

# STROKE EDUCATION

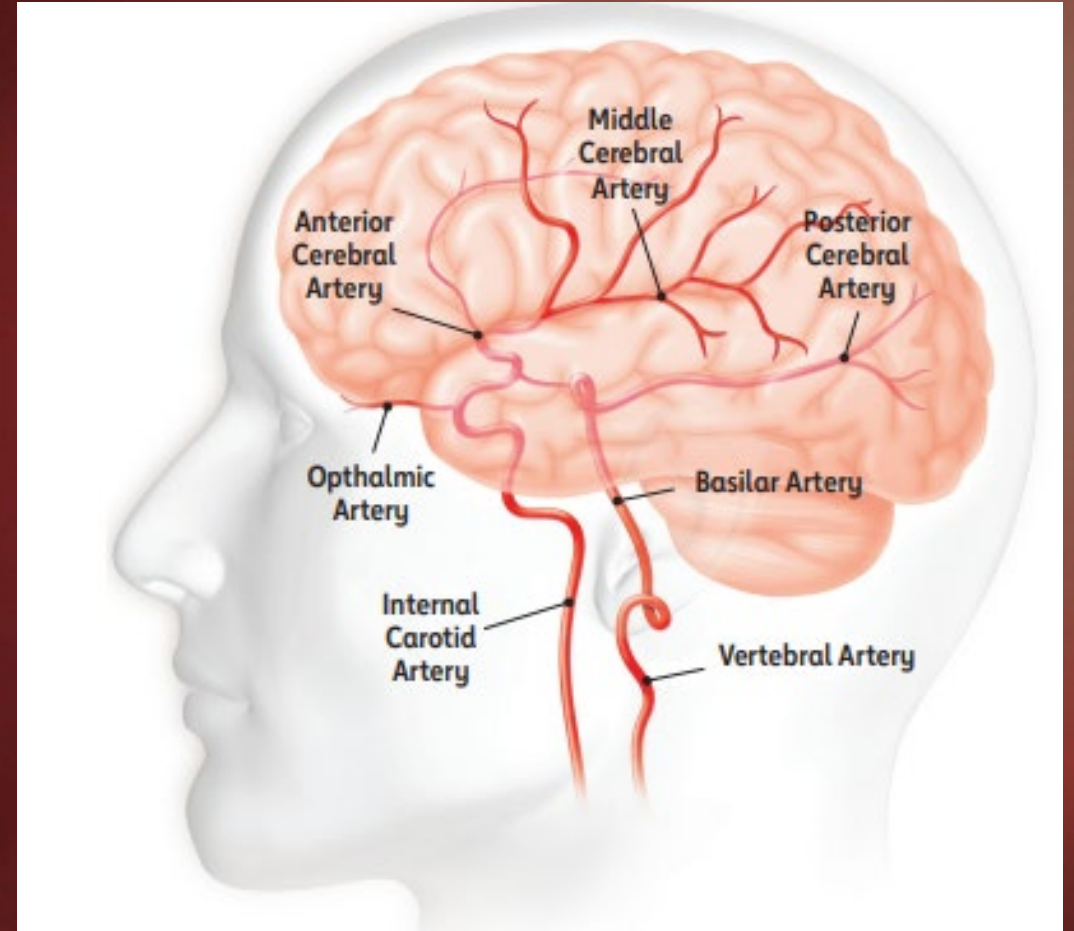
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# WHAT IS A STROKE?

- A medical emergency
  - Occurs when there is an interruption of blood flow to the brain
- Decreased blood flow causes the brain to be deprived of oxygen and nutrients
  - Without oxygen and nutrients, it causes brain cells to die
  - Resulting in long-term disability or death

# HOW IS YOUR BRAIN SUPPLIED WITH BLOOD?

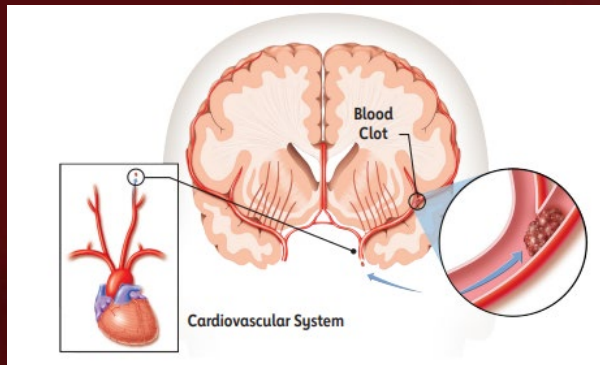
- Arteries are the blood vessels that carry blood to your brain.
- Our brains need a constant supply of blood, which carries our oxygen and nutrients to our brains. Without this, we would not be able to function.
- The brain has multiple arteries that supply specific areas of the brain with this blood supply.
- When an artery's blood supply is stopped, this results in a stroke, which can lead to death.



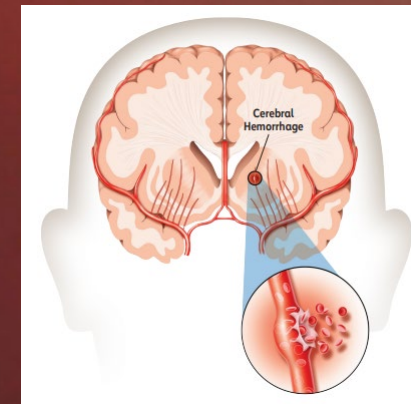


# TYPES OF STROKES

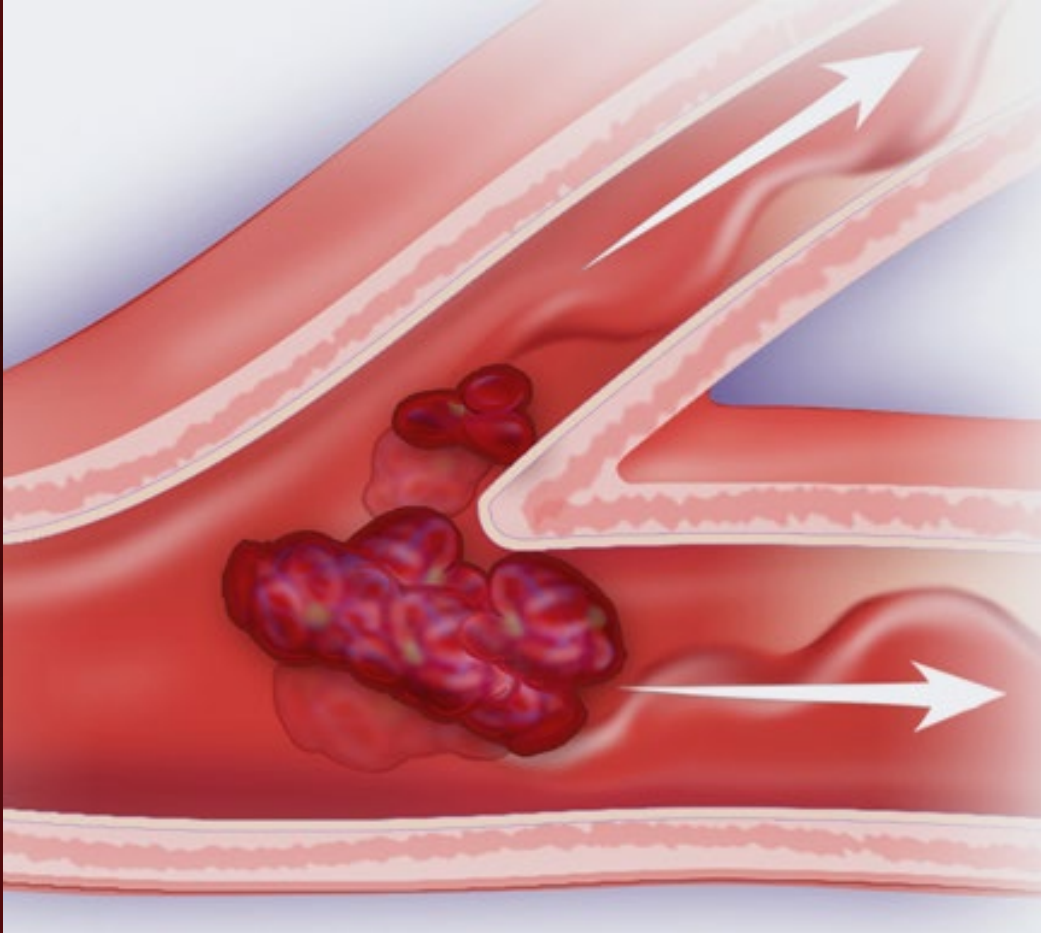
- Ischemic (Clot)
  - Blood vessel supplying the brain with blood becomes obstructed by a blood clot or plaque formation
  - 87% of strokes are ischemic (per the American Stroke Association)



- Hemorrhagic (Bleed)
  - Weakened blood vessel ruptures
  - Typically, from an aneurysm or an arteriovenous malformation
  - Most common cause of hemorrhagic strokes is high blood pressure



# TRANSIENT ISCHEMIC ATTACK (TIA)



- TIA's can sometimes be referred to as a mini-stroke.
- These events happen when an artery leading to the brain is blocked for a short period of time, causing the blood flow to slow or stop.
- TIA's can cause similar symptoms as a traditional stroke, however, these symptoms only last for a short period of time and then disappear.
- The difference between a TIA and a traditional stroke is the artery either becomes unblocked or a new path opens leading to normal blood flow.

# SEE THE TYPES OF STROKES

<https://www.youtube.com/watch?v=UJ5aO4KmQ8M>



# STROKE STATISTICS

- About 795,000 Americans will have a new or recurrent stroke this year.
- Stroke is the #5 cause of death and a leading cause of disability in the U.S., resulting in more than 142,000 deaths.

# DO YOU KNOW THE SYMPTOMS OF A STROKE?

- These can include:
  - **Sudden** confusion, trouble speaking or understanding speech
  - **Sudden** numbness, weakness, especially on one side of the body
  - **Sudden**, severe headache with no known cause
  - **Sudden** trouble seeing from one or both eyes, blurred/double vision
  - **Sudden** trouble walking, dizziness, or loss of balance/coordination



## SPOT A STROKE™



**F**ACE

Drooping



**A**RM

Weakness



**S**PEECH

Difficulty



**T**IME

to Call 911

**High Blood Pressure**

**Obesity**

**Poor Diet**

**Smoking**

**Sedentary Lifestyle  
(little to no  
exercise/physical  
activity)**

# RISK FACTORS

Age – risk goes up as we age

Anxiety

Depression

High Levels of Stress/Prolonged Stress

Family History – family member who has had a stroke

Air Pollution

Race – higher rates of stroke in Black, Alaska Native, American Indian, and Hispanics

Other Medical Conditions – sleep apnea, kidney disease, migraine headaches

Sex – men are more likely to have a stroke at a young age and women who take birth control or use hormone replacement therapy are at a higher risk

# RISK FACTORS





Call 9-1-1 at the first sign of a stroke!

It's important to get to the hospital quickly for treatment of a stroke.

Faster treatment = less brain damage.

Treatment depends on the type of stroke and how much time has passed since the first symptom(s) started.

A STROKE IS A  
MEDICAL  
EMERGENCY

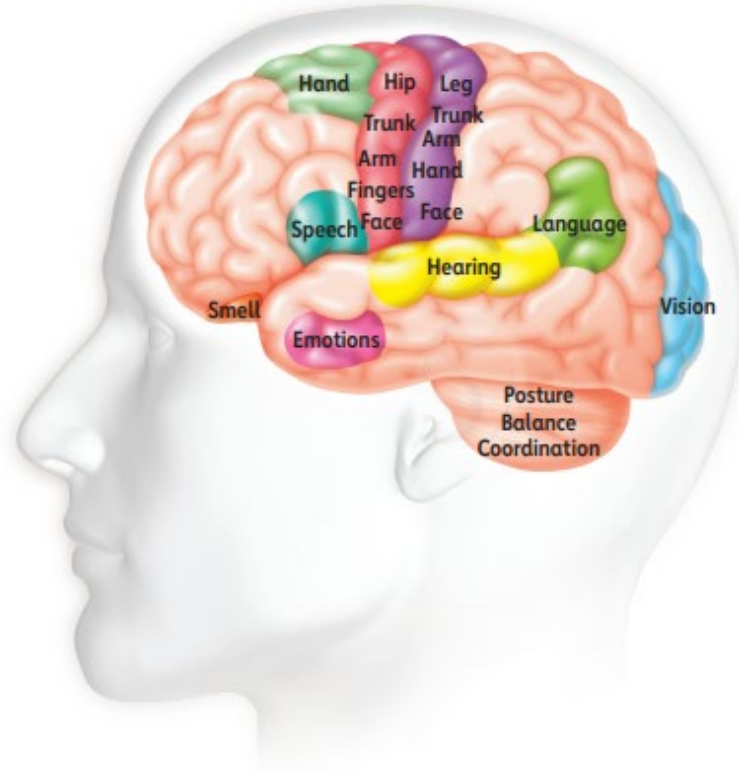
# STROKE AFFECTS

- Depending on which side of the brain the stroke occurs, a person will experience affects on the opposite side of their body.
- Stroke on Left Side of Brain = Right Side of Body Affects
- Stroke on Right Side of Brain = Left Side of Body Affects

# LEFT SIDE VS. RIGHT SIDE

- Stroke on Left Side of Brain Affects Right Side of Body, as well as some or all the following:
  - Speech/Language Issues
  - Inability to Read/Write/Learn New Information
  - Impaired Ability to do Math/Reason/Organize/Analyze
- Stroke on Right Side of Brain Affects Left Side of Body, as well as some or all the following:
  - Depth Perception/Directions-Up, Down, Front, and Back
  - Inability to be Creative
  - Inability to Recognize Emotion(s)





The human brain has different areas that control how the body moves and feels. When a stroke damages a certain part of the brain, that part may not work as well as it did before. This can cause problems with walking, speaking, seeing or feeling. There may be challenges with basic self-care such as bathing or dressing, eating, swallowing, memory, emotions and understanding surroundings that should be familiar.

# STROKE DAMAGES

**Seeing**

**Sleeping**

**Having Seizures**

**Fatigue**

**Memory**

**Sleeping**

**Controlling Your  
Bladder/Bowels**

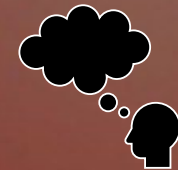
**Pain**

**Thinking**

**Depression**

**Moving Parts of  
Your Body**

## ADDITIONAL STROKE DAMAGES





# TREATMENT(S)

Dependent on which type of stroke you experienced, the amount of time that has passed since your first symptom(s) appeared, and other medical conditions you may have.



# TREATMENTS FOR ISCHEMIC STROKE

- Can include medications and medical procedures.
- tPA is the main medication used to treat ischemic strokes because it breaks up the blood clots that are blocking your arteries.
- Thrombectomy is a medical procedure that removes the blood clot from the blood vessel.

# TREATMENTS FOR HEMORRHAGIC STROKE

- Treatment depends on what part of the brain is bleeding and the amount.
- Blood pressure medications are typically used for these types of strokes, as well as stopping any blood thinner medications you may be currently taking and using Vitamin K to help stop the bleeding.
- There are multiple medical procedures that can be performed depending on what you are experiencing. Some of those include: aneurysm clipping, blood transfusion, draining excess fluid on your brain, removing part of your skull due to increased brain swelling, or radiation to remove or shrink an arteriovenous malformation.

Some patients recover fully, while others have long-term disabilities.

Recovery time varies from a few weeks to well over a year.

Most patients will require rehab to assist in their recovery such as seeing speech, occupational, and physical therapists.

## RECOVERY



**Control Blood  
Pressure**

**Maintain Healthy  
Weight**

**Exercise  
Regularly**

**Don't Smoke**

**Limit Alcohol**

**Consume  
Healthy  
Foods/Drinks**

**Check Your  
Cholesterol**

**Manage Chronic  
Conditions such  
as: Diabetes and  
Heart Disease**

# STROKE PREVENTION

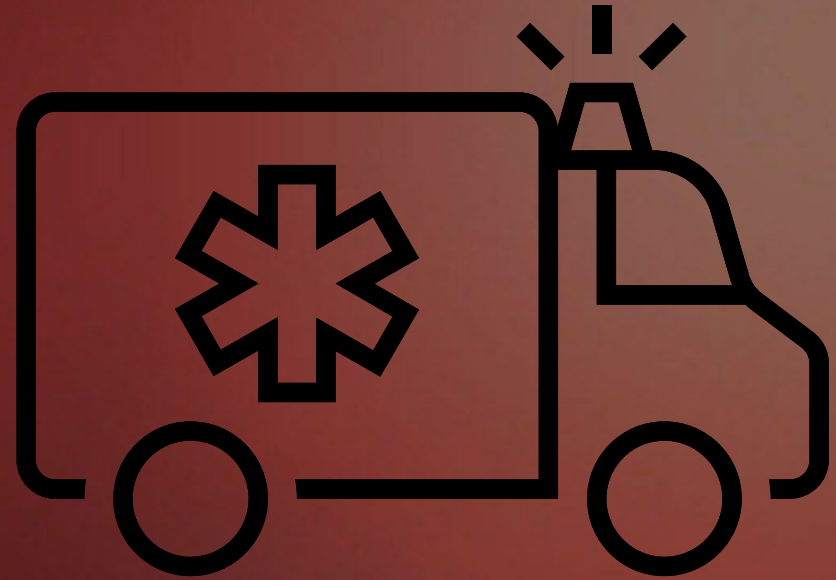


# STROKE PREVENTION

Having a stroke puts you at a greater risk of having another stroke.  
Make sure you are adopting the prevention items listed on the previous slide.

# REMEMBER!

- If you or anyone you know is experiencing F.A.S.T. (facial drooping, arm weakness, speech difficulty, time to call 9-1-1) symptoms of a stroke, call 9-1-1 immediately!
- Don't forget to make note of the time these symptoms started!



## ADDITIONAL INFORMATION CAN BE FOUND BELOW

- American Stroke Association
- 1-888-4-STROKE (7653)
- [www.stroke.org](http://www.stroke.org)
- *Information on life after a stroke, call the number listed above and ask for the Stroke Family Warm Line.*
- American Heart Association
- 1-800-AHA-USA1 (242-8721)
- [www.heart.org](http://www.heart.org)



# REFERENCES

- [www.thestrokefoundation.org](http://www.thestrokefoundation.org)
- [www.americanstrokeassociation.org](http://www.americanstrokeassociation.org)
- [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)
- [www.cdc.gov](http://www.cdc.gov)
- [www.ccf.org](http://www.ccf.org)
- [www.mayoclinic.org](http://www.mayoclinic.org)
- [www.stroke.org](http://www.stroke.org)
- [www.aha.org](http://www.aha.org)