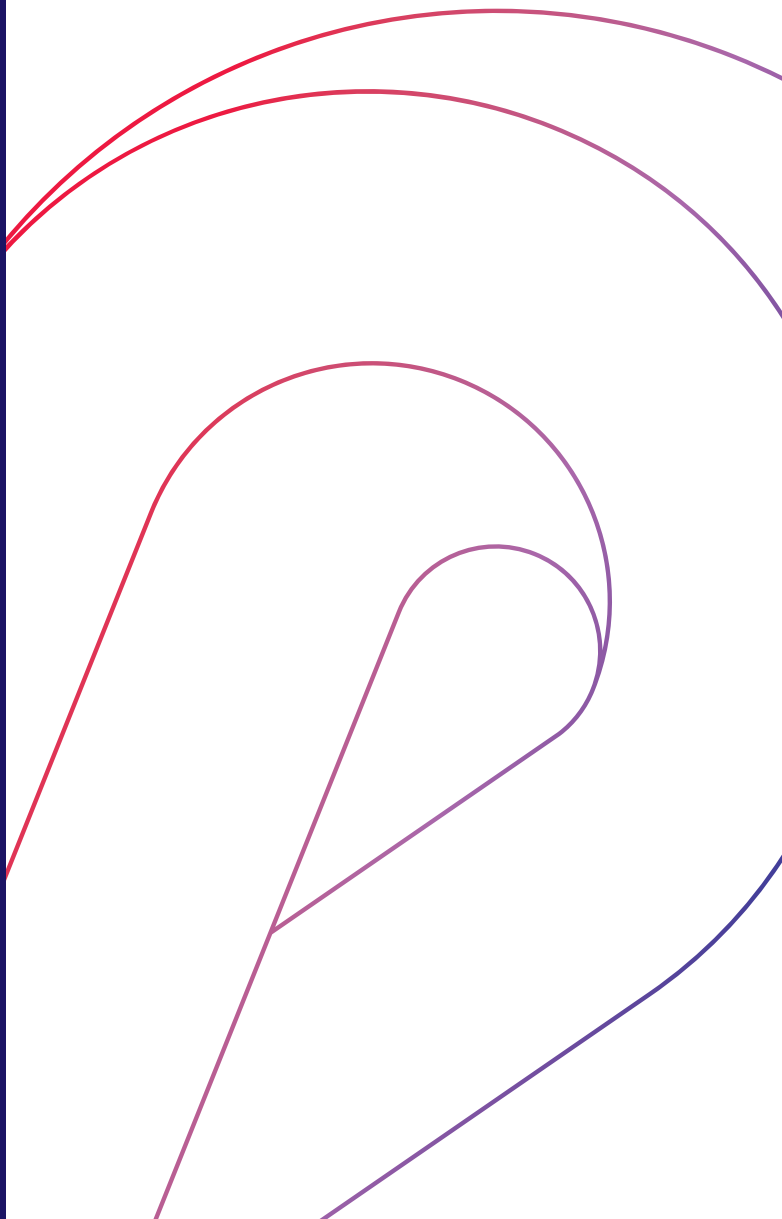
Patient and Family Education
intermountainhealth.org

Learning About Stroke and TIA

Intermountain Health

What's Inside:



After a Stroke

After a stroke, you and your loved ones may feel uncertain and overwhelmed. You probably have many questions about what lies ahead and what you need to know and do. This booklet can help.

Along with your doctors and other healthcare providers, the information here can guide you through your initial recovery period. It can also help you prepare for better days ahead.

As you read, keep in mind that this booklet doesn't replace the specific instructions you will receive from your healthcare providers. Always follow the directions of your own doctors, nurses, and other care providers — and go to them with questions or concerns.

For family and friends:

This booklet is for you, too. Read it to learn more about stroke, stroke recovery, and what you can do to help your loved one heal.

Throughout these pages, look for the "For Family and Friends" sections to find tips and information to help you understand stroke and care for your loved one.

Sincerely,

Your Stroke Care Team

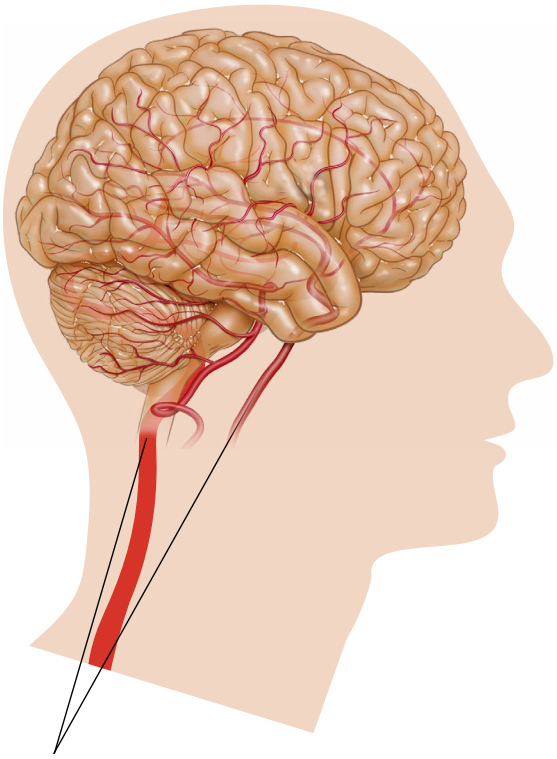
Intermountain Health

Key Information About Stroke

Each year, nearly 800,000 Americans have strokes. This section gives some basic information about stroke, its causes, and what a stroke will mean for your health.

What is a stroke?

A stroke is when blood flow to part of your brain suddenly stops. Because your brain cells need the oxygen and nutrients carried by blood, brain cells begin to die within minutes of when a stroke happens. Since the brain controls many body functions, a stroke can change how your body moves, how your mind works, how you feel, and how you express yourself.



Arteries and smaller blood vessels carry oxygen-rich blood to your brain. A stroke — sometimes called a brain attack — happens when the flow of blood through any of these vessels is suddenly cut off.

What is a Transient ischemic attack (TIA)?

A transient (temporary) ischemic [iss-KEE-mik] attack (or TIA) is a stroke that resolves on its own. A TIA happens when a blood clot blocks an artery leading to your brain for just a few minutes. Sometimes called a "mini-stroke," a TIA causes stroke symptoms such as weakness, vision or speech problems, dizziness, or headache. With a TIA, however, these effects usually last only a few minutes.

Don't ignore a TIA! It may not cause lasting brain damage, but it often happens before a major stroke. A TIA is a strong sign that you could have another, larger stroke in the near future.

If you notice any of the warning signs listed on the back cover — even if they seem to have gone away — call 911 right away.

What are the different types of stroke?

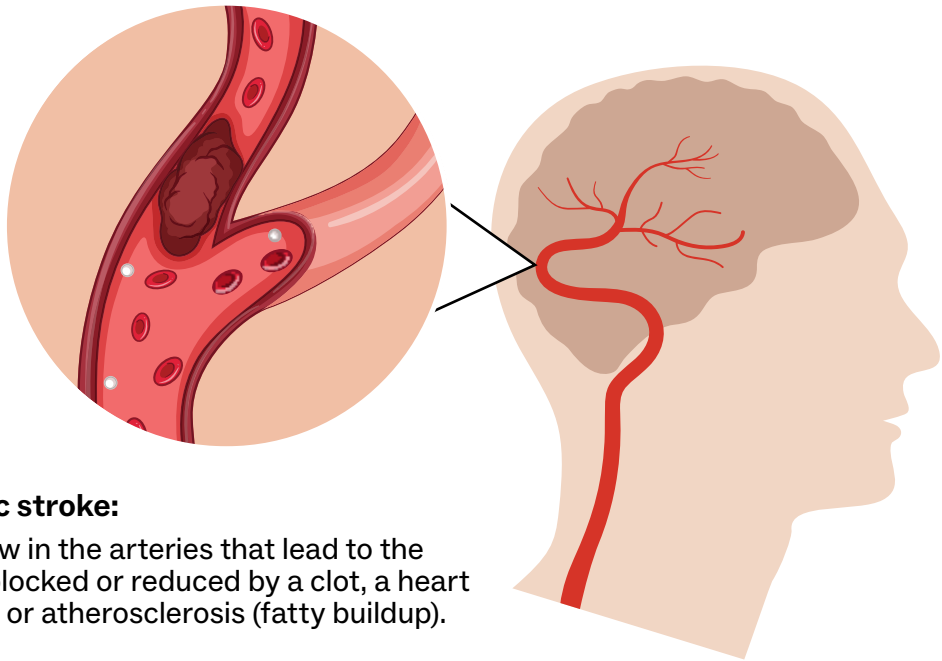
There are 2 main types of stroke: ischemic stroke and hemorrhagic [heh-mor-RAGE-ik] stroke.

Ischemic stroke

In an ischemic stroke, blood flow to the brain is cut off or greatly reduced. Ischemic strokes are the most common type of stroke. About 87% of all strokes are of this type. The cause of the blocked or reduced blood flow depends on the type of ischemic stroke you've had:

- A **thrombotic stroke** happens when a blood clot (thrombus) forms inside an artery leading to the brain, blocking blood flow. It often forms in an artery that's already damaged by atherosclerosis. Atherosclerosis [ath-er-oh-skler-OH-sis] is the buildup of a fatty material called plaque in the arteries.
- An **embolic stroke** is also caused by a blood clot. In this case, a clot that forms elsewhere — often in your heart — travels through the artery toward your brain. This type of blood clot is called an embolus.
- **Systemic hypoperfusion** means low blood flow, and it happens when the heart's pumping action fails. A heart attack or other heart problems can cause this kind of stroke.

See **pages 10 to 12** to learn about treatments for ischemic stroke.



Ischemic stroke:
Blood flow in the arteries that lead to the brain is blocked or reduced by a clot, a heart problem, or atherosclerosis (fatty buildup).

Hemorrhagic stroke

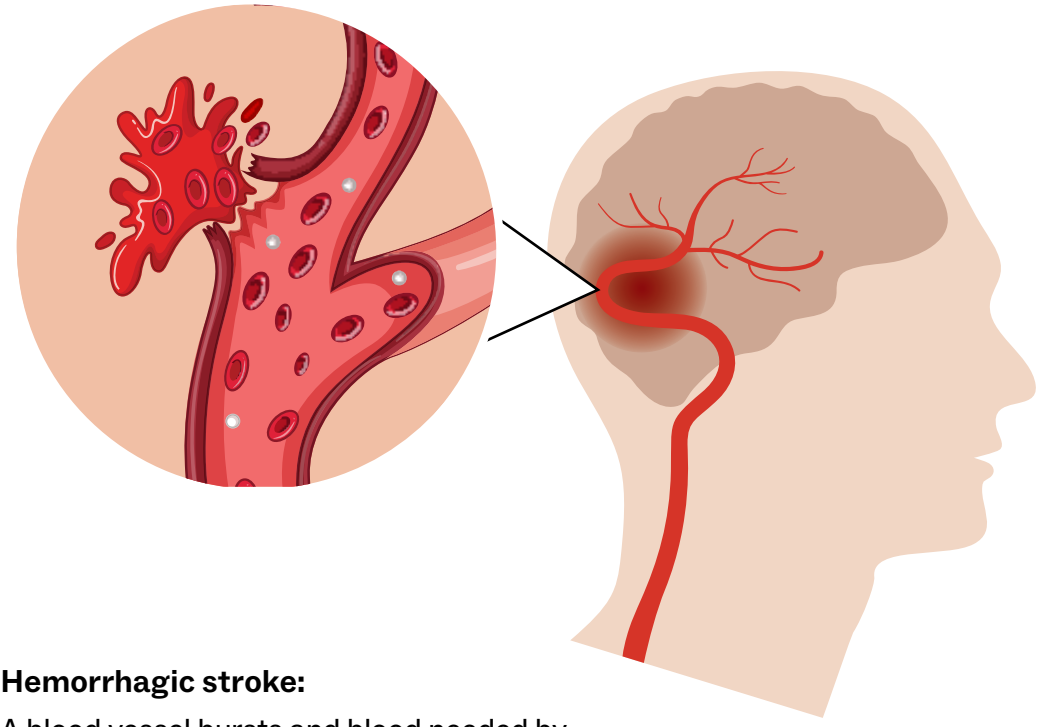
A hemorrhagic stroke happens when a blood vessel leading to your brain ruptures (bursts). When this happens, blood floods into the surrounding tissue. The part of your brain that is normally fed by the burst blood vessel no longer gets the blood it needs. Also, the bleeding can cause dangerous swelling in your brain.

Ruptures tend to happen at a weakened spot (aneurysm [AN-yur-is-ehm]) in the wall of one of the arteries leading to the brain (see the picture below).

There are two types of hemorrhage that can cause a stroke. They are named by where they happen in your brain:

- **An intracerebral** [in-tra-sir-REE-bruhl] **hemorrhage (ICH)** happens when a blood vessel breaks deep inside your brain. The bleeding can cause a lot of pressure.
- **A subarachnoid** [sub-ah-RAK-noyd] **hemorrhage (SAH)** happens when a broken blood vessel causes blood to build up on the brain's surface.

See **page 13** to learn about treatments for hemorrhagic stroke.



Hemorrhagic stroke:

A blood vessel bursts and blood needed by your brain escapes. Bleeding can also cause dangerous swelling in your brain.

How are strokes diagnosed?

When a stroke is suspected, doctors must work quickly to confirm the diagnosis. They also try to determine the stroke type and location — these are important factors in treatment. Here are common steps in this process:

- **Medical history.** The goal of a medical history is to better understand your condition. Your healthcare providers ask you or your loved ones about previous health problems and about any medicines you take. They also ask about your symptoms and when you first noticed them. Are they getting worse, or better? Are they changing, or staying the same?
- **Physical exam.** Providers examine you and check for stroke risk factors. They test your muscles and nerves, and they assess your strength, coordination, and reflexes. They ask you questions to check your memory, speech, and thinking.
- **Other tests as needed.** Doctors often order tests to rule out other causes of your symptoms or to get more information. Tests might include:
  - **Blood tests** to see if your blood is clotting normally and check for infections and immune problems.
  - **Imaging tests** of your head, such as CT (computerized tomography [tuh-MOG-ruh-fee]) or MRI (magnetic resonance imaging). These can check for bleeding, where the stroke is, and the amount of brain injury.
  - **Blood flow tests** (such as angiography [an-gee-AH-grah-fee] or carotid ultrasound) to help show the cause of a stroke.
  - **Heart function tests** to help show the cause of a stroke. These might include a regular **echocardiogram** eh-coh-CAR-dee-oh-gram]**, transesophageal** [tranz-eh-soff-uh-GEE-uhl] echocardiogram, or a **transthoracic** [tranz-thor-AS-sik] echocardiogram. Sometimes, in order to complete your stroke workup, we may recommend that you wear a heart monitor when you go home to check for atrial [AY-tree-uhl] fibrillation [fib-rihl-LAY-shun].

For family and friends

Knowing the stroke

Your loved one's treatment and recovery may depend on the type of stroke, where it happened in the brain, and the risk factors involved. Work with the medical team to record this important information.

How to use this information

Use this page to record the type of stroke you had and where it happened in your brain. Your treatment and recovery may depend on this information.

Type of stroke

☐ TIA
(See **page 4**)

☐ Ischemic
(See **page 5**)

☐ Hemorrhagic
(See **page 6**)

About my stroke

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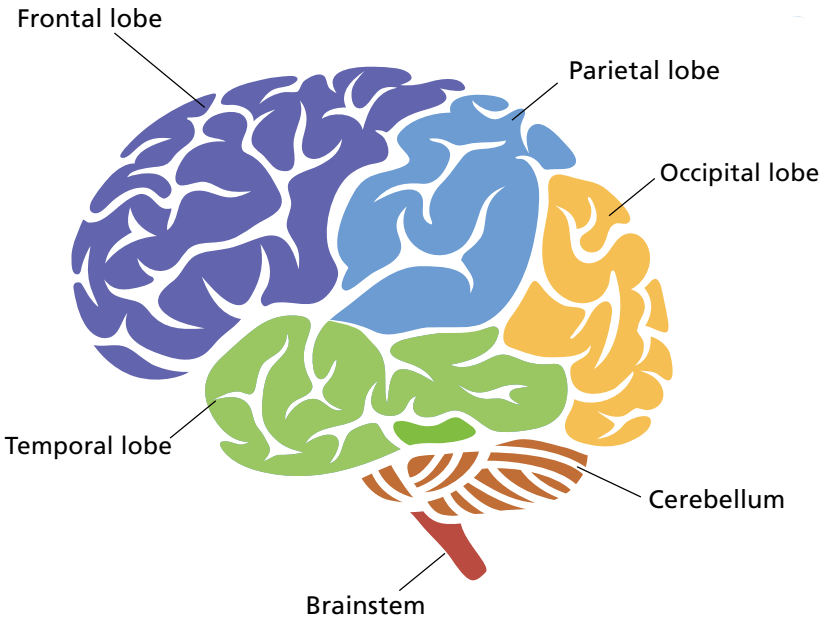
What type of stroke did I have?

A stroke can happen anywhere in the brain. If a stroke occurs on the left side of the brain, you're more likely to see the effects on the right side of the body. Likewise, if the stroke happens on the right side of the brain, the effects are seen on the left side of the body. A stroke that occurs in the brainstem will likely affect the entire body.

Why does it matter where in my brain the stroke happened?

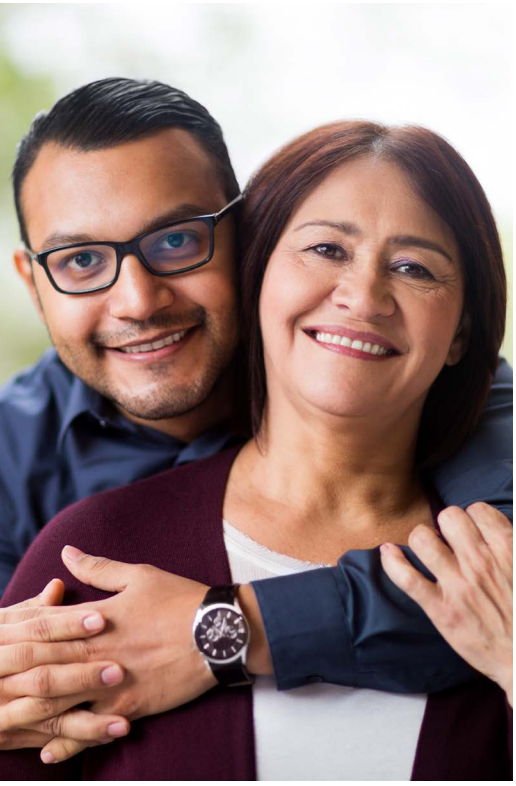
Your brain is divided into 2 sides, or hemispheres [HEM-iss-fears]. The right and left sides of your brain work together, but each side controls different things. For example, the left side of your brain controls your the right side of your body, and vice versa. Your brain also has different sections. Each section controls different mental functions and body movements. A stroke in the brainstem can affect both sides of your body, and the stroke may be more severe.

The table on the next page describes common effects of stroke in each area of the brain. These general descriptions may not match your experience exactly. Also, there can be quite a bit of overlap in symptoms and areas. For example, several stroke locations can affect strength and movement, even though this symptom is most common in a frontal lobe stroke



STROKE LOCATION	MOVEMENT AND SENSATION	COMMUNICATION	THOUGHT AND MEMORY	VISION	BEHAVIOR AND EMOTION
Frontal lobe	• Loss of strength or movement on one side of the body • Facial droop on one side • Trouble swallowing • Trouble controlling movements	• Trouble speaking or understanding speech • Trouble reading and writing	• Confusion or disorganized thinking • Trouble solving problems and connecting thoughts		• Trouble planning and organizing • Poor judgment • Depression • Low motivation • Irritability • Repeating actions
Parietal lobe	• Forgetting to use one side of the body • Trouble telling which finger is which • Numbness on one side, trouble identifying objects by touch • Trouble with coordination	• Trouble remembering words • Trouble reading and writing	• Trouble with numbers or arithmetic • Confusing left and right, up and down, over and under, etc.	• Partial loss of vision • Trouble opening eyes • Trouble seeing objects in peripheral vision	• Trouble paying attention • Apathy or dullness
Temporal lobe	• Hearing difficulties • Dizziness, balance problems	• Trouble speaking or understanding • Trouble finding the right word	• Trouble learning • Memory loss • Confusion about time		• Denial of the effects of stroke • Being more easily frustrated
Occipital lobe				• Partial or full loss of vision on one or both sides • Trouble recognizing faces or objects	
Brainstem	• Loss of strength, feeling, or movement • Trouble swallowing • Jerky movements • Dizziness, poor balance or coordination	Slurred speech due to weak mouth and tongue muscles	Decreased level of alertness or consciousness (may cause coma)	• Double vision or other vision changes • Drooping eyelids or trouble closing eyes	
Cerebellum	• Trouble coordinating movements • Slowed reactions • Problems walking or coordinating legs • Dizziness, balance problems • Trouble swallowing	Trouble speaking		Rapid eye movements	

Stroke Treatment



How are strokes treated?

Very often, stroke treatment must first include basic life support. This includes helping you breathe and keeping your airway open. You may also need treatment for stroke symptoms and complications. To help protect your brain, your medical team will also work to keep your blood sugar and your body temperature within normal ranges.

Beyond these measures, treatments depend on the type of stroke and when it started. It can also depend on its cause and its location in your brain.

Ischemic strokes: Treatment and prevention

For an ischemic stroke, the immediate goal is to restore normal blood flow through the blood vessel. The long-term goal is to reduce the risk of another stroke. Medication and surgical or catheter procedures are common ways to meet each goal.

Immediate treatments

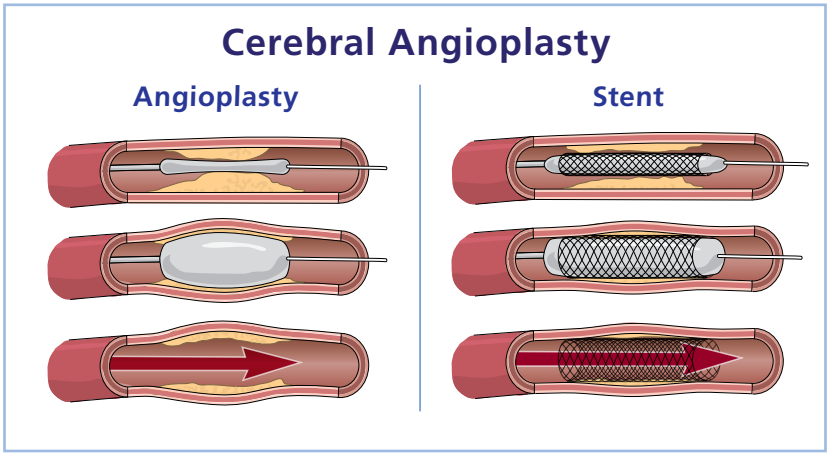
- Thrombolytics [thrahm-boh-LIT-iks] are medications that can quickly dissolve a blood clot that is blocking blood flow to your brain and causing a stroke. Common thrombolytics include tenecteplase [teh-NEK-teh-playz] or alteplase [AL-teh-playz]. These “clot-busting” medications can be put into your blood vessel in the first few hours after stroke symptoms appear. For these medications to have the best chance to work, it is vital to get to the hospital as soon as possible after stroke symptoms occur. Every second counts! (There are some risks with thrombolytics, so your doctor will help you understand if this medication is right for you.)
- Clot retrieving devices can remove a clot from a blocked blood vessel. A doctor inserts a catheter (narrow tube) into your blood vessel through the skin in your groin. The catheter has a special device on the end. The doctor guides the catheter through the blood vessel to the clot. There the doctor uses the device to remove the clot.

Procedures

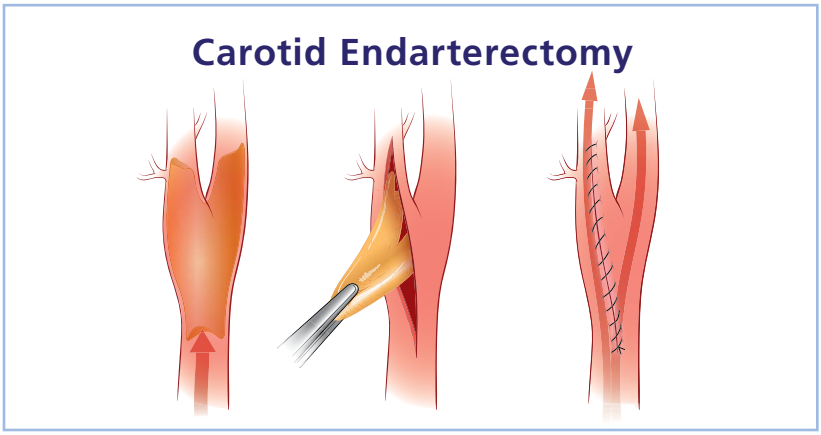
- **Cerebral** [seh-REE-bruhl] **angioplasty** [AN-gee-oh-plass-tee] is a procedure to widen an artery narrowed by fatty plaque. This procedure can help prevent another stroke.

  During the procedure, a doctor opens a blood vessel through the skin on your neck and threads a small, balloon-tipped **catheter** (thin, flexible tube) through the blood vessel. When the catheter reaches the narrowed area in the artery, the doctor inflates the balloon. This presses the plaque against the side of the artery.

  The doctor will sometimes place a hollow tube **(stent)** inside the artery. Once the catheter balloon is deflated and removed, the stent remains in place to help keep the blood vessel open.



- **Carotid endarterectomy** [en-dar-teh-REK-tuh-mee] is a surgery to clear away plaque in your carotid artery. This surgery can help prevent another stroke. During the procedure, the surgeon makes a small incision (cut) in your neck to reach the artery and removes the plaque inside. Blood will flow more easily through this newly "cleaned" artery.



Which treatment?

Your doctors will move quickly to choose and begin the right treatment for you. The faster treatment begins, the less brain damage there may be. Keep in mind that stroke treatment is NOT "one size fits all." Your doctor must carefully consider the following:

- **Will it help?** Some treatments may have no effect on your condition.
- **Is it safe for you?** Allergies, other illnesses, or the severity of your condition may rule out a particular treatment.
- **Do the risks outweigh the benefits?** Every treatment carries risks. Your doctors must determine that the potential benefits are greater than the risks.

New studies, new options

Researchers are always working to find better ways of treating strokes. Ongoing research includes studies on how to block chemicals created by brain cells during a stroke in order to protect the brain and help prevent stroke-related damage. Other research focuses on better ways to prevent stroke and help people recover.

Research offers new hope for anyone whose life has been touched by a stroke. To learn more about stroke research, see the National Institute of Neurological Disorders and Stroke (NINDS) at this website:

https://www.ninds.nih.gov/health-information/stroke/research

Medications

- **Statins** are a type of cholesterol medication that can protect and support inflamed blood vessels during a stroke. Statins can also help prevent another stroke, and may be prescribed long-term even if you don't have high cholesterol.
- **Antiplatelets and anticoagulants** work in different ways, but they both help prevent blood clots from forming inside your blood vessels. Doctors sometimes give these medications during a stroke and often prescribe them long-term after a stroke.
- **Medications** that reduce high blood pressure (hypertension) can help prevent a future stroke.

For family and friends

Medication management

Make sure the medical team knows about everything your loved one takes for health, such as:

- Prescription medications, including pills, patches, inhalers, or injections
- Over-the-counter medications
- Herbal or nutritional supplements
- Vitamins and minerals

Sharing this information will help the team determine the best short-term and long-term treatments.

Also realize that many stroke survivors go home with new medications. For more on medication management, see page 25.

Hemorrhagic strokes: Treatment and prevention

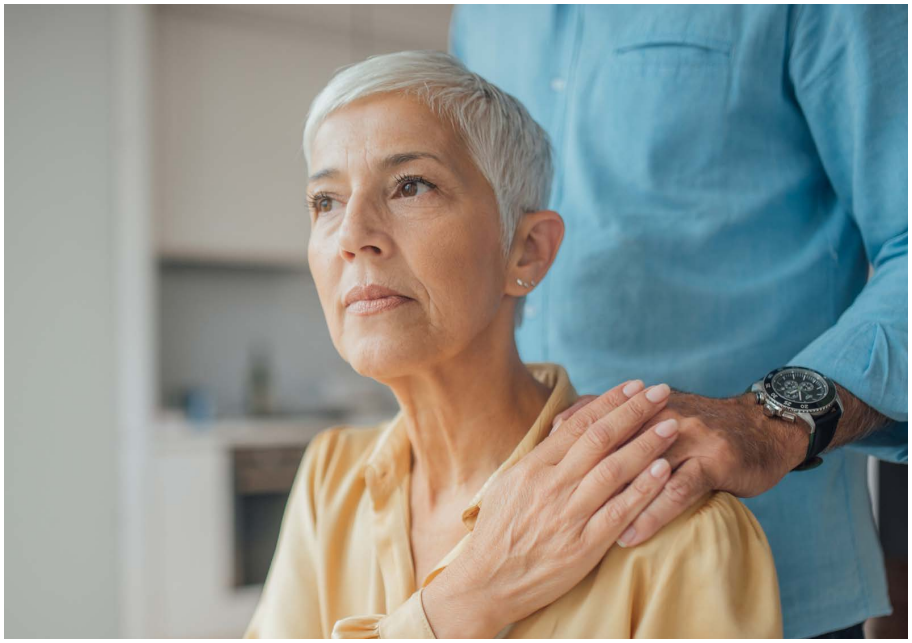
For a hemorrhagic stroke, the first goal is to stop the bleeding in the brain and relieve any extra pressure on the brain. You will also have treatment to help prevent another stroke. Treatment during and after a hemorrhagic stroke depends on the factors that cause or accompany the stroke. Some common treatments include:

- **Procedures to reduce pressure and irritation in the brain** might be needed. For example, you may have surgery to remove a hematoma (a collection of blood), clear away dead tissue, or temporarily remove part of your skull. If fluid builds up in the brain because of bleeding, your doctor may need to do a ventriculostomy [ven-trik-yoo-LOSS-tuh-mee]. This surgery places a small, soft tube into your skull. The tube stays in until the extra fluid has drained and the pressure on your brain is relieved.
- **Medications that lower high blood pressure (hypertension)** can help reduce the bleeding from a hemorrhagic stroke. These medications can also help prevent a future stroke.
- **Hyperosmotic** [hy-per-oz-MOTT-ik] **agents** are medications that help reduce swelling in the brain tissue caused by the bleeding.
- **Substances to help your blood clot can help stop the bleeding in your brain.** If you've been using anticoagulant medication such as warfarin (Coumadin), your doctors may give you something to reverse its effect.
- **A procedure to treat the cause of bleeding** might be used, depending on what caused the hemorrhage. These procedures include:
  - **Aneurysm clipping.** If a ruptured aneurysm caused the hemorrhage, a surgeon might place a small clip on the blood vessel. This can prevent re-bleeding or rupture of the aneurysm.
  - **Coil embolization (coiling).** This procedure might be used if the hemorrhage was caused by a ruptured aneurysm or by an arteriovenous malformation (AVM), a tangle of abnormal blood vessels. In this procedure, the doctor pushes a tiny platinum coil through a catheter (tube) placed inside one of the blood vessels leading to your brain. Once the catheter and coil reach the trouble spot, the coil opens up to fill it.
  - **A procedure to remove or seal off an arteriovenous malformation (AVM).** If the AVM isn't too large or too deep inside the brain, surgery might be used to remove it. Or, a beam of radiation might be used to seal it off so it eventually disappears.

New studies, new options

A stroke can sometimes trigger other health problems, such as seizures, brain swelling, or infections. These may add to the effects of your stroke or prolong your recovery.

That's why, after a stroke, your medical team will work hard to prevent and treat complications.



Common effects: What to expect

The effects of a stroke are greatest in the first days and weeks after the stroke happens. If you're like most people, you will improve with time. In fact, you may continue to improve for many months — and even years — after your stroke. The sections below describe some of the more common effects of a stroke.

Weakness and paralysis

Loss of strength (weakness) and loss of movement (paralysis), usually on one side of your body, are common after a stroke. You may hear the medical terms **hemiparesis** [hem-ee-puh-REE-sis] (for weakness) or **hemiplegia** [hem-eh-PLEE-gee-uh] (for paralysis) used to describe these one-sided effects. Sometimes they can cause one-sided neglect, which is when you ignore or forget one side of your body. Trouble swallowing — **dysphagia** — [dis-FAY-shzuh] is also common.

Trouble communicating

Struggling to express your thoughts is quite common after a stroke. So is mixing up words or having trouble understanding other people's speech. **Aphasia** [ah-FAY-shzuh] is the general term for these kinds of problems. But other stroke effects may also interfere with your ability to communicate. For example, if the muscles used in talking or swallowing are affected, your speech can be slurred, slow, and difficult to understand.

Problems thinking and remembering

You might have trouble making decisions or solving problems. You might become forgetful, or feel like your memory is playing tricks on you.

Changes in vision

Your field of vision (how much you see on either side of your head) may be smaller than normal. Some people say it's like a shade is being pulled across or over part of their field of vision. You might also have trouble coordinating or controlling your eye movements. Or, you could struggle with depth perception (judging how close things are to you). Blurred vision is also common after a stroke.

Changes in your emotions and behavior

After a stroke, some people feel sad or angry for a time. Your emotions may change rapidly, and you may find yourself crying or laughing at unexpected times. In some cases, people feel that their basic personality has changed. They find that they're more or less friendly, spontaneous, cautious, bold, and so on.

How does the brain heal?

Some of the damage done by a stroke can't be reversed, but some of it can. Here's how it works:

- **The stroke kills some brain cells.** Your body clears away these dead brain cells, and they can't be re-grown or replaced. The function they controlled may be permanently lost.
- **The stroke limits (impairs) the function of other, undamaged brain cells.** Often this happens because the undamaged brain cells have lost normal communication with a damaged area of the brain.
- **Over time, the brain finds ways to compensate — so function may return.** Communication can be "re-routed" inside your brain, or undamaged areas can take on new tasks. Since most activities — like talking or walking — require a coordinated effort between different parts of the brain, there are many possible ways for the brain to make up for a missing "player."

Right now, you still don't know what your recovery will look like. But there are ways that you and your family can help the healing process. One of the most important of these is to take part in stroke rehab activities. See **page 18** to learn more about what happens in stroke rehab.

For friends and family

How you can help in the hospital

- **Limit visitors.** Friends may be eager to visit, but ask them to wait. For now, keep the guest list to one or two close family members. This will help your loved one rest and lower the risk of infection.
- **Help your loved one rest.** Hospitals are busy places. They can be noisy. Help your loved one rest by staying quiet and relaxed yourself. Just being there is enough.
- **Share your observations.** You know your loved one best, so your insight can be helpful to the team.

What to expect during your stay

After the emergency room (ER), you may go to the intensive care unit (ICU) or another unit of the hospital. Once there, your care will focus on assessing the injury to the brain, preventing complications, and monitoring and treating symptoms. Here's what your care may require:

- **Medication** given by IV (through a vein), by mouth, or by other methods
- **Monitoring,** including frequent checks of your vital signs such as blood pressure, heart rate, and so on
- **Frequent blood draws** for laboratory tests
- **Imaging tests,** such as an x-ray or echocardiogram
- **Bed rest,** with limited bedside and self-care activities as directed by your medical team
- **Other equipment, monitoring, or support** — for example, extra oxygen, a feeding tube, or a ventilator (breathing machine)

Bells and whistles: Don't be alarmed

In the ICU and other hospital units, machines will help monitor your condition. Some have alarms that go off from time to time. An alarm doesn't always mean there's an emergency. Sometimes a machine makes noise to remind the medical team to do a routine task.

Feeling tired

After a stroke, you may feel tired for a while. Fatigue may be an effect of your stroke, and it may be increased by other factors:

- **Changes in routine.** Poor sleep, little exercise, and new medications may leave you with less energy.
- **Daily activities that require more effort.** The effects of your stroke may require you to work harder to walk, talk, focus, and so on.
- **Frustration or worry.** These feelings, common after a stroke, can be tiring.
- **Clinical depression.** If you have symptoms of depression, talk with your doctor. Depression is a treatable problem.

Your energy should slowly come back as you recover. If it doesn't, talk to your doctor. Together you can determine the cause of your fatigue and whether you need treatment.

For family and friends

Understanding and coping with change

You may be surprised at some of the changes you see in your loved one. You may not know what to think or how to react. But help is available to support you as you adjust.

Talk to the medical team. They may be able to explain these changes — to help you see the connection between the brain injury and the behaviors you see. They can give you some context, help you take things a little less personally, and perhaps even show you more of your loved one's "same old self" in this new and unfamiliar situation. Just as important, they can offer tips for communicating with your loved one. Like your loved one, you may need to learn new ways of doing things for a while.

For more information for family and friends, see **page 21**.

Before you leave the hospital

Once your health is stable, you'll enter a new phase of your treatment. You'll still receive the monitoring, medication, and other medical support you need. But your medical team will now begin to help you and your family plan for the future. Here's what you can expect in this part of your hospital stay:

- **Stroke rehabilitation (rehab) evaluation and activities.** Rehab staff will visit and evaluate you. Working with your doctors, they'll determine how the stroke has affected you and what type of rehab will help. They may begin some rehab activities with you before you go home. As they work with you, staff will monitor your response and give feedback to your doctors. If needed, they'll also help arrange an outpatient rehab program.
- **Home instructions.** Small-group and one-on-one teaching from your nurses, stroke rehab staff, and others will help you and your family know what you need to do after you go home. This includes information about the immediate recovery period as well as how to lower stroke risk throughout your life.

What is stroke rehab — and why is it important?

Stroke rehab is a general name for a variety of therapies and services. Stroke rehab can make a big difference in your recovery. It can help your brain learn new ways of working — and help you regain more of the abilities you lost when you had your stroke. It can also help you feel safer and more supported as you go about the hard work of recovery.

Stroke rehab may start when you're still in the hospital and can continue after you've been discharged. Depending on your needs, it can include education, guided exercise, and support for any of the following:

- Eating and swallowing, if the stroke affected your ability to swallow
- Skills for daily living, such as bathing, dressing, and using the toilet
- Mobility skills, such as walking or using a wheelchair
- Communication skills, such as finding the right word or saying it aloud
- Cognitive skills, such as solving problems or remembering things
- Social skills to help you interact with others
- Coping skills to help you handle your emotions and get help for depression if needed

Your stroke rehab team

You may work with a number of new people in the days and weeks to come. As you begin stroke rehab, your care team will include some or all of these healthcare providers:

- **Doctors,** such as inpatient physicians (hospitalists) and specialists in a range of areas (neurology, internal medicine, physical rehabilitation, and mental health) will direct and monitor your treatment.
- **Rehab nurses** have special training to help stroke survivors. They teach you about strokes, risk factors, and healthy living after a stroke. They also help you relearn basic skills, such as using the toilet and bathing.
- **Physical, speech, and recreation therapists** help you gain skills for more independence and a more satisfying life after a stroke. Which therapists you see will depend on your condition and your goals.
- **Occupational therapists and vocation counselors** can help you rebuild skills you'll need if you want to return to work. They can also help you plan job adjustments and consider your work options.
- **Social workers** can help you make adjustments for life at home or work.

The role of repetition

Rehab can help you:

- Regain skills you lost when your brain was injured
- Learn new skills and new ways of doing things
- Be more independent
- Have the best possible quality of life

Repeating certain movements and exercises again and again is an important part of most rehab programs. Studies show that repetition is a key to learning. If you've ever worked hard on a skill — such as playing the piano or perfecting your golf swing — you know this is true!

Stroke Recovery

You're probably eager to leave the hospital. But you may have some questions and concerns, too. This section has general guidelines to follow when you go home. Use them to help prevent another stroke and live a healthier life every day.

Before you leave the hospital, your nurses will answer any questions you have. Always follow the advice of your medical team, even if it's different from the guidelines in this booklet.

What does the future hold?

Right now, you and your family are eager to know what to expect for the future. You probably wish someone could tell you exactly which stroke effects will linger, and which will go away.

Your doctors and other caregivers can explain your specific condition. They can also tell you a lot about your recovery. But there will still be many unknowns. As with any brain injury, stroke recovery can take many possible courses — and it can be difficult to predict. As you go forward in your treatment and recovery, it's important to keep in mind the following:

- **The effects of a stroke are greatest in the first few days after the stroke.** Don't assume you'll always feel as you do today. You may improve a lot in the days, weeks, and months to come.
- **With time, care, and effort, most people do improve.** Healing may not happen the way you think it will, but it does happen.
- **Rehabilitation activities can play a huge role in recovery.** Stroke rehab may include physical, occupational, and speech therapy. It may also include counseling for mental health concerns.
- **Your healthcare providers are important to your recovery,** but YOU are the most important person on your care team. Your commitment and energy will be vital factors in your recovery.

FOR FRIENDS AND FAMILY

Helping at home

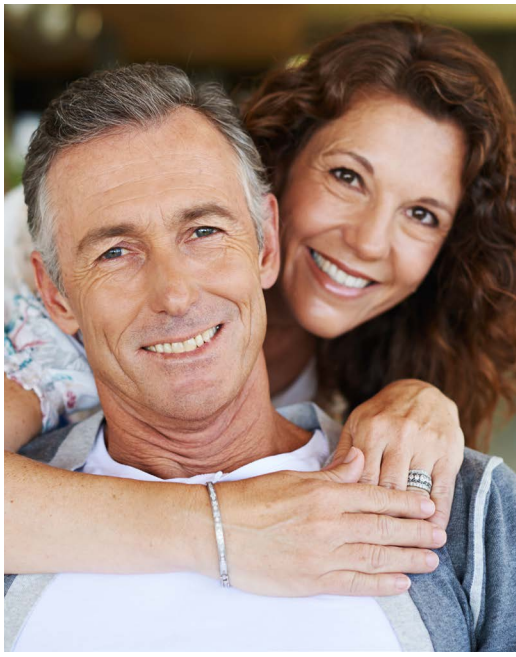
As your loved one leaves the hospital, you'll probably have a list of new jobs — driving to rehab appointments, organizing medications, cooking healthier meals, and so on.

As you review this book, you'll probably find many tasks that you can help your loved one do.

Try to take things slowly. Give yourself credit for everything you're doing. And if you need help or advice, call your social worker or your loved one's doctor. Also, see the resources listed on **page 39.**

If you're not able to go home

You may need a little extra help after hospitalization. Some people can get this extra help at home from their family, or from home health nurses or aides. For other people, the best place for recovery is at a facility such as the following:



Nursing facility

This is for people who need more (or different) medical care than they can get at home. Also, a nursing facility can give around-the-clock care by skilled nurses and aides.

Assisted living facility

Assisted living is for people who can manage most things on their own, but still need some extra support and care. For example, an assisted living facility may offer a service to help you manage your daily medication.

These are just two broad types of facilities that you and your family may consider. In fact, there are many different kinds of facilities, providing differing levels of care and services. Ask your medical team or social worker to help you explore your options.

For family and friends — What you can do today

Someone close to you has just had a stroke. You may find yourself wondering what you can do to help — or how you can feel more in control of things right now. If so, look below for ideas to help you through this difficult time:

- **Learn as much as you can.** Read all of this booklet. Ask the medical team about anything that worries you. The more you know, the more confident you may feel.
- **Anticipate changes**. Even if it was very mild, the stroke will bring changes to your loved one — and to you. These changes can happen in different areas of your life. They may not be permanent, but it helps to anticipate them — and to be as patient and flexible as you can be in the days to come.
- **Ask for help.** What do you need help with? What do you want to know? Ask others to help you right now. Some examples:
  - Friends or family members can mow your lawn, bring you dinner, or pick up groceries.
  - A hospital social worker can help you arrange care, find medical supplies, sort out financial and legal issues, and so on.
  - Nurses and rehab staff can help you set up a medication schedule, show you how to prepare healthier meals, and find other ways for you to support your loved one at home.
- **Take care of yourself — starting today.** Caring for a stroke survivor can be demanding, and you need to pace yourself to avoid burnout.

For more information on all of these topics, **see pages 35 to 38**.

What can I do to prevent another stroke?

Once you've had a stroke or TIA, you're at higher risk for another stroke. However, you can take steps to prevent the effects of another stroke.

Follow the recommendations in this book for managing your blood pressure, eating a healthy diet, and getting the exercise your body needs. Know the symptoms of stroke and teach your family what to watch for.

Know the signs of stroke! BE FAST!

Balance — sudden loss of balance or coordination

Eyes — sudden loss of vision or double vision

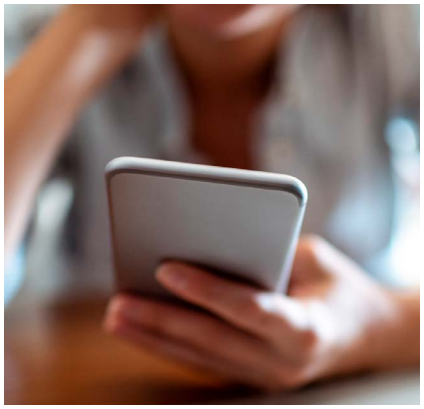
Face — sudden weakness in the face

Arms — sudden weakness of an arm or leg

Speech — sudden difficulty speaking

Time — time the symptoms started

You and your family should ALWAYS watch for these signs.



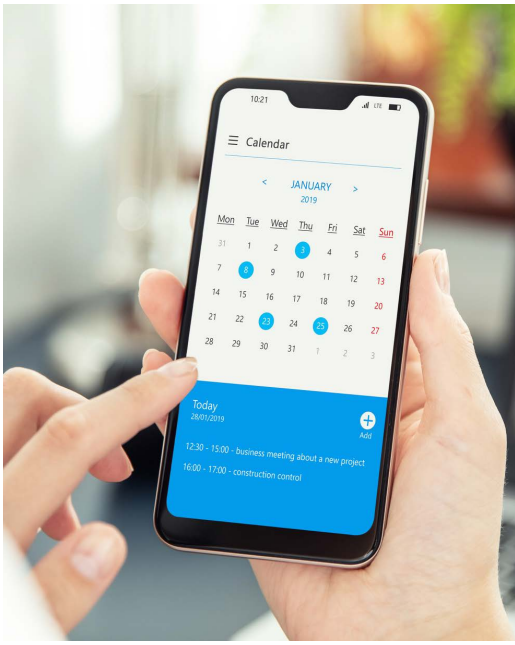
Call 911 — get treatment fast

If you notice any of the signs listed above, call 911 right away. During a stroke, 32,000 brain cells die every second — so every second counts to help prevent brain damage.

Keep follow-up appointments

In the first few weeks after your discharge, you'll need to see members of your medical team.

- **Primary Care Provider (PCP):** Your PCP is will be your main contact in the healthcare system. They will help you manage your risk factor and make sure your prescription medications are up to date. Your PCP will be the point person for any medical issues and will provide referrals to other necessary specialties.
- **Neurologist:** Your neurologist will review your hospital stay and make sure you get all the necessary tests. They will explain test results, the overall known reasons for your hospitalization, and help you understand how to prevent a stroke in the future. The neurologist will guide your ongoing therapy and help with any other medical specialties that might be important to your ongoing treatment. Your neurologist will also provide support with symptom management after your stroke.
- **Home Health:** Home health services, if needed, will be coordinated when you are discharged from the hospital. Home health services may start as early as your first day at home.
- **Other providers:** You may have appointments with other providers to help manage health conditions that you had before your stroke or for new conditions that arise.



Safety Checklist

☐ Give your home a safety upgrade

After a stroke, you're more prone to accidents. But making some changes around the house can help prevent them. Try the room-by-room suggestions below to make your home safer. (If your home has uneven floors, a lot of stairs, or other features that make it difficult for safety, you may need to stay with friends or family for a time.)

Tips to make your home safer

All rooms, stairs, and hallways

To help prevent falls:

- Remove rugs or tape them down with non-skid tape.
- Put sturdy handrails along stairs — even small flights, like on a porch.
- Keep pathways clear of electrical cords or other clutter.
- Add night lights to your hallway and bedroom, and add a table lamp by your bed and favorite chair.
- Remove light furniture that could be knocked over.

Bedroom

- Keep your bed covers up off the floor.
- Keep a telephone within easy reach of your bed.
- If you have trouble getting to the bathroom during the night, get a commode chair. (This is a seat with grab bars on both sides and a small removable bucket beneath it. You can use it at night, then empty it in the morning.)

Bathroom

To steady yourself in the tub or shower:

- Put grab bars on the wall.
- Use a special seat or bench to sit on while you bathe. If you sit while bathing, a hand-held shower head is helpful.
- Put non-skid decals on the floor of the bath or tub.
- If you find it difficult to adjust the water temperature, replace faucet handles with bigger, lever-type handles.

Kitchen

- Create a clear surface near the stove. This gives you a space for pans that are too heavy or too hot to hold.
- If you've become more forgetful, you may want to install automatic shut-off valves on the stove.

☐ Take your medications

Most people will need to take some new medications after a stroke to reduce stroke risk factors, such as high blood pressure. Always follow your doctor's instructions and keep these basic guidelines in mind:

- **Only take medications that your doctor has approved or prescribed for you.** Tell your doctor about all the things you take for your health, including all the items lists at right.
- **Know your medications.** Medication mistakes are common and can be dangerous. Listen carefully to the instructions from your doctor or pharmacist, and ask questions. Write down what you're taking, why you're taking it, and how to take it. Find out what potential side effects you should watch for, and what to do if they happen. If you need help, just ask your pharmacist or rehab therapist.
- **Get organized.** Use a pillbox or chart to help organize your medications. A medication chart or smartphone app can help you keep track of what to take and when.
- **Don't stop taking any medication unless your doctor tells you to.** You may leave the hospital with a small supply of medications. You'll probably need to refill this supply at your pharmacy. Make sure you have all the prescriptions you need and order refills before you run out.

You may be prescribed an anticoagulation medication (also called a blood thinner). Make sure you take this medication exactly as prescribed. Ask your doctor before making any changes to your medications.

Take medications exactly as directed

You may need to take daily medication to help control your stroke risk factors and improve your health in other ways. Follow the directions on your discharge instructions about which medications to take and when. If you have questions, call your Primary Care Provider or ask your Home Health care provider.

Make a medication list

Keep an updated medication list with you at all times. Include everything you take, including all:

- Prescription medications
- Over-the-counter remedies (like allergy pills or aspirin)
- Herbal remedies
- Vitamin supplements
- Inhalers
- Patches
- Injections
- Ointments

Update your list anytime you change a medication.

"When I first got home, everything was different. Talking was difficult, and I had to fight for every little improvement. Now, I feel I'm getting my life back.

I'm taking my medications, keeping an eye on my blood pressure, and I'm exercising more. I'm doing everything I can to prevent another stroke."

— Roberto, 49, 4 months after his stroke

☐ Monitor your health

After a stroke, you need to pay special attention to your body, how you feel, and even what you do each day. In fact, your medical team may ask you to keep a record of some of these things. For example:

- **Blood pressure.** High blood pressure is a major risk factor for stroke. If you have this problem, measure your blood pressure regularly. Write down your numbers. If you find you can't meet your blood pressure goals, call your doctor.
- **Weight.** Are you staying at a healthy weight? Your healthcare provider will calculate your body mass index (BMI), a measure of body mass based on your height and weight. A BMI of 25 to 30 means you're overweight. A BMI over 30 is a sign of obesity, with much higher risk of future problems.
- **What you eat and drink.** Your medical team may have asked you to change some of your eating habits. For example, if you have high blood pressure, you need to limit sodium (salt) in your diet.
- **Minutes of physical activity.** Daily exercise is even more important after a stroke. Set goals with your medical team, and track your progress every day.
- **Other rehab activities.** Your rehab providers may give you exercises to do on your own. For example, they may ask you to work on strengthening your weak side, practice repeating words, or solve puzzles every day.

☐ Balance rest and activity

Both rest and activity are important for healing. Here are a few guidelines for getting enough of each:

- **Rest.** Try to get at least 7 to 9 hours of sleep every night. Avoid things you find stressful. Even if you don't find yourself unusually tired — as many people do after a stroke — your body needs extra rest right now.
- **Activity.** Physical activity is a big part of your stroke rehab. It's also a big part of healthy living for the rest of your life. Even if you can't move as well as you used to, you can still exercise. So talk with your medical team about creating a plan. For most people, a good goal is 30 minutes of moderate exercise, 5 days per week. For better all-around fitness, try to do activities that help improve your strength, balance, flexibility, and endurance.

Exercise ideas

Ask your medical team to help make an exercise program. They can help you decide what activities to do, how often to do them, how hard, and how long.

Strength

- **Arm raises**
  Lift light hand weights, no more than 2 pounds. (You can use cans of soup.)
- **Knee bends**
  Holding onto the back of a sturdy chair, bend both knees, then stand again.
- **Crunches**
  Lying on your back on the floor with your knees bent, tuck your chin and lift your shoulders up toward your knees. Stop when your shoulder blades are just off the floor. Hold for a moment, then roll back down.
- **Wall push-ups**
  Standing a few feet away from the wall, place your palms against the wall at shoulder level and do "push-ups."

Getting a feel for fitness

Wonder whether you're exercising too hard, or not hard enough? Here's what moderate exercise feels like:

- You can talk during exercise, but you can't sing.
- You're breathing harder than usual, but not gasping for air.
- You're sweating lightly, not dripping wet.
- You feel invigorated right after — not exhausted.

If you have physical disabilities

The National Center on Physical Activity and Disability (ncpad.org) offers personalized tools and resources to help you meet your goals for physical activity — regardless of your disability.

Exercise ideas (Continued)

Balance

- **Side leg raises**
  Holding onto the back of a chair with both legs straight, lift one leg 6 to 12 inches out to the side. Keep your foot facing forward (not pointed). Repeat on the other side.
- **Hip extensions**
  Stand facing a table 12 to 18 inches away and hold on to it for support. Lean forward slightly as you lift one leg straight out in back (no pointed toe). Repeat on the other side.
- **Heel-to-toe walk**
  Walk so that you're placing the heel of one foot down directly in front of the toes of the other foot.
- **Stand up and sit down** without using your arms.

Flexibility

- **Triceps stretch**
  Holding the end of a dish towel in your hand, raise your arm over your head, then bend it so the towel is draped down your back. Reach behind your lower back with the other hand to grab the bottom of the towel. Slowly work your hands closer together for a good stretch. Hold for 10 seconds. Repeat on the other side.
- **Hip rotation**
  Lying on your back on the floor with your knees bent, gently lower both knees to one side as far as you can without pain. Keep your knees together and your back flat on the floor. Hold for 10 seconds. Repeat on the other side.

Endurance

- **Walking**
- **Swimming or water aerobics**
- **Gardening, mowing, raking**
- **Cycling on a stationary bike**
- **Bicycling outdoors**
- **Running or jogging**
- **Playing tennis**
- **Climbing stairs or hills**
- **Playing golf (walking)**

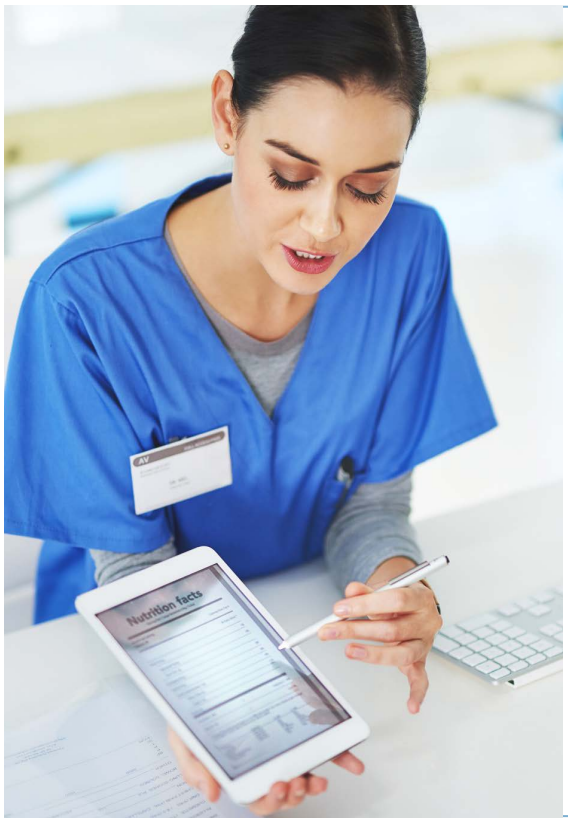
☐ Eat healthy

For the first few weeks after your stroke, you may not have much of an appetite. But you need to keep eating to keep up your strength and speed your recovery. At the same time, you might need to make a few changes in your diet to help control your stroke risk factors. Your medical team will have specific instructions, but here are a few general guidelines.

- **Eat a variety of healthy foods.** Vegetables, fruits, and whole-grain foods are good choices. If you aren't hungry, ask your rehab team or dietitian to recommend a nutritional drink to add to your daily meals.
- If you have dysphagia (trouble swallowing), take it slowly. If your rehab team has given you a special diet because of your dysphagia, follow it faithfully. In general, eat smaller bites. Chew them slowly. If you have a lot of trouble swallowing, try soft foods like applesauce and soup. Liquids thickened with honey are another possibility. Ask your rehab team or dietitian for more ideas.
- **Start a healthy eating plan as recommended by your medical team.**

Diet changes

If you have high blood pressure, you may need to cut down on sodium (salt) in your diet. If you need to lose weight or lower your cholesterol, you may need fewer calories and a l ow-fat diet.



A Nutrition prescription

Your healthcare providers may refer you to a Registered Dietitian Nutritionist (RDN). An RDN can help you make changes in your eating habits by:

- Teaching about nutrition and how diet affects your stroke risk factors
- Helping you choose foods and plan menus
- Helping you track progress toward goals
- Encouraging and supporting your family's efforts to eat healthier

Take a new look at food

Food, like exercise, is good medicine. Your doctor or dietitian will recommend that you follow healthy eating plan that will meet your health needs. It will also include a little wiggle room to allow for your tastes and lifestyle. After all, it's important that you enjoy your favorite things while still making overall improvements in your daily habits. It will make it easier to stick to the changes if you enjoy what you're eating!

The **Mediterranean** and the **D.A.S.H.** eating plans are 2 options that may be recommended by your doctor or dietitian. Follow their recommendations and work with them to design a plan that will work for you and your family.

The Mediterranean-style eating plan

A **Mediterranean-style eating plan** is based on how people eat and drink in the 16 countries that border the Mediterranean Sea. This healthy eating plan can reduce your risk of having another stroke, or developing heart disease, cancer, high blood pressure, type 2 diabetes, Parkinson's disease, and Alzheimer's disease. This eating plan:

- **Focuses on plant-based foods** (legumes, fruits, vegetables) that are freshly prepared instead of processed, packaged, or canned foods.
- **Allows for variety.** Eat different foods each week to make this diet work for you AND your family.
- **Helps you save money at the grocery store** by buying less red meat, refined grains, desserts, and fast food each month.
- **Supports a healthy lifestyle:** Be creative with menu planning, grocery shopping, and cooking!

For more information on the Mediterranean Eating Plan, check out the American Heart Association website at: **HEART.org**

The D.A.S.H eating plan

(Dietary Approaches to Stop Hypertension)

The D.A.S.H. eating plan focuses on limiting the sodium (salt) in your diet to 2,300 milligrams (mg) a day. (The lower-sodium D.A.S.H. plan calls for less than 1,500 mg of sodium a day.)

Like the Mediterranean eating plan, the D.A.S.H. plan also focuses on meals that are rich in:

- Whole grains, fruits, and vegetables
- Fat-free or low-fat milk products
- Fish and poultry
- Beans, seeds, and nuts

The D.A.S.H. plan includes the following advice:

- **Limit your sodium (salt) intake.** Don't cook with salt, and don't add salt later. Also, read food labels. The label will reveal any hidden sodium, as well as other unhealthy ingredients like trans fat.
- **Choose unsaturated fats.** Avoid saturated and trans fats.
- **Eat plenty of fruits and vegetables.** Don't rely on juices or canned versions. Focus on whole fruits and vegetables instead. Try for lots of dark green, orange, and yellow vegetables.
- **Go for whole grains.** Whole-grain bread, brown rice, and oatmeal are healthier than white bread and rice or processed cereals.
- **Get your protein from heart-healthy sources.** Fish, nuts, beans, and lean poultry and meat are best.
- **Pick nonfat or low-fat dairy products**. Milk, cheese, and yogurt are healthiest when they're low in fat.

For more information on the D.A.S.H. plan, visit this website at the National Institutes of Health (NIH):

nhlbi.nih.gov/education/dash-eating-plan

☐ Return to work and driving

After a stroke, you may be eager to return to work or start driving again. But for your health and safety, you'll need to wait a while. There's no single, set time frame for returning to work or driving after a stroke. It depends on many individual factors. ALWAYS follow your own medical team's advice on resuming work or driving. Your actions can affect your health and safety — and the safety of others.

Driving

- Even with very few stroke effects, most people should wait at least a week before driving again. This gives time for you and your medical team to know your limits.
- Driving after a stroke may not be safe — for you or for others. A stroke can change your perception, judgment, and reaction times. And since many people don't realize all the effects of their stroke, it's vital to involve your doctor and rehab staff in your decision to start driving again. Talk to your family, too.
- Driving against your doctor's advice may be illegal. In some cases, the law requires your doctor to alert the state that you've been advised against driving.
- If you have any concerns about your ability to drive safely after a stroke, contact your state's driver licensing office. They can give you a medical evaluation form for your doctor to fill out. As part of this evaluation, your doctor may refer you to someone who can test your driving ability or to a driver's training program that can help you get back on the road.
- If you do start to drive again, have your family watch for warning signs of unsafe driving. If they see any of these in your driving, you need to have your driving tested:
  - Driving too fast or too slow
  - Ignoring traffic signs or signals
  - Getting lost or confused easily
  - Drifting across lanes
  - Driving and stopping too close to, or too far from, other cars

Work

- Your body needs time to heal. Even with very few stroke effects, most people should wait at least a week before returning to work.
- The stroke may have affected your ability to work — temporarily or permanently. It depends on your condition and the type of work you do. And since many people don't realize all the effects of their stroke, it's wise to involve other people in your decision to return to work.
- Talk to your family, employer, doctor, and rehab team about the demands of your job. Have you had enough rest, and are you emotionally ready to take the plunge? Can the job be adjusted?
  - Suggest a trial period at work to test out your job readiness.
  - Start back gradually. Try lighter-duty assignments and shorter days at first.
- Explore occupational therapy. An "OT" can help you relearn work skills or make other adjustments to help you stay in the workforce.

For family and friends

The decision to drive

To many people, driving means freedom and independence. Even thinking about giving it up can be very difficult.

As you talk over the issues with your loved one, try to be patient. If or when your loved one starts driving again, help by watching for signs of unsafe driving. And keep in mind that safety — for your loved one and others — is the most important thing.

☐ Care for your mental and emotional health

Emotional changes are common after a stroke. They may be a direct effect of your stroke — a result of the injury to your brain. But they can also come from the changes that a stroke may bring to your life. Many people report feeling some anger or sadness as they adjust to the reality of life after a stroke.

Often these feelings are temporary. But they can be painful and they may get in the way of your rehab and recovery. To prevent this, try the following things to care for your mental and emotional health:

- **Go easy on yourself.** Be patient and let the feelings come. Don't beat yourself up about the way you're feeling.
- **Join a support group.** Other stroke survivors know what you're going through, and they can help you feel more hopeful. See page 39 for information on joining a stroke support group.
- **Stick to your exercise plan.** Being physically active can boost your mood and speed your recovery.

Talk to your doctor

Depression and anxiety can be treated. Your doctor can discuss the best treatment for you.

☐ Quitting tobacco

People who use tobacco have 3 times the risk of heart attack and stroke as those who don't. The good news is that if you quit now, your risk goes down right away — even if you've used tobacco for many years.

Talk to your medical team. They can help you plan a way to quit tobacco and can suggest programs and methods to help you cope with the stress of quitting. They may also offer medications to help reduce your craving for tobacco and ease your withdrawal symptoms. You can also check out one of the resources below.

Worried you can't quit tobacco? Keep trying!

Most people try several times before they finally quit tobacco for good. So keep at it. It's never too late to be healthier — and past failures do NOT mean you can't succeed this time.

Resources to help you quit

Utah Tobacco Quit Line

In English: 800-QUIT-NOW
(1-800-784-8669)

En Español: 877-629-1585
tobaccofreeutah.org

The Utah Tobacco Quit Line is a free, phone-based service available to all Utah teens, uninsured adults, and adults on Medicare or Medicaid. In addition to other services, the Quit Line provides support and information for pregnant women trying to quit tobacco.

Quit for Life

866-QUIT-4-LIFE (866-784-8454)
quitnow.net

The Quit for Life program is a confidential, phone-based program to help you quit tobacco. It offers one-on-one telephone support from a trained specialist, a quit guide and workbook, and stress management tools and materials.

Online programs

These programs are free, anonymous, and effective.

- **Freedom from Smoking**
  freedomfromsmoking.org
  Get advice and support in a program by the American Lung Association.
- **Become an EX**
  becomeanex.org
  This free plan is based on personal experiences from ex-smokers and the latest scientific research. It helps you relearn life without tobacco.

Family and Friends: Caring for a loved one after a stroke

After a stroke, you're focused on helping your loved one. That's how it should be. But believe it or not, taking care of yourself will be just as important. This section tells you a little about what you might expect as a stroke caregiver, and how you can help your loved one — without losing yourself.

What may change after a stroke

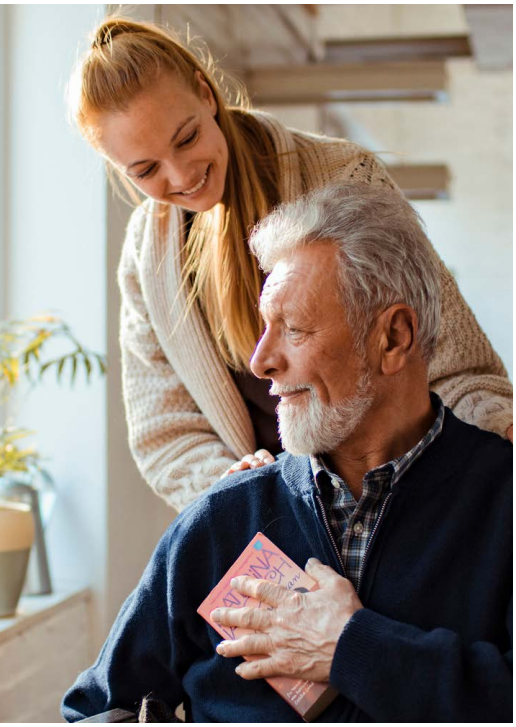
If someone you live with — or spend a lot of time with — has recently had a stroke, you may already sense that changes are on the way for you, too. Strokes affect health, but they also affect daily living and relationships. According to other stroke caregivers, you may see changes in these areas:

- **Time for yourself.** Helping with daily activities, driving to rehab and doctor appointments, helping your loved one rest and recover — all this takes time. It may require extra effort to find time for yourself. It's important to find those moments when you can, and be patient during these changes.
- **Roles and responsibilities.** Strokes often shift the dynamics of a relationship. Maybe you need to "parent" your mother or father now. Or maybe you have to start doing things your spouse usually handled — driving, paying bills, supporting the family financially, and so on. Expect to rethink your role in your relationship with your loved one.
- **Daily habits.** To control stroke risk factors, your loved one may need to make some lifestyle changes. Such changes often require a team effort. For example, you may need to cook and eat in a new way, become more active, or stop smoking too.
- **Social life.** Going out to see people may be more difficult, at least for a while. You'll probably need to reach out in other ways to keep your social ties intact. The effort is worth it, though. Keeping in touch with friends by phone or online can be an important source of support.

"My father's stroke was a setback, but it wasn't an ending. It was hard work, and it took time, but Dad did get better.

"Now my Dad is back to spending time with friends and doing many of the activities she likes to do. Things go more slowly — but he enjoys every day. "

— Mona,
5 months after
her dad's stroke



What may change after a stroke

"Stroke caregiver" is a job you probably didn't expect to have. Depending on your situation, you may have some difficult feelings as you begin your on-the-job training for this new role:

- **Worried.** You worry that you won't do a good job taking care of your loved one, or that you won't be able to handle it.
- **Tired.** You feel exhausted — physically and emotionally.
- **Sad.** You mourn the "good old days" before the stroke. You have trouble making decisions, enjoying things, or sleeping.
- **Guilty.** You play the "what-if?" game, wondering if you should have done something different to protect your loved one. Or, you feel guilty for being frustrated and impatient with your loved one.

These feelings are hard to handle, but they are normal — and there are good ways to deal with them and improve your outlook. See the ideas below for coping with the demands of being a caregiver and taking good care of yourself.

Coping: Tips from other caregivers

You won't be much help to anyone if you let yourself get overwhelmed by the new demands — and strong emotions — that can come with caregiving. Here are a few tips for coping:

- **Join a support group.** Other caregivers can be a great source of information, ideas, support, and hope.
- **Talk it out.** Don't let your worries build up inside. Talk to your loved one, your friends, and the hospital social worker. They can offer you support and help you prepare for whatever the future brings.
- **Get help.** Be open to accepting offers of help. Create a "job list"that details what people can do. Then, if they ask, you can show them the list and have them take their pick. And if people aren't offering to help, call them up and ask for it. Everyone needs a hand at times.
- **Get relief.** Most communities have resources that can help care for your loved one from time to time, so you can take a break.
- **Try on a new perspective.** For a moment, imagine that the stroke has happened in someone else's family. Would you blame or judge any of them? Wouldn't they deserve your sympathy and compassion? Try to give yourself the same kindness you would show to someone else in your situation. And try not to dwell on the past. Instead, focus on making healthy changes for the future.
- **Hold on to hope.** It's normal to grieve a little right now. Try to be patient with your feelings of loss or sadness. Things should improve with time. But if the feelings are stopping you from doing what you need to do every day, call your doctor. You may need treatment for depression.

Do's and don'ts for communication and care

Because of the stroke's effects, you and your loved one will need to find new ways to connect. As you work with your loved one to give care and comfort, try these tips:

Do

- Keep conversations simple and brief. "Yes" or "no" questions are easiest to understand and answer.
- Use your face and body to help communicate. Point at things, nod your head, shrug, guide with your hands, etc. You can also try using pictures to help get your point across.
- Break down tasks into steps, and guide your loved one through them one at a time.
- Make a daily schedule and stick to it. A predictable routine will reassure your loved one.
- Give your loved one plenty of time to answer questions and do things.
- Remember that chatting isn't the only way to relate to your loved one. Share a cup of tea, take a walk, play checkers, or work in the garden together.

Don't

- Don't use baby talk or speak more loudly or softly than normal.
- Don't keep the radio or TV on when you're helping your loved one do an activity. The radio or TV may be too distracting.
- Don't wait until later to give feedback on a task. It's easier to learn from mistakes if they are corrected immediately.
- Don't leave your loved one alone to do a new task or stay in an unfamiliar environment.
- Don't ignore your loved one or exclude them in conversations with others.
- Don't get upset if your loved one acts or talks inappropriately. Stay calm and continue doing what you were doing.

The search for a "new normal" can take time

Celebrate each small victory. Laugh when you can.

Be patient with your loved one — and with yourself. You're new to this caregiving job, but you'll learn it. And since you do it with love, there's no one better qualified.

GIVE IT TIME

Be patient with each other. Remember all the reasons you love each other, and remember all the other ways to stay connected.

For couples — returning to sexuality

Most couples can have a satisfying sexual life after a stroke. Here are some things to keep in mind:

- **Sex is safe after a stroke.** There is very little chance that another stroke will happen during sex.
- **You may need to make some adjustments.** Changes in sensation, strength, energy, or communication may mean you need to do things a little differently.
- **Communication is helpful.** Talking openly with each other is a good first step to beginning sexual activity again.
- **Medical problems or medications can interfere.** Depression is common after a stroke, and it can affect sexual desire. Some medications may also affect sexual function.
- **Your healthcare provider can help** with information, medications, or other treatments.

Stroke Resources

Below you'll find a few of the many organizations that support people who have had a stroke and provide resources and tools for their family and friends.

Intermountain Stroke Recovery

For stroke rehab and stroke support groups, along with other local resources, call the facility nearest you.

Weber / Davis County:

McKay-Dee Hospital*

801-387-2080
(Neuro Rehab)

801-387-7800
(Community Health Information Center)

neurosupportgroup@imail.org
(Neuro Support Group)

Salt Lake County:

Intermountain Medical Center*

801-507-9800
(Neurosciences Clinic)

801-314-5000
(Neuro Therapy Services)

Utah County:

Utah Valley Hospital*

801-357-2765 (Inpatient Rehab)
801-357-7171 (Outpatient Clinic)
801-714-3366 (Outpatient Rehab)

Washington / Iron County:

St. George Regional Hospital*
Neuro Specialty Rehabilitation Unit

435-251-4500
(Inpatient Neuro Rehab and Stroke Support)

*Starred facilities re-certified as Primary, Thrombectomy Capable, or Comprehensive Stroke Centers by The Joint Commission, a national organization that evaluates healthcare organizations. This honor is given to a limited number of hospitals that provide exceptional stroke care.

Utah Department of Health, Heart Disease and Stroke Prevention

385-443-871

heal.utah.gov/heart-health/

Call or visit the website to get free stroke prevention materials and learn how you and your family can live healthier lives.

American Stroke Association

888-478-7653
stroke.org

Call or visit the website to learn more about stroke, healthy habits to control stroke risk factors, and stroke rehab and recovery. You can also sign up to get *Stroke Connection*, a free magazine for survivors and caregivers.

National Institute of Neurological Disorders and Stroke (NINDS)

ninds.nih.gov/health-information/stroke

Visit this website to get stroke information and research from the National Institutes of Health.

The National Center on Health, Physical Activity, and Disability

866-866-8896
nchpad.org

Call or visit the website to get personalized tools and resources to help you meet your goals for physical activity — regardless of your disability.

KNOW THE SIGNS OF STROKE

B.E. F.A.S.T.

Balance problems	Eye (Vision loss)	Face drooping	Arm weakness	Speech problems	Time to act

CALL YOUR PRIMARY CARE DOCTOR IF:

- You notice side effects from your medication that worry you
- You notice stroke effects or other problems that weren't discussed in the hospital
- You're taking an anticoagulant (blood thinner), and you notice bleeding from your gums, or blood in your urine or stool
- You feel so sad and down that you can't do what you need to
- You're having trouble sleeping
- You (or your caregiver) are struggling to manage day-to-day activities

Intermountain Health