

Patient Guide to Stroke



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Introduction

Having a stroke is a frightening experience, and we're here to guide you as you begin the healing process. Learning more about strokes will help.

“Time is brain.” That’s what doctors say when it comes to treating a patient who’s having a stroke. Every second can mean the difference between life and death, total independence or long-term disability.

At Edward-Elmhurst Health, we strive to provide the fastest, most efficient and effective stroke care possible. Our “stroke teams” are specially trained to treat stroke patients. Edward Hospital is certified as a Comprehensive Stroke Center by DNV GL Healthcare, reflecting the highest level of competence when it comes to treatment of serious stroke events. And, the Joint Commission has recognized Elmhurst Hospital as an Advanced Primary Stroke Center, for treating stroke cases.

Let's start with three basic facts:

1. Stroke is the 5th leading cause of death in the United States.
2. 80% of strokes are preventable.
3. Making some healthy lifestyle changes can help you prevent or lower your chances of having another stroke.

In this patient education booklet, we will explain the different types of strokes and treatments as well as steps you can take to prevent having another stroke.

On the next page, you will find a sheet that you and your medical team will fill out together prior to being discharged. This sheet contains important information about the type of stroke you had and the next steps to take.

Stroke education and support don't stop once you leave the hospital so make sure to join us for our monthly stroke support group, information is located at the back of the booklet.

Stroke Prevention and Discharge Plan

Type of stroke you were diagnosed with:

- Ischemic Stroke (Clot)
- Trans Ischemic Attack (TIA)
- Hemorrhagic Stroke (Bleed)

Risk Factors: Risk factors we cannot change include age, gender, family history, race, ethnicity, and past medical history. Below are the risk factors we can change:

- High Blood Pressure
- Obesity
- High Cholesterol
- Atrial Fibrillation
- Carotid Stenosis
- Smoking
- Excessive Alcohol Use
- Uncontrolled Diabetes
- Sleep Apnea
- Cardiovascular disease

Medication: In addition to working on reducing your risk factors, you have been started on the following new medications:

_____ for high blood pressure
 _____ for irregular heart rhythm
 _____ to help prevent blood clots

_____ for cholesterol

Cholesterol: _____ Triglycerides: _____ HDL: _____ LDL: _____

See discharge summary for all discharge medications.

Follow Up: You will need to follow up with _____ in _____ Days / Weeks.

See discharge summary for follow-up contact information and where to pick up prescriptions.

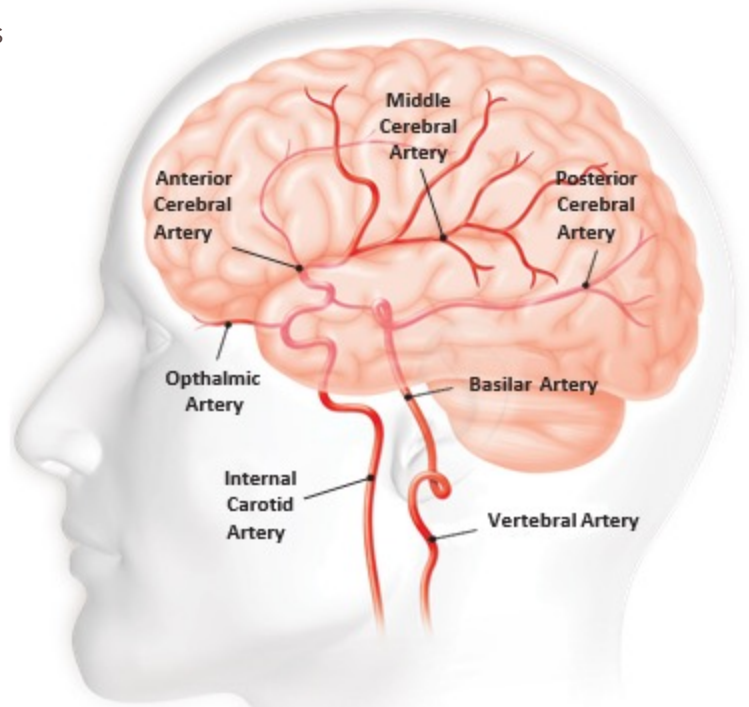
Signs & Symptoms of a Stroke: Call 911 IMMEDIATELY if you or someone else is experiencing any of the following symptoms:

Facial Droop	Difficulty understanding speech	Loss of feeling one side of your body or face
Arm or Leg Weakness	Difficulty speaking	Vision loss or double vision
Severe headache	Difficulty with Vision	Dizziness

What is a Stroke?

A Stroke is a Medical Emergency!

The brain is nourished by one of the body's richest networks of blood vessels. Blood vessels that carry blood to the brain from the heart are called arteries. The brain needs a constant supply of blood, which carries the oxygen and nutrients it needs to function. Specific arteries supply blood to specific areas of the brain. A stroke occurs when one of these arteries is either blocked or bursts. Since each area is responsible for different functions, the effects of stroke may range from mild to severe disabilities depending on the type, severity, and location of the stroke. As a result, part of the brain does not get the blood it needs, so it starts to die.



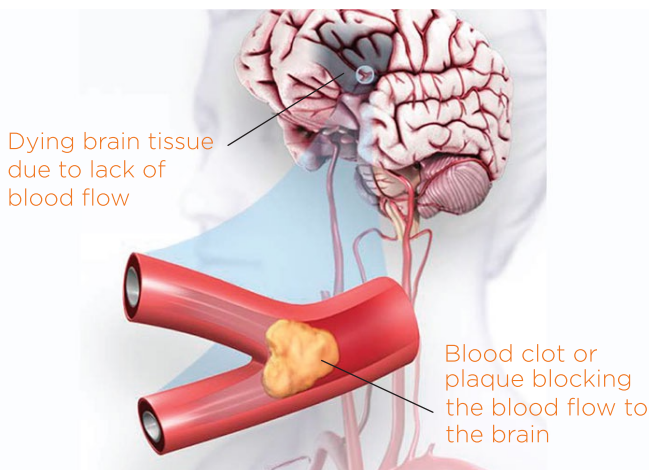
Types of Strokes

Ischemic Stroke

Ischemic Stroke—An ischemic stroke occurs when the supply of blood to an area of the brain is suddenly cut off or interrupted, causing a lack of oxygen to millions of neurons and other brain cells fed by the blocked artery.

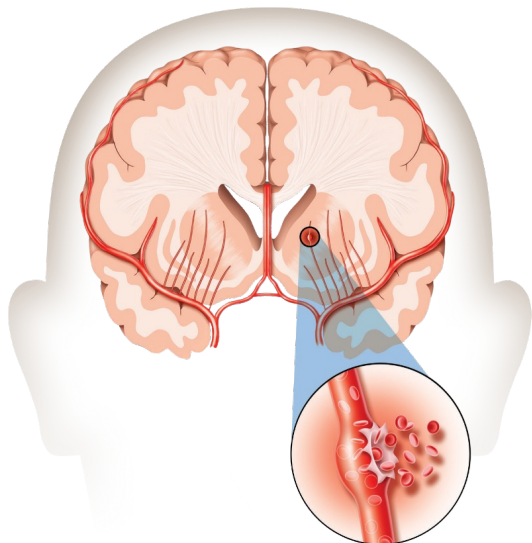
Three types of ischemic strokes:

1. **Embolic Stroke:** In an embolic stroke, a blood clot or plaque fragment forms, usually in the heart or the large arteries leading to the brain, and then moves through the arteries to the brain. In the brain, the clot blocks a blood vessel and leads to a stroke.
2. **Thrombotic Stroke:** A thrombotic stroke is a blood clot that forms inside an artery that supplies blood to the brain. The clot interrupts blood flow and causes a stroke.
3. **Stenosis:** An artery in the brain or neck narrows



Hemorrhagic Stroke

A hemorrhagic stroke occurs when an artery in the brain bursts, spilling blood into or around the brain which causes damage to the surrounding tissue. The blood in or around the brain increases the pressure inside the skull (intracranial pressure) and can cause significant tissue damage.



Three types of hemorrhagic stroke:

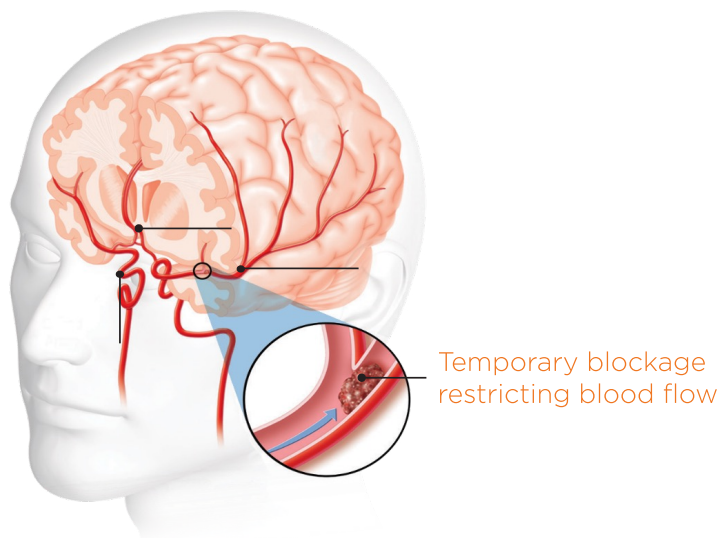
1. **Subarachnoid hemorrhage:** Involves rupture of a vessel on the surface of the brain and bleeding into the space between the brain and an envelope of tissue called the arachnoid layer.
2. **Intracerebral hemorrhage:** Involves bleeding directly into the brain tissue.
3. **Intraventricular hemorrhage:** Involves bleeding into or around the ventricles, the chambers in the brain that contain the cerebrospinal fluid that surrounds and bathes the brain and spinal cord.

Transient Ischemic Attack (TIA)

A transient ischemic attack (TIA) is a temporary cut-off of blood flow to the brain often by a clot, but then dissipates after a short time and the stroke symptoms go away.

Any stroke damage from a TIA is typically temporary or confined to a very small region, but a TIA is an important warning sign that a larger, more serious stroke could come soon.

About one in three people who have a TIA will have a stroke sometime in the future, with the majority of those occurring within a year after the TIA. Additional factors increase a person's risk for a recurrent stroke. Because TIAs can last for only a few minutes, many people mistakenly ignore them. Call 911 as soon as symptoms appear.



Stroke Treatments

A stroke can cause permanent damage within minutes to hours. Calling 911 immediately and arriving at the hospital in an ambulance can aid in stroke treatment and recovery.

Ischemic Stroke Treatment:

Thrombolytic therapy:

Used for Ischemic strokes. Thrombolytic treatment focuses on restoring blood flow and improving your ability to function normally, so you can enjoy a better quality of life. Here are the treatments typically used:

- TNK (Tenecteplase) is a clot-busting drug and is given through an intravenous access in the arm. TNK works by dissolving blood clots that cause an ischemic stroke and allows blood to once again flow freely to the area of the brain that was deprived of oxygen.

Mechanical Thrombectomy:

Mechanical thrombectomy is a minimally invasive surgery to remove large blood clots from blood vessels in the brain. It is indicated for patients with acute ischemic stroke who have a large vessel occlusion in the brain and who meet eligibility criteria. It is possible to receive both thrombolytic therapy and mechanical thrombectomy.

Hemorrhagic Stroke Treatment:

Medical and/or surgical management may be necessary depending on how severe the bleeding is. A neurosurgeon will be assigned to see you while in the hospital.

QUICKER
TREATMENT = LESS BRAIN
DAMAGE

Rehabilitation After Stroke

Stroke rehabilitation programs can help you quickly get back to your normal life and activities. People who participate in stroke rehabilitation care often recover faster than those who don't take advantage of these specialized services.

How long your stroke rehabilitation will take depends on the severity of your stroke and any complications you may have experienced.

Stroke rehabilitation is tailored to your specific needs. Your personalized stroke recovery care plan may include any or all of the following therapies:

- Speech-language therapy to help if you have trouble swallowing or communicating, including understanding the meaning of words or being able to speak words that used to be second nature.

- Physical therapy to improve your movement, balance and coordination and reduce your risk of falling.
- Occupational therapy to help you with activities you typically do every day, such as eating, bathing, dressing, writing and other tasks.
- Recreational therapy to help you return to activities you enjoyed before you had your stroke.



Stroke Prevention

The first step toward stroke prevention is improving your knowledge of your personal stroke risk. Listed below are both controllable and uncontrollable risk factors. Your care team will go over which risk factors apply to you and how you can make changes to help you prevent future strokes.

Controllable Stroke Risk Factors	Uncontrollable Stroke Risk Factors
<ul style="list-style-type: none"> • High blood pressure • Cigarette smoking • Diabetes • Carotid artery disease • Peripheral artery disease • Atrial fibrillation • Other heart disease • High blood cholesterol • Poor diet • Physical inactivity • Obesity 	<ul style="list-style-type: none"> • Age - the risk of having a stroke doubles every 10 years after the age of 55 • Gender - More men than women have strokes • Heredity - African Americans, Hispanics/Latinos and Asian have a higher risk of stroke • Family History of Stroke or heart disease • Personal history of stroke, TIA, or heart attack

Choosing a Rehabilitation Setting

You will begin stroke rehabilitation while you're still in the hospital. Before you're discharged, your care team will work with you and your family to determine the best rehabilitation setting for you. Below are the options for rehabilitation:

1. Long-Term Acute Care

Services Provided

- Respiratory/Ventilator Care and Weaning
- Stroke and Brain Injury Care
- Chronic Disease Care (e.g. organ failure)
- Critical/Intensive Care
- Wound Care
- IV Medications such as Antibiotics

Requirements

- Serious medical conditions that require continued hospital level care (e.g. complex wounds, ventilator use, dialysis)

What to Expect

- Usual stay is 10-40 days based on need
- Focus on medical treatment first, therapy is secondary
- 24-hour physician, nursing, and respiratory services

Examples

- Kindred
- RML Specialty Hospital

2. Acute Inpatient Rehab

Services Provided

- Physical Therapy
- Occupational Therapy
- Speech Therapy

Requirements

- Need for 24-hour medical supervision and nursing care
- Need for multiple therapy services
- Ability to tolerate three hours of therapy per day

What to Expect

- Usual stay is 12-18 days based on need

- Minimum of 15 hours of therapy per week
- Medical management in addition to therapy

Examples

- Marianjoy
- Shirley Ryan AbilityLab

3. Subacute Rehab

Services Provided

- Physical Therapy
- Occupational Therapy
- Speech Therapy

Requirements

- Must be preceded by a three-night hospital stay
- Requires skilled nursing or ongoing therapy to restore mobility/independence

What to Expect

- Usual stay is 10-14 days based on need
- About 1.5 hours of therapy per day
- Doctor visits once per week or as needed

Examples

- Bella Terra
- Elmhurst Extended Care
- Park Place Christian Community
- Providence Downers Grove

4. Day Rehab

Services Provided

- Physical Therapy
- Occupational Therapy
- Speech Therapy

Requirements

- Ability to take care of yourself or have support available to help in your home
- Must be medically stable
- Must require more than one type of outpatient therapy

SCREEN

Stroke Care at Residential Edward-Elmhurst NorthShore

A stroke, or cerebral vascular accident (CVA), is what happens when blood flow to part of the brain is interrupted. The result is oxygen deprivation to brain tissue. The quality of care provided after a stroke patient is discharged from the hospital is critical to the patient's recovery and ability to stay out of the hospital. According to the National Institutes of Health, 53% of stroke patients who are discharged from the hospital are readmitted for avoidable reasons.



SCREEN is an exclusive program of Edward Elmhurst NorthShore that helps to improve quality of life for recovering stroke patients and reduce the likelihood of rehospitalization. Please review the information below to become familiar with the program and next steps.



It all Starts with Your Transitional Nurse Liaison

A Residential Transitional Nurse Liaison (TNL) will meet with you to help arrange your discharge home. The nurse will coordinate with your doctor and the hospital staff, organize medically necessary services and equipment, and start your home care on the right track. Your first home visit will be within 48 hours of your hospital release.

Your Home Healthcare

Once you're home, specially certified Edward-Elmhurst Nurses will visit you there, as scheduled, to provide medical services according to the care plan developed with your doctor. These may include:

- Speech therapy if recommended at discharge
- Education on diet and lifestyle changes to aid your recovery
- Evaluation for physical or occupational therapy needs

The American Heart Association and
American Stroke Association proudly recognizes

Edward Hospital
Naperville, IL

Get With The Guidelines[®] - Stroke GOLD PLUS with Honor Roll
Elite and Target: Type 2 Diabetes Honor Roll

Achievement Award Hospital

SCREEN nurses are trained and certified in the NIH Stroke Scale



Things You Can do to Assist in Your Own Recovery:

- Ensure that you have a scheduled follow-up appointment with your neurologist. The appointment should be noted on your discharge paperwork.
- Review the stroke education binder given to you at discharge for specific information that can help you avoid future strokes and other health problems.
- Fill your prescription(s) and adhere to the prescribed dosage and schedule. Also, review any potential side effects of the medication(s) so you'll be well-prepared.
- Ask your clinician about healthy diet recommendations, such as the Mediterranean diet, and follow the recommendations given to you at discharge.
- Ask your clinician how to read food labels for sodium, total fat and total carbs.
- If your clinician orders physical or occupational therapy, follow the exercises and activities closely.

Who is at Risk for a Stroke?

There are several medical conditions and lifestyle factors that increase the risk of stroke, including:

- Alcohol Use
- Asymptomatic Carotid Stenosis
- Cardiovascular Disease
- Cigarette Smoking
- Diabetes
- Dyslipidemia
- Hypertension
- Obesity

How can We Help You?

Please contact us with any questions or concerns you have about the SCREEN at-home stroke recovery program.

Learn the Warning Signs of Stroke - **B.E.F.A.S.T.**

BBALANCE

Is the person suddenly having trouble with balance or coordination?

EEYES

Is the person experiencing suddenly blurred or double vision or a sudden loss of vision in one or both eyes without pain?

FFACE

Does one side of the face droop or is it numb? Ask the person to smile.

AARMS

Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward?

SSPEECH

Is speech slurred, are they unable to speak, or are they hard to understand? Ask the person to repeat a simple sentence like, "The sky is blue." Is the sentence repeated correctly?

TTIME TO CALL 911:

If the person shows any of these symptoms, even if the symptoms go away, call 911 and get them to the hospital immediately.

Exercise After Stroke

Medical Fitness

Stretches, exercises, and education designed to help you move better!

The focus of Exercise After Stroke is to:

- Increase your range of motion
- Improve mobility, strength, and balance
- Minimize the risk of falls and fractures
- Make everyday tasks easier

Exercise After Stroke is an 8-week exercise program that meets twice a week for 60 minutes. This class will incorporate both cardiovascular and strength exercises. Each class will consist of 20 minutes of light to moderate intensity cardiovascular exercise such as walking, elliptical, biking, or Nu-Step for those with limited walking abilities. Then followed by 20-30 minutes of strength training exercises and finish off with 5-10 minutes of stretching.



Fee for 8 Week Session (60 - minute class)

Member/Supporter: \$35

Non-Member/Supporter: \$115

Registration:

www.EEHealth.org/fitness-classes

630-646-5917

or Toni.Kadera@eehealth.org



Beyond Stroke

STROKE SUPPORT GROUP

A monthly in-person support group for stroke survivors, family members, and caregivers. This group provides a forum for learning about the stroke recovery process. Our guest speakers will offer insight, education, and tips to you and your loved ones on moving forward after a stroke. Each meeting begins with a brief educational program followed by time for discussion and group support. Stroke survivors are welcome at any time during their recovery.

Meeting Locations

Edward Hospital

801 S. Washington St

Naperville, IL 60540

Elmhurst Hospital

155 E. Brush Hill Road

Elmhurst, IL 60126

For more information, dates, and times, please contact us at StrokeSupport@EEHealth.org or call 630-527-7884.

