as table salt.
- Try to avoid it.
- Don’t be afraid to make special requests.
- Stay away from butter, cheese, or sauces.
- Ask for dressings, gravies, and sauces to be placed on the side.
- Share a meal with a friend and reduce meal sizes.
- Stay away from fried foods, bacon, sausage, or ham.
- Limit fast food items or choose items with less sodium.
- Look for steamed, grilled, baked, broiled, or poached foods.





MONITORING YOUR MEDICATIONS

Blood Pressure Lowering Medications

- Consider obtaining a blood pressure monitor to track your readings while you are at home.
- Keep a record of your blood pressure readings and the date they were obtained.
- Blood pressure self-monitoring will allow your healthcare provider to better control your blood pressure by seeing your readings on a daily basis rather than infrequently at your office visits.

Anti-platelets/Anticoagulants (blood thinners)

- If you take warfarin, you may have regular blood tests so your healthcare provider can see how the medication is working.
- Tell your family about your anticoagulant medication and consider wearing a medical alert bracelet (or carry a medical ID card with you) that indicates you are on a blood thinner in case of emergency.
- If you are on a blood thinner, call your healthcare provider or go to the emergency room if you experience any of the following: urine is red, orange or looks like Coca-Cola, dark tarry stool or visible red blood in toilet, if you throw up and it looks like coffee grounds, severe headache, dizziness or weakness and bleeding lasting longer than 15 minutes from a cut or nosebleed.



TAKING YOUR MEDICATIONS

Plan a way that will help you remember how and when to take your medication.

Keep a list of your medicines with instructions for how many pills to take and when to take them.

Pill boxes are a great way to store daily medication.

If you know you are going to be away from home when your medicine is due, take extra medicine with you.

When planning a vacation or a trip, remember to include plans for your medication. Make sure to have the medicine you will need for the time you will be away from home. Plan on taking a few extra days' worth of medication in the event your trip is delayed.

Bring your current medication list with you each time you go to your health care provider. Be sure you have included any over-the-counter drugs, herbal medications, or dietary supplements you are taking.

When your healthcare provider changes your medications, ask for an updated medication list before you leave.





HOW TO TAKE YOUR MEDICATIONS

It is very important that you take your medications as prescribed by your healthcare provider.

- Take each of your medicines, every day, at the right times.
- Do not skip doses of your medicines, even when you feel good.
- Do not stop taking your anti-platelet drugs and/or blood thinner without talking with your healthcare provider.
- If you think you are having side effects from your medicines, call and talk with your healthcare provider or pharmacist immediately.
- **Always check with your healthcare provider before taking new medications or supplements, as these may affect the way your current medications work.**
- If you are having trouble paying for your medicine, talk with your healthcare provider.
- Whenever possible, have all of your medicines filled from the same pharmacy. It is helpful to have one pharmacist review all of your medicines to avoid drug interactions that could be harmful to you.
- Make sure you always have enough medicine left in your pill bottles. Do not let your medication run out.



ACTIVITY AFTER A STROKE

Rehabilitation therapy is often recommended after a stroke. The purpose of rehabilitation is to help improve your physical activity and ability to safely care for yourself.

Rehabilitation may take place in another hospital, at your home, or at an outpatient facility.

If you are not currently exercising, start with 10 minutes every day. It can be as simple as walking 5 minutes from your door and turning around and walking back. Moving more can help you have more energy and feel better.

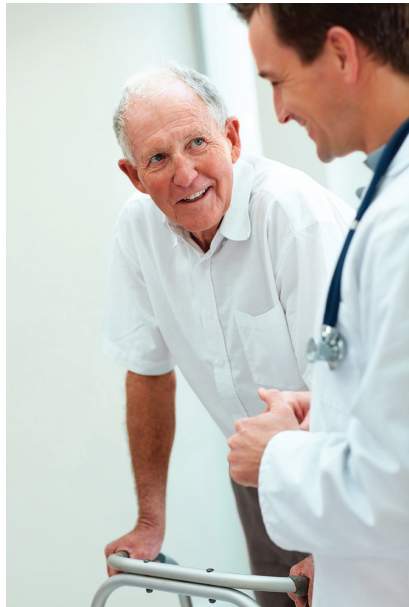
- Find activities that you enjoy and do a variety of activities so you do not get bored.
- Use music to help you during your exercise.
- Exercise with friends, neighbors, or family. It will motivate you and them while you enjoy one another's company.
- Wear properly fitting shoes and comfortable clothing.
- Start slowly. Only do what is comfortable for you.
- Stop if you feel any chest pain, dizziness, or have severe shortness of breath.
- Discuss with your healthcare provider when it is safe to resume sexual activity following a stroke.

Be aware of your risk of falling

It can increase after a stroke. A few things you can do to lessen your risk of falling include:

- Keeping active
- Removing obstacles from your walking path
- Using assistive devices (i.e. canes, walkers) as prescribed.

Remember that falls CAN be prevented.



Being active is one of the best things you can do!

REHABILITATION

The goals of rehabilitation are to increase your independence, improve your physical function, and help you gain a satisfying quality of life after your stroke. There are many people who are a part of your rehabilitation team, and each plays an important role in your recovery. Your rehabilitation team may include:

Physical Therapist: Specializes in maximizing your mobility and independence. They will develop an exercise program that is best for you and will teach you mobility skills that are the building blocks for real life activities.

Occupational Therapist: Focuses on helping you rebuild daily skills such as bathing, toileting, and dressing. They can help you learn to use adaptive self-care equipment such as reachers, sock aides, and bathroom safety equipment. They will also work with you and your family to help you adapt your home so that you can be as independent as possible.

Music Therapist: Specializes in the use of music to help you regain your ability to move and communicate. You do not need to be musical in order to participate. Music Therapists use rhythm in both music-listening and playing to provide your brain with timing cues that, in turn, cause improvements in walking as well as large and small movements in your arms and hands. They use singing to help you regain your ability to speak.

Speech-Language Pathologist: Works to help you restore your ability to communicate and swallow. Their goal is to work with you to improve your thinking and language skills. In addition, they will assess your swallowing abilities to recommend exercises and strategies to help you swallow safely.



Sometimes after your stroke, you may need more concentrated care to help you regain some of your lost functions. If that happens, your doctor may recommend rehabilitation.

EXERCISING AFTER A STROKE

Your body may need time to get used to being more active. You will notice that it will get easier the more active you are. You will be able to do more and you will feel better and stronger. Walking is easy, fun, and free. Many people say that walking is the easiest exercise for them. You can walk with a friend or a pet.



Steps for doing more:

- Begin slowly. Do some warm up exercises to get your body ready to exercise.
- Do an activity that makes your heart beat a little faster for 10 minutes. Try to do this at least three times a week.
- After a couple of weeks, add 5 minutes to your exercising time. Continue to add 5 minutes until you can exercise for 30 minutes at a time.
- You want to slowly work up to 30 minutes of exercise most days of the week. Don't forget to do cool down exercises when you finish.

Take small steps every day towards living well after your stroke.

Think Positive Thoughts

It is normal to feel sad, overwhelmed, or nervous following a stroke, or to have problems sleeping. Talk to your healthcare provider or counselor, who can recommend resources to help. Some medications can affect your mood, and depression is not uncommon after a stroke. Grieving for what you have lost is part of the healing process and is very normal.

- Take one day at a time
- Focus on the things you can do. These may include a favorite hobby, meditation, praying, or spending time with the people who care about you.
- Get enough rest and try to lessen the stress in your life.
- Enjoy your family and your pets.
- Stay active and have fun with your friends.
- Consider joining a stroke support group.

You can do it!
Put your mind to it.



WHEN TO ASK FOR HELP

Call your healthcare provider if you:

- Are unable to take your medicines, no matter the reason.
- Are unable to keep your follow-up appointment(s), as rescheduling will be important for ongoing management of your stroke risk factors.
- Are asked to stop your anti-platelet therapy or blood thinner; please call your healthcare provider before you stop taking the medicine.
- Have gone to the Emergency Department or have been hospitalized.
- Have questions or concerns about changes you have experienced.

THINK YOU ARE HAVING A STROKE?

CALL 9-1-1 IMMEDIATELY!

BE FAST is an easy way to remember the common signs of stroke.

When you spot any one of these signs, call 9-1-1 for help right away.

- B** **Balance:**
Trouble walking, loss of balance or coordination.
- E** **Eyes:**
Trouble seeing in one or both eyes.
- F** **Face Drooping:**
Face droops on one side or is numb.
- A** **Arm Weakness:**
Arms drift downward when raised.
- S** **Speech Difficulty:**
Speech is slurred or unable to speak.
- T** **Time to call 9-1-1:**
Make the call IMMEDIATELY.

IMPORTANT QUESTIONS FOR YOUR NURSE OR HEALTHCARE PROVIDER:

<p>What is my target blood pressure? (Typically 120/80 or lower is the target goal)</p>	
<p>What is my target total cholesterol level? (Typically below 200)</p>	
<p>What is my target LDL (also known as the less desirable, or bad cholesterol) level? (Typically below 70)</p>	
<p>Can I get nutrition counseling? (Especially if you are diabetic.)</p>	
<p>Can I get help with quitting smoking?</p>	
<p>Can I get help with alcohol intake?</p>	

My Blood Pressure Log

Date	Blood Pressure



Keep a record of your blood pressure readings and the date they were obtained.



Information about your previous stroke

Type / location of stroke: _____

Type of treatment: _____

Neurologist name: _____

Phone number: _____

Patient Checklist

- I have a clear understanding of my diagnosis of stroke.
- I know the warning signs of a stroke and when to call 9-1-1.
- I understand when it is necessary to call my healthcare provider.
- I know when my follow up appointment is with my healthcare provider.
- I have reviewed my medications and know when and how to take them.
- I understand my instructions on a healthy diet and any restrictions.
- I know what exercises I can do and when I can begin them.
- I know what to do to stay healthy.

APPENDIX A

Medications and Side Effects

Type	Examples of Medications	Possible Side Effects
Anti-platelets	Antithrombotic Aspirin Aspirin/dipyridamole (Aggrenox) Clopidogrel (Plavix) Ticlopidine	Stomach discomfort/heart burn Nausea/vomiting/diarrhea Excessive bleeding Easy bruising Headache (Aggrenox only — should go away with time, but may take a month or longer)
Blood pressure lowering	ACE inhibitors Benazepril (Lotensin) Captopril (Capoten) Enalapril (Vasotec) Fosinopril (Monopril) Lisinopril (Prinivil, Zestril) Moexipril (Univasc) Perindopril (Aceon) Quinapril (Accupril) Ramipril (Altace) Trandolapril (Mavik)	Dizziness Cough Problems with kidneys Increases potassium level Swollen face, tongue and throat (get medical help immediately)
	Angiotensin II Receptor Blockers (ARBs) Azilsartan (Edarbi) Candesartan (Atacand) Eprosartan (Teveten) Irbesartan (Avapro) Losartan (Cozaar) Olmesartan (Benicar) Telmisartan (Micardis) Valsartan (Diovan)	Dizziness Problems with kidneys Increases potassium level

Type	Examples of Medications	Possible Side Effects
Blood pressure lowering	Diuretics (Fluid pills) Bumetanide (Bumex) Chlorothiazide (Diuril) Chlorthalidone (Hygroton) Furosemide (Lasix) Hydrochlorothiazide (Hydrodiuril) Metolazone (Zaroxolyn) Torsemide (Demadex)	Dizziness Decreases potassium and magnesium levels Frequent urination Dehydration
	Beta-Blockers Acebutolol (Sectral) Atenolol (Tenormin) Betaxolol (Kerlone) Bisoprolol (Zebeta) Carvedilol (Coreg) Labetalol (Trandate) Metoprolol (Lopressor, Toprol XL) Nadolol (Corgard) Propranolol (Inderal)	Feeling tired Dizziness Masks low blood sugar Possibly worsens asthma symptoms
	Calcium Channel Blockers Amlodipine (Norvasc) Diltiazem (Cardizem) Felodipine (Plendil) Nifedipine (Adalat, Procardia) Nisoldipine (Sular) Verapamil (Calan, Verelan)	Swelling in legs, ankles and feet Constipation
Cholesterol lowering	HMG CoA Reductase Inhibitors (Statins) Atorvastatin (Lipitor) Fluvastatin (Lescol) Lovastatin (Mevacor) Pitavastatin (Livalo) Pravastatin (Pravachol) Rosuvastatin (Crestor) Simvastatin (Zocor)	Muscle pain Stomach discomfort/nausea/constipation Headache Liver problems Dark colored urine (call your health care provider)

Type	Examples of Medications	Possible Side Effects
Cholesterol lowering	Bile Acid Sequestrants Cholestyramine (Questran) Colesevelam (Welchol) Colestipol (Colestid)	Stomach discomfort/heart burn Constipation
	Fibric Acid Derivatives Fenofibrate (Lofibra, Tricor, Triglide, Antara, Fenoglide, Lipofen) Gemfibrozil (Lopid)	Stomach discomfort/nausea/ vomiting/ constipation Liver problems Dark colored urine (call your health care provider)
	Nicotinic Acid Niacin (Niaspan, Niacor, Slo-Niacin)	Flushing/itching Stomach discomfort/nausea/ vomiting Liver problems
	Ezetimibe (Zetia)	Stomach discomfort Diarrhea Liver problems
	Omega-3-Acid Ethyl Esters (Lovaza)	Stomach discomfort/heart burn Altered taste
Anticoagulants (blood thinners)	Apixaban (Eliquis) Dabigatran (Pradaxa) Enoxaparin (Lovenox) Rivaroxaban (Xarelto) Warfarin (Coumadin)	Easy bruising Excessive bleeding Stomach discomfort (Pradaxa only — should go away with time)

MORE INFORMATION

If you would like more information about staying healthy after a stroke, use these sites for reliable information:

Sentara Healthcare

1-800-SENTARA
www.sentara.com
www.sentarastrokeeducation.com

American Stroke Association

1-888-4-STROKE
www.stroke.org

American Heart Association

1-800-AHA-USA-1
7272 Greenville Ave.
Dallas, TX 75231
www.heart.org

Young Stroke Organization

YoungStroke, Inc
P.O. Box 692
Conway, SC 29528
843-655-2835
info@youngstroke.org
www.youngstroke.org

References:

American Heart Association
American Stroke Association

My Notes

Use this section for writing down important notes or questions for your nurse or healthcare provider.



SENTARA®

SentaraStrokeEducation.com

Atención: si habla español, tiene a su disposición servicios lingüísticos gratuitos. Llame al 844-809-6648.

주의: 한국어를 사용하시는 경우, 언어 지원 서비스를 무료로 이용하실 수 있습니다. 844-809-6648 번으로 전화해 주십시오.

注意: 如果您讲中文普通话, 则将为您提供免费的语言辅助服务。请致电 844-809-6648。

ATTENTION: Language assistance services are available to you free of charge. Call 844-809-6648.

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#2308 Revised October 2021
Sentara Stroke Program Team