

A Patient's Guide To
Stroke & Transient
Ischemic Attack



YOUR HOSPITAL STAY AND DISCHARGE INFORMATION



SHORE

MEDICAL
CENTER

Our Passion Makes Us The Best

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Introduction

The Stroke Program at Shore Medical Center serves the community by providing an integrated, multidisciplinary approach to stroke care for the adult population through the use of evidence-based practice. Shore is committed to clinical excellence and best practice through compliance with guidelines published by the American Stroke Association and The Joint Commission, and providing an environment of care and respect for our stroke patients and their families.

Shore Medical Center is proud to be certified as a Primary Stroke Center by both the Joint Commission and the State of New Jersey, achievements that recognize our commitment to excellence in treating our stroke patients. We have earned the Joint Commission's Gold Seal of Approval® for our strict adherence to the national standards and guidelines that help diagnose and treat stroke faster with better outcomes for our patients.

Our multidisciplinary team of passionate physicians, nurses, therapists and support staff is dedicated to providing you with excellent care and a foundation for a successful recovery, including administering tPA, the "clot busting" medication that can save lives when administered in time. We will do everything possible to meet your expectations during your stay at Shore. If you have any concerns regarding your care, please call the nurse manager at 609-653-4631. If you are unable to reach the manager, contact the nursing supervisor at 609-653-3673.

What is a Stroke?

A stroke is the rapidly developing loss of brain function due to a disturbance in the brain's blood supply. It is a medical emergency and can cause permanent neurological damage, complications and death. Stroke can happen to anyone at any time, regardless of age, race or sex.

Types of Stroke

There are two types of stroke:

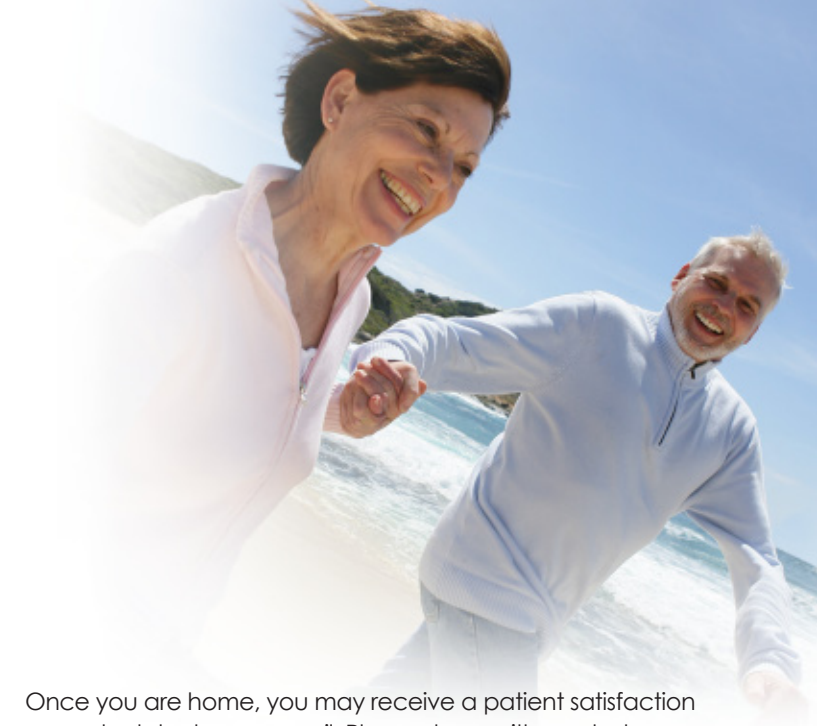
What is a Transient Ischemic Attack (TIA)?

A Transient Ischemic Attack (TIA), sometimes called a mini-stroke, is an event with stroke symptoms that last less than 24 hours before disappearing. While TIAs generally do not cause permanent brain damage, they are a serious warning sign of stroke and should not be ignored. Up to 40 percent of all those who suffer a TIA will go on to experience a stroke.

What causes a Transient Ischemic Attack?

Blood vessels carry blood throughout the body. When a blood vessel in the brain becomes blocked for a short period of time, the blood flow to that area of the brain slows or stops. This lack of blood (and oxygen) often leads to the symptoms of a TIA, such as slurred speech or blurry vision.

Someone having a **TIA or Stroke** may experience one or more of the following symptoms:



Once you are home, you may receive a patient satisfaction survey by telephone or mail. Please share with us what was helpful about your care, as well as anything we can do to improve upon the services we provide.

Shore Medical Center is dedicated to providing high quality care through the use of the most modern medical technologies and treatments administered in a caring, patient-centered environment through the combination of clinical excellence coupled with exceptional service. Thank you for your confidence in Shore Medical Center's Primary Stroke Center.

Ischemic stroke occurs when arteries are blocked by blood clots or by the gradual build-up of plaque and other fatty deposits. About 87 percent of all strokes are ischemic.

Hemorrhagic stroke occurs when a blood vessel in the brain breaks, leaking blood into the brain. Hemorrhagic strokes account for 13 percent of all strokes, yet are responsible for more than 30 percent of all stroke-related deaths.

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

If you experience any of these symptoms or see them in someone else, even for a short time, **call 911** immediately. It is vitally important that once symptoms of a stroke are identified, emergency treatment is administered. Treatment is more effective if it is given as soon as possible.

Stroke Facts

- A stroke is a brain attack, cutting off vital blood flow and oxygen to the brain.
- In the United States, stroke is a leading cause of death and a leading cause of serious long-term disability.
- Approximately 795,000 strokes will occur this year, one every 40 seconds.
- Every four minutes, someone dies from a stroke.

- Two million brain cells die every minute during a stroke, increasing the risk of permanent brain damage, disability or death. Recognizing symptoms and acting **FAST** to get medical attention can save a life and limit disabilities
- The prevalence of Transient Ischemic Attacks, or TIA, (commonly known as "mini strokes") increases with age.

What to expect during your hospital stay

During your hospitalization, your physician may order the following tests:

- **Blood tests** – Blood tests help determine your condition and course of treatment.
- **Carotid Doppler** – A carotid doppler study uses high-frequency sound waves to create pictures of the inside of the two large carotid arteries on either side of your neck. These arteries supply your brain with oxygen-rich blood.
- **Chest X-ray** – A chest X-ray makes images of the heart, lungs, airways, blood vessels and the bones of the spine and chest.
- **CT Scan of the Head** – A CT scan (sometimes called a CAT scan) is a noninvasive test that helps physicians diagnose a stroke. CT scanning combines special X-ray equipment with sophisticated computers to produce multiple images of your brain.
- **Echocardiogram** – An echocardiogram (often called an "echo") is a graphic outline of the heart's movement. During an echocardiogram, ultrasound (high-frequency sound waves) is used to create an image of your heart.

- **MRI** – Magnetic resonance imaging (MRI) is a test that uses a magnetic field and pulses of radio wave energy to take pictures of the head. In many cases, an MRI supplies information that cannot be seen through the use of X-ray, ultrasound, or CT scan.
- **Transesophageal echocardiogram, or TEE** – A specialized probe containing an ultrasound transducer at its tip is passed into the patient's esophagus. TEE has a very high sensitivity for locating a blood clot inside the left atrium of the heart. This is an invasive procedure.
- **Swallowing evaluation** – This test evaluates your ability to swallow and determines what type of diet is best for you. It is performed by observation and administering a small amount of water. A speech therapist may assist with the evaluation.

Your physician may order the following treatments:

- **Oxygen** – This may be prescribed to help you breathe more comfortably and ensure that your body is getting enough oxygen.
- **Sequential Compression Device** – This device is used on your lower legs to help prevent blood clots while in bed or sitting in a chair by massaging your legs to improve blood flow.

During your hospitalization, your physician may order the following to be monitored:

- **Temperature, pulse and blood pressure** – These vital signs will be recorded frequently.
- **Cardiac monitoring** – This refers to the continuous monitoring of your cardiac rhythm with electrocardiography. A small monitor is worn and your heart rhythm can be viewed on a monitor at the nursing station.
- **Pulse oximetry** – This is a non-invasive method of monitoring the oxygenation of your blood by placing a sensor on the body, usually on a fingertip.
- **Your neurological status** – Your neurological status will be evaluated frequently. To assess the effects of the stroke, you will be asked a series of questions and to perform tasks such as opening and closing your eyes, raising your right arm, and touching your nose.
- **Your fluid intake and urine output** – These actions may need to be measured.



- Your activity levels will be increased gradually depending on your ability.

Your physician may order the following medications:

- **Fibrinolytics** (also known as "clot busters," or tPA) – This medication is available to treat ischemic stroke patients who arrive at the hospital within four and a half hours of known symptom onset and who meet the proper criteria.
- **Anticoagulants** – This medication "thins" the blood to help prevent clots from forming. This medication may be taken intravenously or as a pill orally.
- **Antiplatelets** – This medication, taken in a pill form, helps prevent platelets from forming clots.
- **Antihypertensive Medication** – This medication helps control blood pressure.
- **Lipid Lowering Medication** – This medication decreases cholesterol levels.
- **Anticonvulsants** – This medication is used to prevent seizures.
- **Hypoglycemic Medication** – This medication is used for patients with diabetes to help lower their blood sugar.

Your physician may order the following for your fluid and nutritional needs:

- **An IV** (intravenous catheter) may be placed in your vein for administering IV fluids or medications.
- **A special diet** may be ordered by your physician depending on your medical needs and ability to swallow.

Your physician may order the following concerning your activity levels:

- You may be placed on bed rest for 24 hours.
- You may be allowed to sit in a chair.
- You may be seen by a physical or occupational therapist, or both, to assist with your activities.

Discharge Information

- A representative from care management or social services will help make arrangements for your care when you are discharged. They will also help arrange any medical equipment that may be needed for home use, such as a walker or a wheelchair and a home health visiting nurse. If you have any concerns regarding your discharge care, call the coordinated care department at 609-653-3628.
- Achieving as much independence as possible is often the most important goal for stroke survivors. The effects of stroke may mean changing, relearning or redefining how you live. Rehabilitation is a critical part of recovery for many stroke survivors, and can help them return to independent living.

What about my medications?

- When you are discharged, the nurse will review your medication list with you, including the correct dosage, and how and when to take your medication.

- You will be given a written instruction sheet with your medications listed.
- Certain medications require frequent blood tests to check levels. The nurse will review this with you as informed by your physician.
- You should continue taking all your medications as directed unless instructed otherwise by your physician.
- If you have any questions, consult your physician.

Do I need to follow up with my physician?

- Follow-up care with your physician is very important for you to maintain your health and help prevent illness.
- When you are discharged, the nurse will review when to schedule a follow-up appointment with your physician.



Education & Prevention

Symptoms commonly associated with stroke or TIA include, but are not limited to:

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

To help reduce the impact of stroke and spread awareness about stroke symptoms, use the F.A.S.T. method for recognizing symptoms.

F = FACE	Ask the person to smile. Does one side of the face droop?
A = ARMS	Ask the person to raise both arms. Does one arm drift downward?
S = SPEECH	Ask the person to repeat a simple phrase. Does the speech sound slurred or strange?
T = TIME	If you observe any of these signs, it's time to call 911. Note the time of symptom onset.

If you or someone you know show any signs or symptoms of stroke **DIAL 911 IMMEDIATELY**. Fibrinolytics (commonly known as "clot busters," or tPA) are available to treat ischemic stroke patients who present to the emergency department within four and a half hours of the known symptom onset and meet the proper criteria.

Risk Factors for Stroke

Medical stroke risk factors include:

- Previous stroke
- High cholesterol
- Heart disease
- Carotid artery disease
- Previous episodes of TIA
- High blood pressure
- Atrial fibrillation

Lifestyle stroke risk factors include:

- Smoking
- Drinking too much alcohol
- Being overweight

Many risk factors for stroke are beyond your control, including being over the age of 55, being a male, African-American, having diabetes, or a family history of stroke. If you have one or more of these risk factors, it is important to learn about the lifestyle and medical changes you can make to prevent a stroke with the help of your healthcare professional.

To reduce your risk of stroke, take control of your health by following these guidelines:

- 1. Know your blood pressure** – High blood pressure is a major stroke risk factor if left untreated. Have your blood pressure checked routinely by your physician.
- 2. Identify atrial fibrillation (Afib)** – Afib is an abnormal heartbeat that can increase stroke risk by 500%. Afib can cause blood to pool in the heart, which may form

a clot and cause a stroke. Physicians can diagnose and treat Afib.

- 3. Stop smoking** – Smoking doubles the risk of stroke. It damages blood vessel walls, accelerates clogging of the arteries, raises blood pressure and makes the heart work harder. Stopping smoking today will immediately begin to decrease your risk of stroke.
- 4. Control alcohol use** – Alcohol consumption has been linked to stroke in many studies. Most doctors recommend not drinking or drinking only in moderation. Remember that alcohol can negatively interact with other drugs you are taking.
- 5. Know your cholesterol levels** – Cholesterol is a fatty substance in the blood that is made by the body. It also is in food. High cholesterol levels can clog arteries and cause a stroke. It is recommended by the American Stroke Association that your cholesterol level be **less than 200**.
- 6. Control Diabetes** – Many people with diabetes have health problems that are also stroke risk factors. Your doctor can provide a nutrition program, lifestyle changes and medication to help control your diabetes.

- 7. Manage exercise and diet** – Excessive weight strains the circulatory system. Exercise five times a week, maintain a diet low in calories, salt, and saturated and trans fats, and cholesterol. Eat five servings of fruits and vegetables daily.
- 8. Treat circulation problems** – Fatty deposits can block arteries carrying blood to the brain and lead to a stroke. Other problems, such as sickle cell disease or severe anemia, should be treated.
- 9. Act quickly** – Know and follow the F.A.S.T. guidelines at the first signs of a stroke. Call 911 immediately.

- 10. Schedule annual physical examinations** – Routine evaluations by your physician can help prevent stroke.

If you have heart disease or have had a stroke, members of your family also may be at higher risk. It's important for them to make changes now to lower their risk. Talk to your physician, nurse or other healthcare professionals about your risk factors, and to learn more about stroke prevention and lifestyle changes.

For more information about stroke, call 1-888-4-STROKE (1-888-478-7653) or visit www.strokeassociation.org.

Smoking Cessation

Smoking is the nation's leading preventable cause of death. It significantly increases the risk for stroke, coronary heart disease, and peripheral vascular disease. More than half of all smoking-related deaths in the United States each year are from heart disease, stroke or other cardiovascular diseases. The good news is that one year after quitting, your risk of developing heart disease is cut in half. After five to 15 smoke-free years, your risk is similar to that of a person who never smoked.

If you smoke, now is the time to stop. The following is a sample smoking cessation plan.

Step One

- List your reasons to quit and read them several times a day.
- Wrap your cigarette pack with paper and rubber bands. Each time you smoke, write down the time of day, how you feel, and how important that cigarette is to you on a scale of 1 to 5.
- Rewrap the pack after each cigarette.

Step Two

- Keep reading your list of reasons and add to it as needed.
- Don't carry matches, and keep your cigarettes out of easy reach.
- Each day, try to smoke fewer cigarettes.

Step Three

- Continue the guidelines set forth in Step Two. Set a target date to quit.
- Don't buy a new pack of cigarettes until you finish the one you are smoking.
- Try to stop for 48 hours at one time.

Step Four

- Quit smoking completely. Throw out all cigarettes and matches. Hide lighters and ashtrays.
- Stay busy! Find activities you enjoy to keep you occupied and make time for exercise.
- Avoid situations and "triggers" you relate with smoking.
- Find healthy substitutes for smoking.

- Carry sugarless gum or artificially sweetened mints. Munch on carrots or celery sticks.
- Try taking part in activities to keep your hands occupied with something other than holding cigarettes.

It's difficult to remain a nonsmoker once you've had a cigarette, so do everything you can to avoid that "one." The urge to smoke will pass.

What if I smoke after quitting?

- This doesn't mean you're a smoker again. Take immediate steps to get back on track.
- Don't punish or blame yourself. Tell yourself you're still a nonsmoker.
- Think about why you smoked and decide what to do differently the next time you are tempted to smoke.
- Sign a contract to remain a nonsmoker.

How can I learn more?

Shore Medical Center's Tobacco Prevention and Treatment Program provides individual or group counseling sessions by trained professionals. Call (609) 653-3440 for the most up to date information about how to stop smoking.

If you have any questions, please do not hesitate to ask your nurse or physician.



References:

- American Heart Association / American Stroke Association, July 2009
- National Stroke Association – Stroke Facts 101, March 2012
- Get with the Guidelines
- Institute for Clinical Systems Improvement (ICSI). Diagnosis and treatment of ischemic stroke. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2008 Jun. 57 p. [146 references]

Resources

	TELEPHONE NUMBER
Shore Medical Center	(609) 653-3500
Ambulance	911
Neuroscience Unit Manager	(609) 653-4631
Hospital Nursing Supervisor	(609) 653-3673
Care Management / Coordinated Care	(609) 653-3628
Physical, Occupational and Speech Therapy	(609) 653-3512
Shore Tobacco Prevention and Treatment Program	(609) 653-3440
American Stroke Association	1-888-4-STROKE (1-888-478-7653) or visit www.strokeassociation.org .
Important Telephone Numbers:	
Your family doctor	
Your neurologist	
Your cardiologist	
Your pharmacy	
Other	

NOTES:
