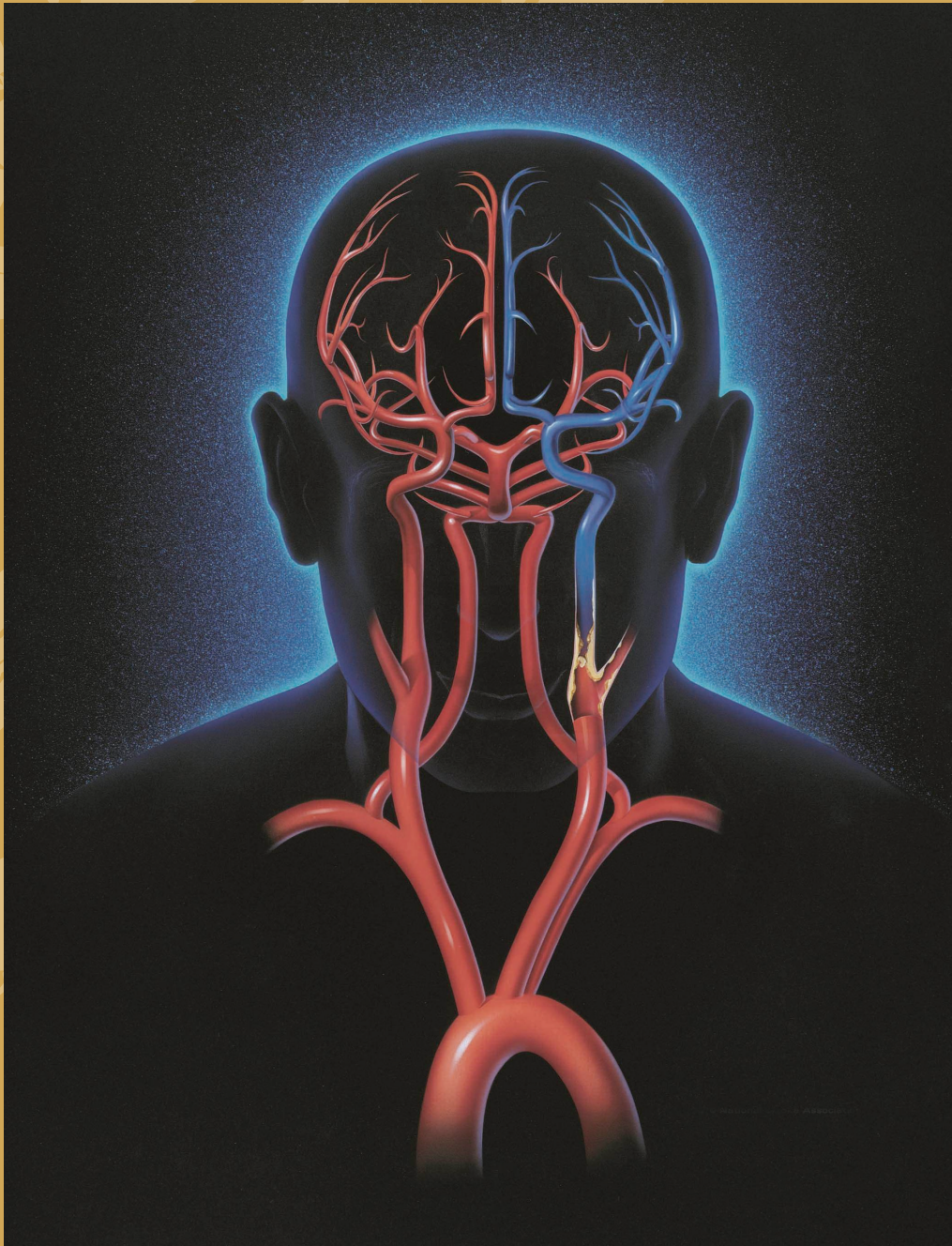




**ENLOE**  
MEDICAL CENTER

Enloe Stroke Program

# Education Packet





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# What is a Stroke?

A stroke occurs when the blood supply to a blood vessel in the brain is blocked or a blood vessel breaks causing brain cells in the blood vessel territory to die. Brain cells do not regenerate. The problems experienced after a stroke like the inability to move one side of the body like before, numbness on one side of the body, speech or visual problems are usually a result of brain cells that have died due to stroke. Persons who have had one stroke are at risk of having another stroke. It is important that you practice secondary prevention of stroke now. Please be sure to ask us any questions about this information or any other questions about your health.

Stroke is the fourth-leading cause of death in the United States and the number one cause of serious long-term disability.

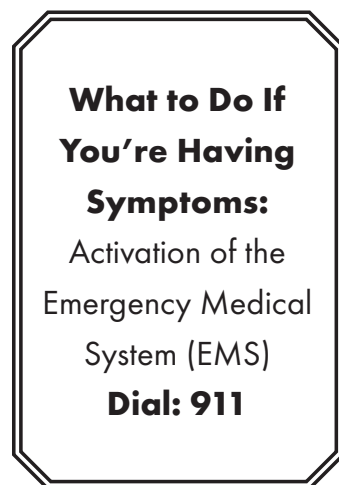
## Recognizing a Stroke

A person having symptoms of a stroke needs immediate emergency care, just as if he or she were having a heart attack. The sooner medical treatment begins the fewer brain cells that are damaged.

The effects of a stroke may range from mild to severe and may be temporary or permanent. A stroke can affect vision, speech, behavior, the ability to think and the ability to move parts of the body. Sometimes it can cause a coma or death.

### Learn the signs of stroke – General symptoms of a stroke include a sudden onset of:

- Face is uneven
- Weakness on one side
- Trouble speaking
- Trouble seeing
- Trouble walking



- Numbness, weakness or inability to move (paralysis) of the face, arm or leg, especially on one side of the body
- Trouble seeing in one or both eyes, such as dimness, blurring, double vision or loss of vision
- Confusion or trouble speaking
- Trouble walking, dizziness or loss of balance or coordination
- Severe headache with no known cause

Symptoms for stroke are typically sudden, but may worsen or fluctuate over several days. This depends on the type of stroke, as well as the location and degree of brain damage.

- Not all the warning signs occur in every stroke. Don't ignore signs of stroke, even if they go away!
- Check the time. When did the first warning sign or symptom start? You or the person who is with you will be asked this important question later. This is very important, because if given within three hours of the start of symptoms, a clot-busting drug can reduce long-term disability for the most common type of stroke.
- If you have one or more stroke symptoms that last more than a few minutes, don't delay! Immediately call 9-1-1 or the emergency medical service (EMS) number so an ambulance (ideally with advanced life support) can quickly be sent for you. Do not drive yourself.

- If you're with someone who may be having stroke symptoms, immediately call 9-1-1 or the EMS. Expect the person to resist going to the hospital. Don't take "no" for an answer because Time Lost is Brain Lost.
- When communicating with EMS or the hospital make sure and use the word "STROKE".

## Types of Strokes

**A TIA (transient ischemic attack)** is a warning signal that a stroke may soon occur, and the condition needs to be treated as an emergency. One or more mini-strokes (or TIAs) may occur before a person has a full-blown stroke. Symptoms for both are similar. However, unlike stroke symptoms, TIA symptoms usually disappear within minutes.

**An Ischemic stroke (87% of all strokes)** occurs when blood flow through a blood vessel (artery) that supplies blood to the brain is blocked. Blockage may develop from a blood clot in an artery leading to the brain (thrombus) or one formed in another part of the body, usually the heart (embolus).

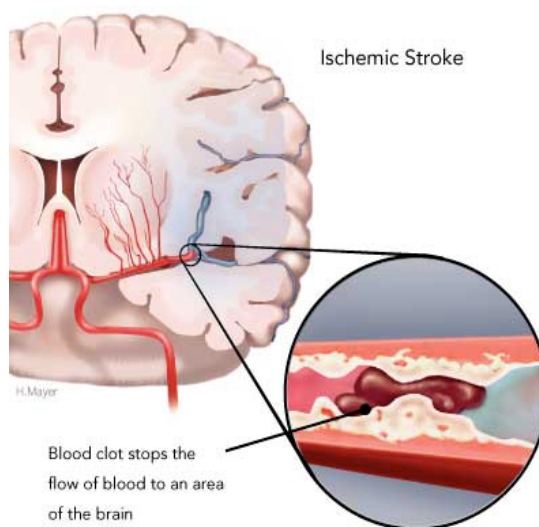
The clot travels with the blood until it blocks an artery in the brain. These blood clots usually are the result of irregular heart beat, heart valve problems, infection of the heart muscle, hardening of the arteries, blood-clotting disorders, or inflammation of the blood vessels or heart attack.

Another cause of ischemic stroke occurs when blood pressure becomes too low. This can reduce blood flow to the brain. Low blood pressure can result from a heart attack, large loss of blood or severe infection.

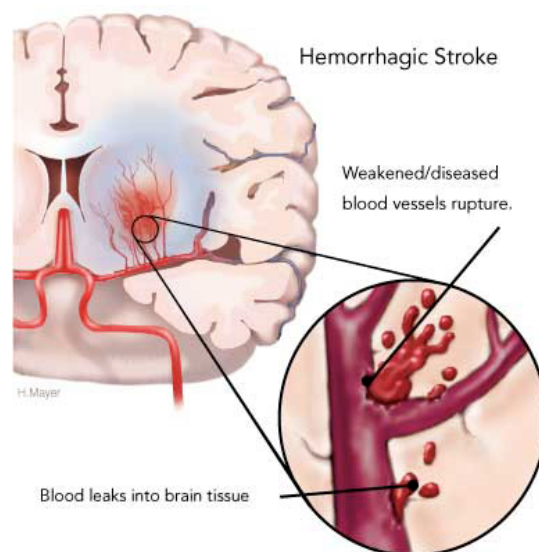
**A Hemorrhagic stroke (13% of all strokes)** is caused by sudden bleeding in the brain. There are different ways that this can occur:

- Cerebral hemorrhage - A blood vessel inside the brain breaks
- Subarachnoid hemorrhage - A blood vessel in the spaces around the brain bleeds
- Aneurysm - Bleeding from bursting of a blood vessel that is stretched and thinned

**High blood pressure** is the most common cause of bleeding inside the brain. Other causes of stroke can be inflamed blood vessels, head or neck injuries or weakened vessels (amyloid angiopathy).



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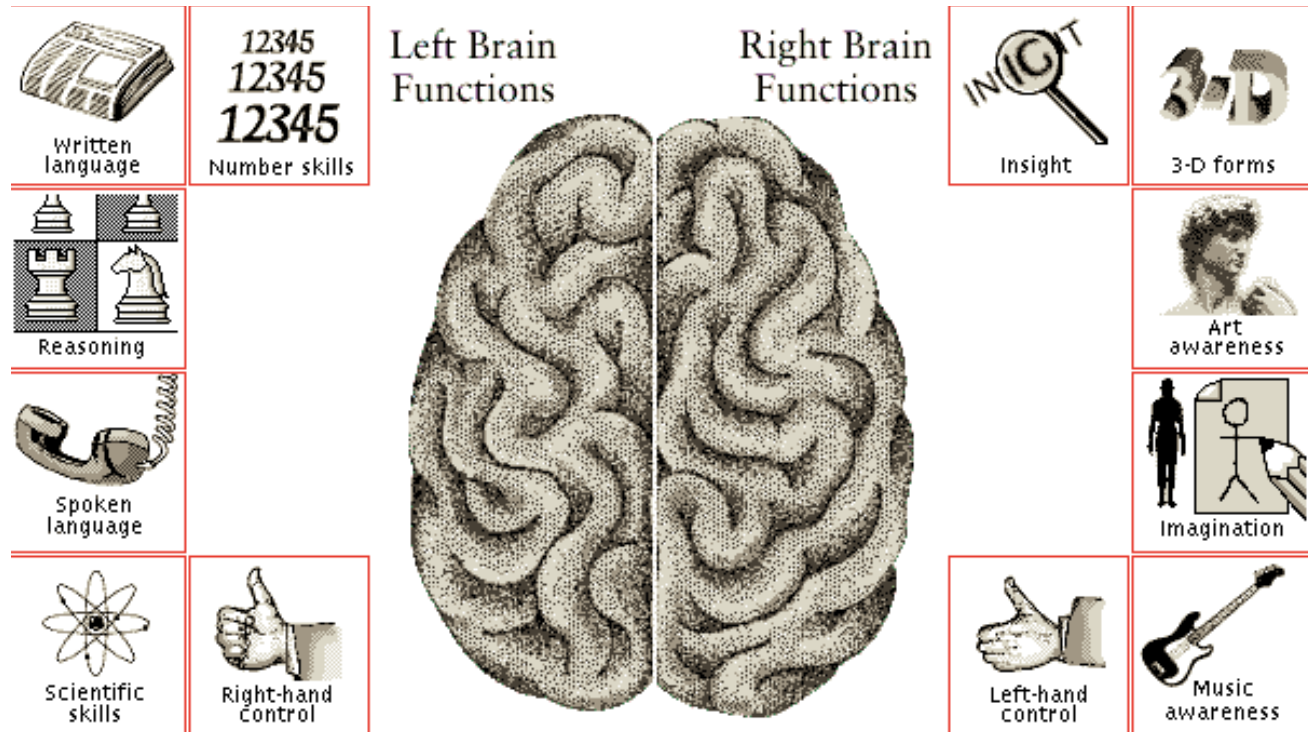
# Location of a Stroke

## If A Stroke Occurs on the Right Side of the Brain:

- Possible paralysis on left side of the body
- Possible vision problems
- Possible inquisitive behavioral reactions
- Possible memory loss

Damage to this side of the brain can cause a range of problems in a person's emotions and behavior. A stroke survivor with right-brain injury may be unaware of his or her impairment and be certain that he or she can perform the same tasks as before the stroke. This individual also may experience emotional lability, poor judgment, short attention span and short-term memory loss.

Often, the spatial-perceptual difficulties involved in right-brain injuries are overlooked. When individuals with right-brain injuries have problems performing simple activities, these individuals may be seen as uncooperative, confused, overly dependent or unmotivated.



## If A Stroke Occurs on the Left Side of the Brain:

- Possible paralysis on right side of the body
- Possible speech/language challenges
- Possible slowness and caution in behavior
- Possible memory loss

The left hemisphere of the brain controls the movement of the right side of the body. It also controls speech and language abilities for most people. A left-hemisphere stroke often causes paralysis of the right side of the body. This is known as right hemiplegia.

Someone who has had a left-hemisphere stroke may also develop aphasia. Aphasia is a catch-all term used to describe a wide range of speech and language problems. These problems can be highly specific, affecting only one component of the patient's ability to communicate, such as the ability to move their speech-related muscles to talk properly. The same patient may be completely unimpaired when it comes to writing, reading or understanding speech.

Left-brain stroke survivors may experience personality changes, communication problems and some paralysis on the right side. Survivors with left-brain damage – unlike those with right-brain damage – tend to behave in a cautious, compulsive, or disorganized way and are easily frustrated. People with left-brain injury may be slow to take action or to respond to questions.

Finally, patients with left-hemisphere stroke may develop memory problems similar to those of right-hemisphere stroke survivors. These problems can include shortened retention spans, difficulty in learning new information and problems in conceptualizing and generalizing.

### **If A Stroke Occurs at the Brain Stem:**

Brain stem strokes can have complex symptoms and they can be difficult to diagnose. A person may have vertigo, dizziness and severe imbalance without the hallmark of most strokes – weakness on one side of the body. The symptoms of vertigo, dizziness or imbalance usually occur together; dizziness alone is usually not a sign of stroke. Brain stem stroke can also cause double vision, slurred speech and decreased level of consciousness.

Only half-inch in diameter, the brain stem controls all basic activities of the central nervous system: consciousness, blood pressure, and breathing. All of the motor control for the body flows through it. Brain stem strokes can impair any or all of these functions.

More severe brain stem strokes can cause locked-in syndrome, a condition in which survivors can move only their eyes.



## **What type of stroke did I have?**

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# What to expect in the hospital

## Diagnosis

Diagnosis of a stroke is based on the patient's medical history and a physical exam. A variety of diagnostic tests are available at Enloe Medical Center. If stroke is suspected, the doctor will order a computed tomography (CT) scan to determine whether the stroke was caused by a clot or from bleeding inside the brain.

For more specific information as to the extent of a stroke, you may have a magnetic resonance imaging test (MRI).

## Brain/Vascular Imaging

- **CT scan (computed tomography)** or CAT scan is usually one of the first tests to be done to evaluate a patient with stroke symptoms. It is useful to distinguish between an ischemic or hemorrhagic stroke, and to exclude other causes of stroke-like symptoms, such as a brain tumor. It may also provide information about the cause, location and extent of the stroke. This test involves the use of low-dose x-ray.
- **CT Angiogram (CTA)** This test requires the injection of an intravenous dye and the use of low-dose x-ray and is done with a CT scan machine. This test can provide information about the size of the vessels and if there is blood circulating through them.
- **MRI (magnetic resonance imaging)** is usually more sensitive than a CT scan for accurately determining the presence of a stroke, and determining the extent of damage. This test involves the use of magnetic fields. Recent MRI techniques using diffusion- and perfusion-weighted imaging allow early and more accurate detection of acute stroke within a few minutes after stroke onset.
- **Magnetic Resonance Angiography (MRA)** This is often obtained as part of the brain MRI. It involves the use of magnetic fields. MRA is a non-invasive test that provides anatomical views of the blood vessels in the brain and neck. It is useful in detecting blood vessel narrowing/occlusion and large aneurysms.



**If disease or narrowing of one of the large arteries in the neck (carotid arteries) is suspected, the following tests may be done:**

- Carotid Ultrasound to determine blood flow through carotid arteries in the neck
- Catheter Angiography (angiogram), an injection of a dye through a major artery (usually in the thigh) and the use of a low-dose x-ray. It is used to determine the size and location of blockages within a blood vessel and is especially valuable in diagnosing aneurysms and malformed blood vessels.



## Other Diagnostic Tests

If evidence shows that the stroke is caused by a clot that formed in the heart, the doctor may order a:

- Chest X-ray
- ECG or EKG,
- Echocardiograph
- TEE heart imaging test
- Laboratory tests to see if other conditions are present, check the person's overall health, and see if the patient's blood clots too easily.



## Heart Imaging Tests

If your doctor is concerned about your heart function and possible clot formation – one of the following tests may be ordered.

- **TEE** - Transesophageal echocardiography is used to image the heart and to assess its function. It also may be combined with an intravenous injection of saline, to determine the presence of PFO, and involves placing a flexible tube to the stomach.
- **Echocardiogram (TTE)** – Transthoracic Echocardiography, an ultrasound test through the chest wall, is used to image the heart and to assess its function in patients with a TIA or ischemic stroke. It also may be combined with an intravenous injection of saline (Bubble Study), to determine the presence of a patent foramen ovale (PFO) or shunting in the heart.



## Treatment

People who have symptoms of a stroke need to seek emergency medical care. Prompt medical attention may prevent life-threatening complications and widespread brain damage.

Emergency treatment should be accessed as soon as possible after symptoms begin. Some people with a stroke caused by a blood clot may be able to receive a medication to dissolve the clot, helping to increase the chance of a full recovery. Treatment varies according to the type of stroke, when the stroke occurred and the seriousness of the symptoms.

The Emergency Department staff provides an early and essential communications link in the identification and treatment of stroke patients. After care in the Emergency Room, stroke patients are generally admitted to a specific unit for continued observation, treatment and eventual rehabilitation.

During their hospital stay, patients will receive care from a dedicated interdisciplinary team. Their goals of treatment are to:

- Reverse or reduce the effects of stroke
- Prevent life-threatening complications that may occur after stroke symptoms develop
- Prevent future strokes, reduce disability, prevent long-term complications
- Help the patient get back as much normal functioning as possible through rehabilitation

## Stroke Team

- **Physicians** - The patient's primary care physicians, hospitalists, intensivists as well as physicians on the neurology, neurosurgery, cardiology, vascular surgery and neuroradiology services are involved in the patient's care.
- **Registered Nurses/Licensed Vocational Nurses** – Nurses assess/coordinate patient needs, administer treatment, and provide patient/family instruction.
- **Nursing Assistants** – Nursing Assistants provide personal care and hygiene.
- **Physical, Occupational, and Speech Therapists** – Provide individualized rehabilitation treatment.
- **Stroke Nurse** – Assists with education including risk factor modification, stroke awareness and discharge planning.
- **Medical Social Worker** – Social Workers offer support to patient and family, and work to coordinate any appropriate community resources.
- **Case Management** – Case Managers oversee hospitalization and coordinate with insurance payers, and work to insure follow-up arrangements such as home care.
- **Dietitian** - Dietitians assist with proper design of nutritional and caloric intake.



# What You Should Know

## Common Complications of a Stroke

- Dysphagia/Difficulty Swallowing
- Pneumonia and Pulmonary Aspiration
- Urinary Tract Infection – UTI
- Musculoskeletal Pain
- Depression
- Falls
- DVT (Deep Vein Thrombosis)/Pulmonary Emboli
- Seizure
- Pressure Ulcers
- Spasticity

The multidisciplinary team will be assessing you for these possible complications and ordering the appropriate tests and treatments.

## Your Personal Risk Factors for Stroke

### Risk Factors YOU cannot change:

- **Age** – The chance of having a stroke more than doubles for each decade of life after age 55. While stroke is common among the elderly, a lot of people under 65 also have strokes.
- **Heredity (family history) and race** – Your stroke risk is greater if a parent, grandparent, sister or brother has had a stroke. African Americans have a much higher risk of death from a stroke than Caucasians. This is partly due to higher rates of high blood pressure and diabetes in this group.
- **Sex (gender)** – Stroke is more common in men than in women. In most age groups, more men than women will have a stroke in a given year. However, more than half of total stroke deaths occur in women. At all ages, more women than men die of stroke. Use of birth control pills and pregnancy pose special stroke risks for women.
- **Prior stroke, TIA or heart attack** – The risk of stroke for someone who has already had one is many times that of a person who has not. Transient ischemic attacks (TIAs) are “warning strokes” that produce stroke-like symptoms but no lasting damage. TIAs are strong predictors of stroke. A person who’s had one or more TIAs is almost 10 times more likely to have a stroke than someone of the same age and sex who hasn’t. Recognizing and treating TIAs can reduce your risk of a major stroke. If you’ve had a heart attack, you’re at higher risk of having a stroke, too.



# What YOU can do to prevent stroke

**Risk Factors YOU can change:** It is important that you practice secondary prevention of stroke NOW.

- **Controlling high blood pressure** – High blood pressure or hypertension is the number one cause of stroke. High blood pressure can damage the small blood vessels of the brain. High blood pressure is the most important controllable risk factor for stroke. Many people believe the effective treatment of high blood pressure is a key reason for the accelerated decline in the death rates for stroke.

Rarely are there any outward symptoms of hypertension so it's important to have blood pressure checked regularly. Blood pressures should be checked every 6 months (hypertension history). Doctors may choose to treat blood pressure consistently more than 140/90, or consistently more than 130/80 in patients with diabetes or chronic kidney disease by recommending:

- A low-salt diet – Stop using table salt and eat as many fresh foods as possible, since a lot of salt is “hidden” in processed or prepared foods.
- Lose weight – Exercise regularly. For some patients, lifestyle modification will not adequately lower blood pressure, so their physicians may prescribe high blood pressure medication.

Blood Pressure Category	Systolic mm Hg (upper #)	(Normal) 120 / 80	Diastolic mm Hg (lower #)
<b>Normal</b>	less than <b>120</b>	and	less than <b>80</b>
<b>Pre-Hypertension</b>	<b>120-130</b>	or	<b>80-89</b>
<b>High Blood Pressure</b> (Hypertension) Stage 1	<b>140-159</b>	or	<b>90-99</b>
<b>High Blood Pressure</b> (Hypertension) Stage 2	<b>160</b> or higher	or	<b>100</b> or higher
<b>Hypertensive Crisis</b> (Emergency Care Needed)	higher than <b>180</b>	or	higher than <b>110</b>

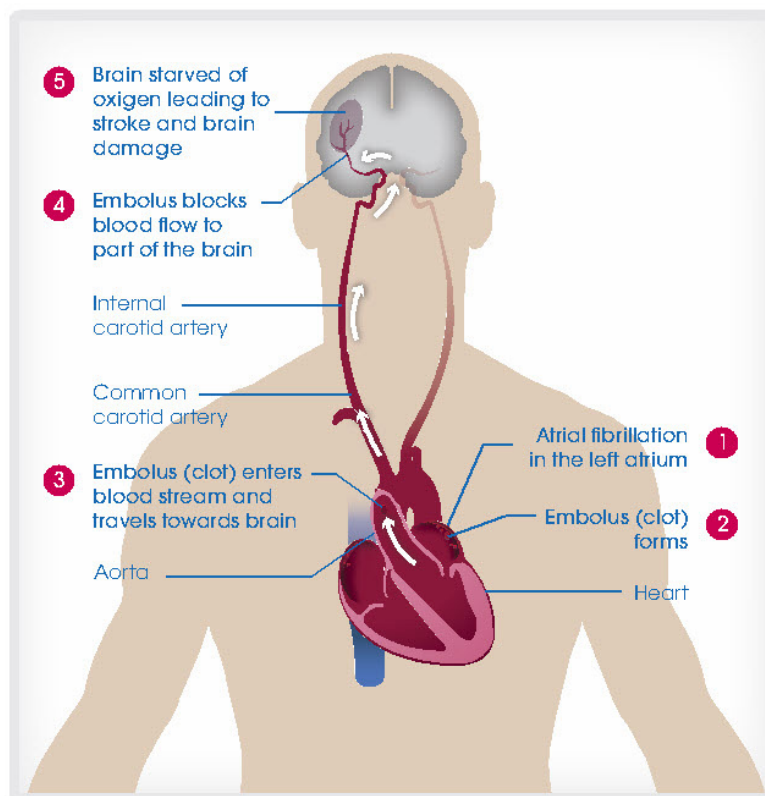
- **Cigarette smoking** – Tobacco use in any form, especially cigarette smoking, is very bad for your health. In recent years, studies have shown cigarette smoking to be an important risk factor for stroke. The nicotine and carbon monoxide in cigarette smoke damage the cardiovascular system in many ways. The use of oral contraceptives combined with cigarette smoking greatly increases stroke risk in women.
- **Smoking Cessation** – Once someone stops smoking, stroke risk will drop significantly within two years. Doctors can give information about quitting and prescribe medicine to help. **1-800-NO BUTTS**



- **Diabetes Mellitus** – Diabetes is a risk factor for stroke. Many people with diabetes also have high blood pressure, high blood cholesterol and are overweight. This increases their risk even more. While diabetes is treatable, the presence of the disease still increases your risk of stroke. Diabetes causes disease of small blood vessels in the brain and can lead to a stroke.
- **Carotid or other artery disease** - The carotid arteries in your neck supply blood to your brain. A carotid artery narrowed by fatty deposits from atherosclerosis (plaque build-ups in artery walls) may become blocked by a blood clot. Carotid artery disease is also called carotid artery stenosis. Causes of carotid artery disease are high blood pressure, diabetes, a diet high in fat, high cholesterol and smoking.
- **Peripheral artery disease** is the narrowing of blood vessels carrying blood to leg and arm muscles. It's caused by fatty build-ups of plaque in artery walls. People with peripheral artery disease have a higher risk of carotid artery disease, which raises their risk of stroke.
- **Atrial fibrillation (Atrial Fib)** - This heart rhythm disorder raises the risk for stroke. The heart's upper chambers quiver instead of beating regularly, which can let the blood pool and clot. If a clot breaks off, enters the bloodstream and lodges in an artery leading to the brain, a stroke results.

Atrial fibrillation is a very important controllable stroke risk factor. Some people with AF will experience heart palpitations -- often described as a “pounding,” “racing” or “fluttering” heart beat. In other people, the only symptom of AF may be dizziness, faintness or light-headedness. Others may experience chest pains ranging from mild discomfort to severe pain.

### How atrial fibrillation leads to stroke



A simple self-screening technique can be used to determine if you may have an irregular pulse, a possible sign of AF. To properly conduct the technique:

- Place the first two fingers of your right hand on your left wrist.
- Then check your pulse to feel for a regular or irregular heartbeat.
- A regular heartbeat is characterized by a series of even, continuous pulsations, whereas an irregular heartbeat often feels like an extra or missed heartbeat.

This self-screening technique should not be considered a substitute for consulting with a physician. If you suspect you may have an irregular pulse or you have difficulty performing the screening technique, discuss your concerns with your physician. Because AF, like high blood pressure, cholesterol and some other heart diseases, often has no outward symptoms, the only way to confirm the presence of AF is to perform an electrocardiogram (ECG).

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- **Other heart disease** – People with coronary heart disease or heart failure have a higher risk of stroke than those with hearts that work normally. Dilated cardiomyopathy (an enlarged heart), heart valve disease and some types of congenital heart defects also raise the risk of stroke.
  - **Blood Clot Prevention Medication** – Since most strokes are caused by blood clots, it makes sense to try to prevent strokes by preventing blood clots from forming. There are two types of blood clot prevention drugs: anticoagulant and antiplatelet drugs.

- 
- **High blood cholesterol** – People with high blood cholesterol have an increased risk for stroke. High blood cholesterol can be reduced by eating right (avoid fried, fatty foods) and exercising routinely. It may also require medication.

Cholesterol	less than 200	_____
Triglycerides	less than 150	_____
HDL (good)	greater than 50	_____
LDL(bad)	less than 70	_____

- **Cholesterol Reducing Medication** – Cholesterol-reducing medications in the statin class are used for reducing the risk of heart attack and stroke. Your doctor may also prescribe other medications specifically to reduce high cholesterol. Cholesterol-reducing medication will only work if it's taken as directed on a regular basis.

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- **Nutrition and Stroke Risk Reduction** – Eating a well-balanced diet including protein, carbohydrates, vegetables and fruit is a vital part of risk reduction. Healthy eating may help lower blood pressure and cholesterol and reduce diabetes complications. Vitamins can reduce your risk. Speak with your care provider before starting any vitamins. High dose vitamins are not generally recommended.
  - **Poor diet** – Diets high in saturated fat, trans fat and cholesterol can raise blood cholesterol levels. Diets high in sodium (salt) can contribute to increased blood pressure. Diets with excess calories can contribute to obesity. A diet containing five or more servings of fruits and vegetables per day may reduce the risk of stroke.

- **Physical inactivity and obesity** – Being inactive, obese or both can increase your risk of high blood pressure, high blood cholesterol, diabetes, heart disease and stroke. So go on a brisk walk, take the stairs, and do whatever you can to make your life more active. Try to get at least 30 minutes of moderate physical activity five days of the week, or 20 minutes of vigorous physical activity, three days a week. Please consult with your doctor.
- **Controlling Weight** – Together with your doctors, overweight patients should set goals for weight loss and exercise goals. A common goal is losing one pound a week and exercising three times a week for 30 minutes. Please consult with your doctor

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- **Controlling Alcohol Consumption** – “Moderate” drinking means limiting intake of alcohol to no more than one drink per day (one drink = 1.5 oz. of hard liquor; OR 4 oz. of wine; OR 12 oz. of beer).
  - **Metabolic Syndrome X** – The underlying causes of this syndrome are overweight/obesity, physical inactivity and genetic factors. People with the metabolic syndrome have a greater risk for heart disease and stroke.
    - **Elevated waist circumference**, greater than 35 inches for women and 40 inches for men.
    - **Elevated level of triglycerides** of 150 milligrams per deciliter (mg/dL)
    - **Reduced HDL** (less than 40 mg/dL in men or less than 50 mg/dL in women)
    - **Elevated blood pressure** (systolic) 130 mm Hg or higher or (diastolic) 85 (mm Hg) or higher
    - **Elevated fasting blood sugar** (blood glucose) of 100 mg/dL

Aggressive lifestyle changes and, in some cases, medication can reduce your risk for stroke. More physical activity, losing weight and quitting smoking help reduce blood pressure and improve cholesterol and blood sugar levels. These changes will help in reducing your risk for stroke.

- **Sickle cell disease** (also called sickle cell anemia) - This is a genetic disorder that mainly affects African-American and Hispanic children. “Sickle-shaped” 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.
- **Obstructive Sleep Apnea** – It is important to realize that OSA can be both a risk factor for stroke and an aftereffect. OSA can cause high blood pressure and atrial fibrillation, two major stroke risk factors. OSA is also an independent risk factor for stroke.
- **Hormone Replacement Therapy (HRT)** – May increase your risk of a stroke.

## Compliance is very important for your health

One of the biggest obstacles doctors encounter in treatment is non-compliance. You are an essential participant in your health care.

# Rehabilitation and Recovery

## Rehabilitation Plans

Your doctor and various member of your health care team may discuss recommendations for stroke recovery. To help your decision process, you and your family should consider the following areas.

- Your goals for recovery
- Safety accommodations in your home environment
- Family and social support
- Medical recommendations- doctor and members of the health team

## Some Options for Recovery

- Acute care and rehabilitation hospitals
- Long-term care facilities: Some facilities, such as a skilled nursing facility, may be able to provide specific therapies to meet your specific needs
- You may receive exercises to do at home
- Home health agencies; A nurse or therapist can visit you in your home
- Outpatient facilities: Speech, Physical Therapy, and Occupational Therapy in a clinic setting.

**Enloe Rehabilitation Center** 340 W. East Ave, Chico • 530-332-6138

Has the following members that are part of the rehab team approach:

- Physical, Occupational And Recreational Therapists
- Speech/Language Pathologists
- Neuropsychologists
- Clinical Social Workers
- Case Managers
- Dietitians
- Physicians
- Rehabilitation Nurses

### Directions to the Enloe Rehabilitation Center

*From Enloe Medical Center* - Go North on Esplanade -Turn left on East Ave. Rehabilitation Center is located on the right side (after the shopping center)

*From Highway 99* - Exit on East Avenue, go West on East Avenue-cross the Esplanade. Rehabilitation Center is located on the right side (after the shopping center)





# Demystifying Common Concerns About My Return to Home

After a stroke, you may be apprehensive about being on your own at home. Common fears you may have include:

- a stroke might happen again
- you may realize the extent of your disabilities and be unable to accept them
- you might eventually be placed in a nursing home
- your loved ones may not be prepared to face the major and unexpected responsibility of caring for you
- friends and family may abandon you

You may display these fears as anger, agitation or tension. Talk openly with your doctor and family to help ease your concerns. With a positive attitude, it will be much easier to find ways to overcome the difficulties.

## Easing Back Into Life

You don't have to stop doing the things you enjoyed before your stroke. Favorite leisure activities can be adapted for almost every situation. Involvement in pleasurable pursuits can help shift attention from disability to your abilities and can enhance your self-esteem and confidence. Leisure and recreation activities can also be used to improve perception and coordination and to strengthen muscles.



If you like to cook, peel and slice vegetables, put frosting on a cake, roll out pastry or assemble salads from a stable position, whether in a wheelchair, seated or supported standing stance. If you like gardening, you could tend to potted plants on the window sill and start new plants from cuttings.

If you enjoy needlework you can continue with your hobby using a special clamp and embroidery hoop to hold the fabric steady. Braille, large-print books, and “talking books” are available for the visually impaired.

Leisure activities can either be things done individually or as a group in more social situations. Social leisure activities can be found at community centers, senior centers, church groups, municipalities and other organizations offering recreation programs.

Involvement in recreation and leisure promotes health by providing a buffer for stress, and creates a sense of balance. For instance, it can give you a break from a stressful situation. Similarly, pleasurable activities, such as watching an entertaining movie, can enhance your mood. Recreation may be central to feeling a part of your community and having a good quality of life. This is especially true of activities that help you feel involved in the neighborhood, such as eating in a restaurant, visiting a library or walking in a park.

Some leisure activities are skill building and can assist with transition to volunteer opportunities, continued education, employment or return to work. The social worker or case manager that worked with you should be able to suggest resources in your community to assist with this transition.

## **Relationships and Intimacy**

Part of getting back into a normal routine involves resuming a healthy sex life. The need for love and to be loved, and to have the physical and mental release sex provides, is important. However, having sex after stroke can present problems or concerns for you and your partner. Consultation with a psychologist may be helpful if this is an area of difficulty for you after your stroke.

## **Sexuality**

The closeness that a couple shares before a stroke will affect how their relationship evolves after the stroke. It is important to remember that sexual satisfaction, both giving and receiving, can be accomplished in many ways.

Whatever is comfortable and acceptable between you and your partner is normal sexual behavior. Be assured that it takes time, but with time, many couples discover new ways of caring for and relating to each other.

It's normal for married couples to experience a sense of profound loss when one partner suffers a stroke. For many people, marriage is the central and most enduring relationship of their lives. Married couples share a common history of joys and sorrows as well as hopes and dreams for the future. They depend on one another for companionship, understanding, support, and sexual fulfillment.

They are accustomed to sharing the responsibilities of the household as well as the enjoyment of social activities.

For many spouses, when the partner suffers a stroke, it is as though part of the self is lost. You may face prolonged separation, often for the first time in years, during the hospitalization and rehabilitation stages. Your spouse may not be able to offer the same level of participation in the relationship as before. You might have to shoulder all the responsibilities previously shared. You may feel the whole situation is a terrible physical and emotional burden that you are not prepared to handle.

## **Family Relations**

Often a parent's stroke comes at a time when children are carrying significant work, family and community responsibilities. These adult children become caught between the demands of their own families and the needs of their parents for care. The role reversal of becoming a parent to one's own parent is a difficult one for many people to accept, partly because it involves the loss of the parent in a very real sense. Once again, the grieving process must occur in order for coping to begin.

## **Siblings**

Sometimes the family member responsible for care of the stroke survivor is a brother or sister. Once again, the results of the stroke can change relationships. Frequently brothers and sisters of the survivor are just at the stage in life when they are planning for retirement, free for the first time from family responsibilities. Sometimes the problems and competitive feelings of childhood can resurface during stress. Adult siblings may find themselves playing out the same old power struggles with each other. Resolving these kinds of difficulties is possible. When people are under stress and suffering from loss, even the most solid relationships can be affected.

**Recovery from a stroke is a lifelong process. For more information or to request a copy of Hope: The Stroke Recovery Guide please contact the National Stroke Association at 1-800-STROKES (1-800-787-6537) or visit [www.stroke.org](http://www.stroke.org)**

Return to Home information resourced from National Stroke Association publication Hope: A Stroke Recovery Guide.

# Stroke Resources & References

## **Enloe Stroke Program**

1421 Magnolia Ave., Chico, CA 95926  
(530) 332-3981  
www.enloe.org

## **Passages**

2491 Carmichael Drive, Ste 400 Chico, CA  
(530) 898-5925 (800) 822-0109  
www.passagescenter.org

## **American Heart Association and American Stroke Association**

2007 "O" Street, Sacramento, CA 95811  
Phone: (916) 446-6505  
www.heart.org

## **Family Caregiver Alliance**

690 Market Street, Suite 600  
San Francisco, CA 94104  
(415) 434-3388 (800) 445-8106 (in CA)  
www.caregiver.org

## **American Stroke Association (ASA) [www.strokeassociation.org](http://www.strokeassociation.org)**

American Heart Association division; it is focused on "reducing disability and death from stroke through research, education, fundraising, and advocacy." The Web site offers information about stroke warning signs, general facts, and treatment.

## **National Stroke Association (NSA) [www.stroke.org](http://www.stroke.org)**

A national non-profit organization in the US that is dedicated to reducing the incidence and impact of stroke, tips on prevention, other facts about stroke. Resource for family members of stroke victims.

## **The Stroke Information Directory (SID) [www.stroke-info.com](http://www.stroke-info.com)**

SID was started in the mid-1980s by family members of stroke survivors to assist patients, their families, clinicians, and researchers with locating stroke information online.

## **National Aphasia Association (NAA) [www.aphasia.org](http://www.aphasia.org)**

The National Aphasia Association (NAA) is a nonprofit organization that promotes public education, research, rehabilitation and support services to assist people with aphasia and their families.

## **Health Hope Network**

**Stroke Survivor Connection (412) 904-3036 [www.healthhopenetwork.org](http://www.healthhopenetwork.org)**

**National Institutes of Health (NIH) 1(800) 352-9424 [www.stroke.nih.gov](http://www.stroke.nih.gov)**

## **Books About Stroke**

**My Stroke of Insight: A Brain Scientists Personal Journey** – Jill Bolte Taylor, Ph. D

**The Brain That Changes Itself: Stories of Personal Triumph from the Frontiers of Brain Science** – Norman Doidge, MD

**Stroke Survivors** – William H. Bergquist, Rod McLean, Barbara A. Kobylinski

**Post-Stroke Hope: A Motivational Journey to Recovery (For Family, Friends and Caregivers)** – Marty O. Hopps, Psy. D.

**After Stroke** – David M. Hinds and Peter Morris

**Aphasia: My World Alone** – Helen Wulf, Wayne State, Detroit, Michigan 1979

**Black Health Library Guide: Stroke: Vital Health Information for African Americans**  
Lafayette Singleton, et al. 1999

**Caring for Someone After a Stroke** – Rob Buckman

**Family Guide to Stroke Treatment, Recovery, and Prevention** – American Heart Association By  
Louis R. Caplan, et al... Time Books, New York 1994

**How to Conquer the World with One Hand...and an Attitude** – Stephanie Mensh

**Living with Stroke: A Guide for Families** – Richard C. Senelick, MD

**My Stroke of Luck** – Kirk Douglas

**Portrait of Aphasia** – David Knox, Wayne State University Press 1985

**The Family Guide to Surviving Stroke and Communication Disorders** – Dennis C. Tanner,  
Needham Heights, MA 1999

# ENLOE STROKE SUPPORT

**“Different strokes for different folks”**



Group meetings are held the 2nd Wednesday of each month  
from 3 - 4 p.m.

Location:  
1528 Esplanade

Call 530-332-3981







## "B.E. F.A.S.T."

Know the signs of stroke and call 9-1-1 immediately.

<b>Balance</b>	sudden loss of balance or coordination
<b>Eyes</b>	sudden change in vision
<b>Face</b>	sudden weakness of the face
<b>Arms</b>	sudden weakness of an arm or leg
<b>Speech</b>	sudden difficulty speaking
<b>Time</b>	time the symptoms started

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### Stroke Program

1531 Esplanade, Chico, CA 95926  
(530) 332-3981 • [enloe.org/stroke](http://enloe.org/stroke)

### Find a Neurologist

1-877-Enloe-MD (1-877-365-6363) or  
[doctors.enloe.org](http://doctors.enloe.org)