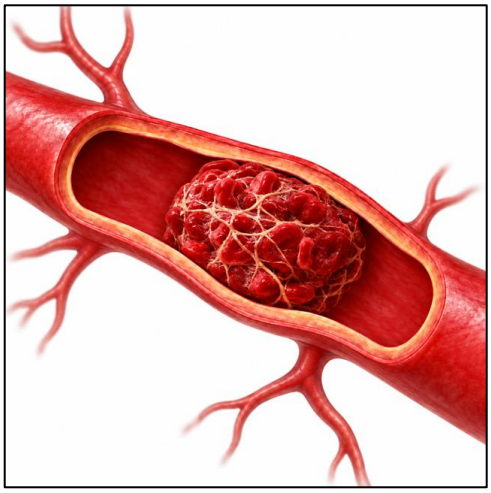
Stroke Education

Sheltering Arms Institute
A collaboration with VCU Health

There are **different types** of **strokes:**

1 Ischemic stroke

A **blood clot** or narrow blood vessel **blocks blood** from **flowing** to your **brain**.



Blood clot

2 Hemorrhagic stroke

A blood vessel **bursts**, **stopping blood flow** in your brain.



Burst blood vessel

3 Transient ischemic attack (TIA)

Stroke symptoms **resolve** within **24 hours**.

After a stroke, you may have **difficulty communicating.**

Aphasia is a condition that affects **language.**

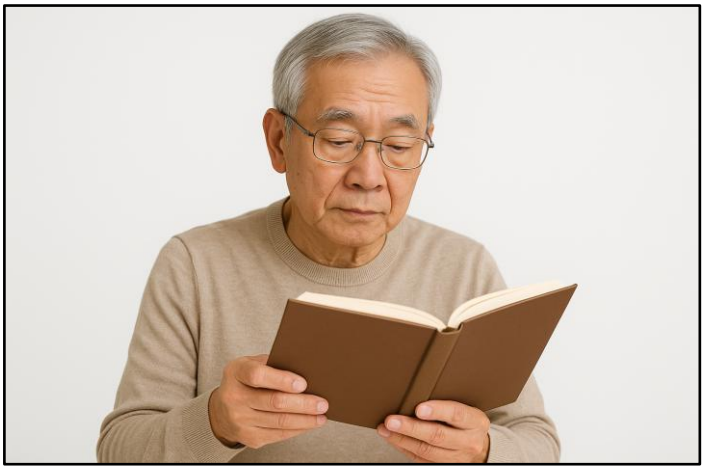
It causes **trouble** with:



Speaking



Understanding

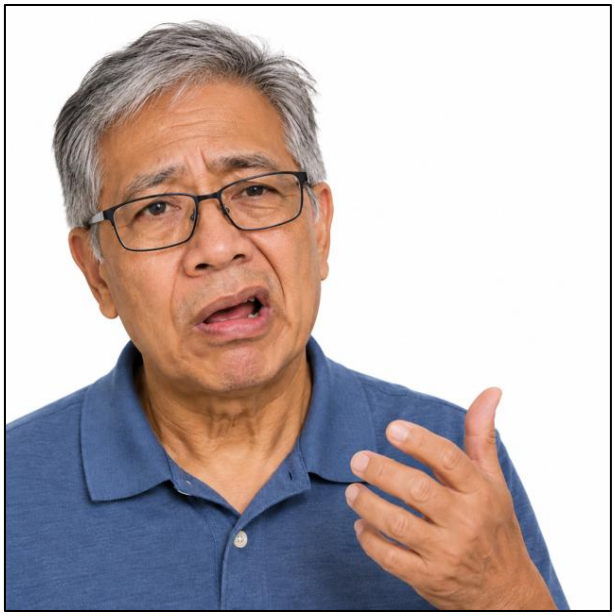


Reading



Writing

Dysarthria is a condition that affects **speech**



Your speech can sound:

- **Slurred**
- **Slow**
- **Hard** to **understand**

It happens because of **changes** to the **muscles** you use to speak and the **way that they move**.

You may have **trouble swallowing.**

- **Dysphagia** can make eating and drinking slow, hard, and unsafe**.**
  - You may **choke**.
  - Liquids might **go down** the **“wrong pipe.”**

    This is called **aspiration.**



Drinking water

You may may notice **changes** to **your <u>thinking</u>**.



This can include **new difficulty** with:

- **Memory**
- **Focusing**
- **Organizing** your **thoughts**
- **Planning** and **completing** tasks
- **Solving problems**
- **Knowing** you are having trouble

You may have **trouble moving** your **body.**

- **Weakness** or **paralysis** on **1 side**
- Difficulty **coordinating movements**
- Poor **balance**
- **Risk** of **falling**



Arm weakness



High fall risk

You may have **less**

physical and **mental energy**.



Fatigue

- You are more **tired**.
- It is **hard** to **finish** daily **activities**.
- **Resting <u>does not</u>** usually **help**.

You may notice **changes** in **sensation** on your skin.

- Touch, pressure, and temperature may **feel different** or you **may not feel them** at all.



Light Touch



Pressure



Temperature

- You might also have trouble **knowing where your body is** in space without looking at it.

You may experience **changes** to your **vision**.



Vision changes can include:



Seeing **double**



Vision **loss**



Trouble seeing **on 1 side**

You can **decrease your risk** of having another **stroke**.



❑ **Monitor** and control your **blood pressure**, **blood sugar**, and **cholesterol**.



❑ **Stop** smoking.



❑ **Limit** alcohol.



☐ Take your **medications**.



❑ If you have **sleep apnea**, use your **CPAP machine**.



❑ Stay physically **active**.



❑ Eat **healthy**.

Know the **signs** of a **stroke**.

- Keep an eye out for **changes** to your:



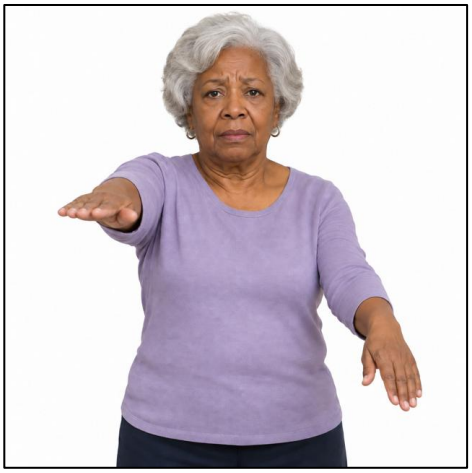
Balance



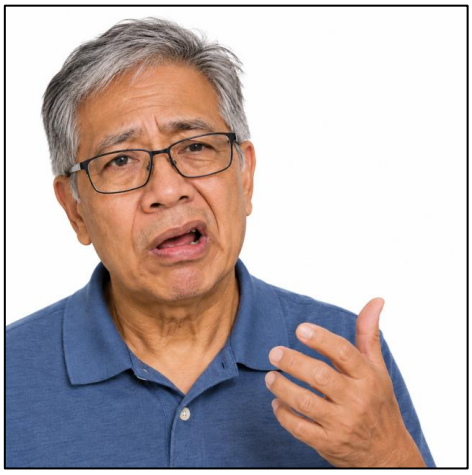
Vision



Face



Arms

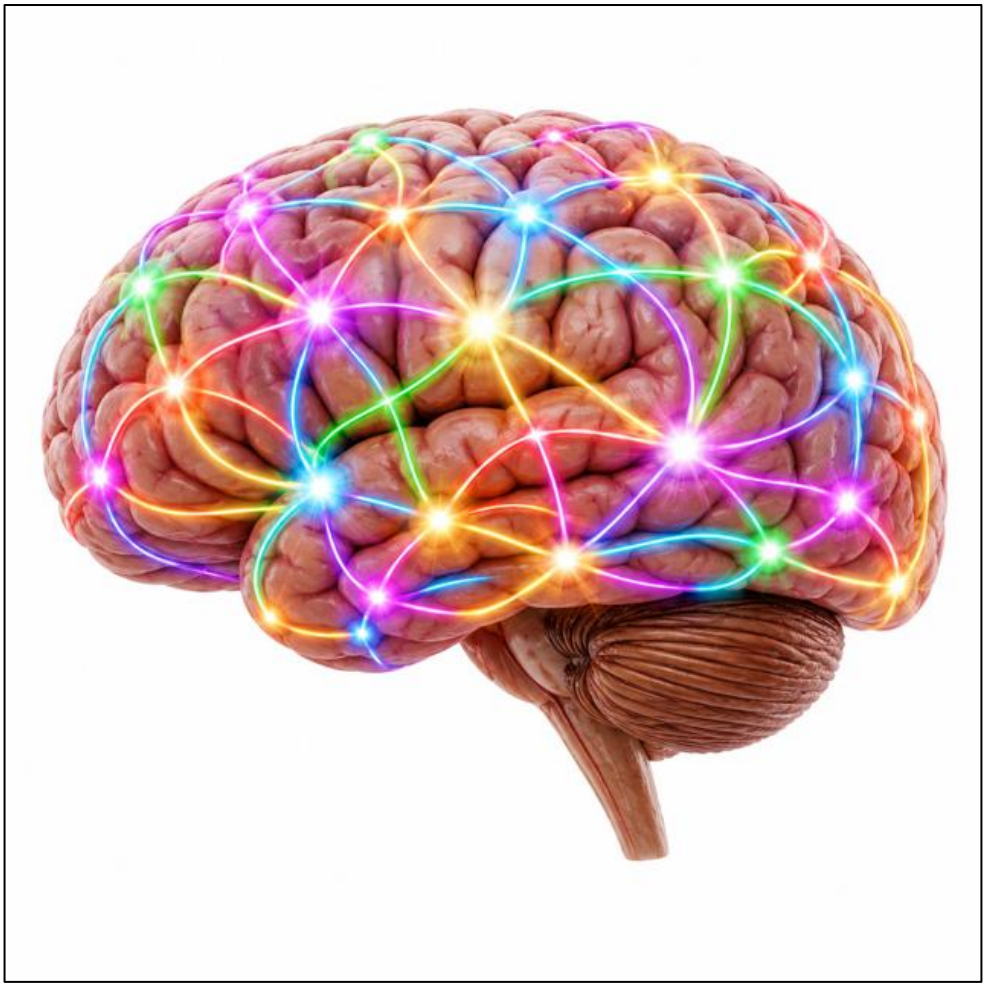


Speech



Call **911** right away!

Your brain can **heal, change,** and **reorganize** its connections after a stroke.



Connections in the brain

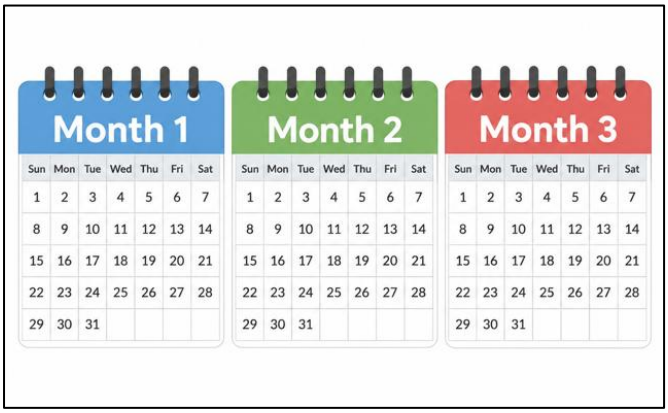
This is called **neuroplasticity**.

Therapy helps the brain make these changes.



Therapy

- **High effort** and **repetition** helps your brain heal.
- The brain **learns best** when you are **engaged** in therapy.

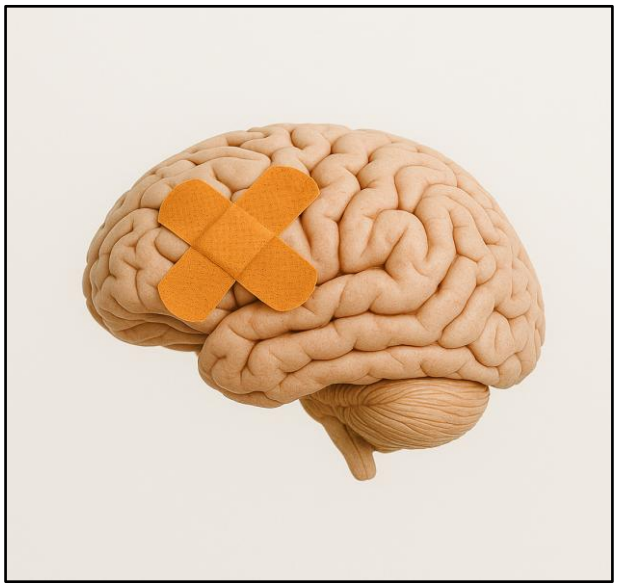


1st few months

- Neuroplasticity is **strongest** in the **first few months** after your stroke.

How you **practice** impacts how much your brain learns and **heals**.

Here are some **tips** to **help your brain heal**:



1 Use it and Improve it.

- You **get better** when you **practice** a **skill.**

2 Intensity

- When you **work hard**, the brain **releases chemicals** to help with **healing**.



High intensity

3 Repetition

- **Repeating** the same exercises **again and again** helps your **brain learn**.

High effort and **lots of practice** helps your brain heal.

4 Specify

- The brain **gets better** when you **practice** the **exact skills** you want to improve.

Example: If you want to **get better at writing**, you need to **practice writing**.





Practicing writing

OpenAI. (2026). *A series of AI-generated photographs related to stroke education* [AI-generated images]. ChatGPT (GPT-5, DALL·E). https://chat.openai.com