

Chapter 6: Effects of Stroke

Effects on Everyday Activities

Tip

Your stroke and recovery are unique to you. You may have one or more changes that affect your ability to do everyday activities.

Talk with your health care provider about your changes and recovery.

Important

Some everyday activities may be dangerous.

Ask your health care provider what activities are no longer safe for you and how to live a healthy lifestyle.

Your health care provider may want you to keep track of the activities that are and are not safe for you to do during your recovery.

Your stroke may affect how you think, move, feel, or a combination of these ways. Changes after your brain injury may be short-term or long-lasting. Changes may range from mild to severe.

Your changes will depend on:

- the area of your brain affected by the injury
- how bad your injury is (from mild to severe).

Some everyday activities may be more difficult or may not be safe for you. Your brain injury may affect your ability to:

- eat
- bathe
- get dressed
- use the toilet
- do housework
- cook
- use the phone
- handle money
- write
- speak
- coordinate your body movements
- drive or get around the community
- take care of children
- interact with other people.

How Stroke May Affect You

Stroke usually affects one side of the brain. Movement and sensation for one side of the body is controlled by the opposite side of the brain.

This means that if your stroke affected the left side of your brain, you will have changes with the right side of your body. If your stroke affected the right side of your brain, you will have changes with the left side of your body.

Changes that may happen after a stroke on either side of the brain include the following.



Abnormal muscle tone

This is a brain problem that can make your movements slow and jerky. There are different stages of muscle tone recovery.

- Your arm, leg or joint may be limp and floppy.
- Your arm, leg or joint may move on its own when your muscle tone starts to return. It does not always do what your brain tells it to do.
- Your arm, leg or joint begins to respond to your brain.

Bladder changes

You may have problems urinating or controlling your urine (incontinence).

Bowel changes

Constipation is the most common problem after a stroke. This may be caused by lack of liquids or limited physical activity. Your doctor or nurse can help you regain your regular bowel pattern.



Cognitive problems

You may have problems with memory, thinking, attention or learning. For example, you may have trouble:

- concentrating
- following directions
- interacting with other people
- organizing or prioritizing your day
- making decisions
- understanding what is safe



- problem-solving such as:
 - thinking of all the steps needed to solve problems
 - coming up with other solutions if the first does not work
- doing everyday activities when a routine is changed or stopped
- remembering information or events such as:
 - what someone just told you
 - the current time and date
 - what you have read
 - if you took your medicine.

□ **Coordination problems**

You may have reduced hand-eye coordination. When reaching for an object, your arm may waver or your hand may overshoot the object.



□ **Dysarthria (dis-AR-three-a)**

Dysarthria is a motor speech problem. This means you are not able to coordinate the movement of your mouth to form words or sounds. You know the right words, but you have problems saying them.

It is not caused by confusion. It is caused by weakness, lack of coordination, or loss of feeling in your lips, tongue and mouth muscles. Dysarthria may affect your:

- word pronunciation
- voice
- speech rate
- rhythm
- resonance (how deep and clear your voice sounds)
- breath control for speaking.

Tip

Just because your loved one has problems using language, does not mean they can't think clearly. Most people know what they want to say, they just have trouble putting their thoughts into words.

Signs of Aspiration

Call your health care provider if you have any of these signs:

- a wet-sounding voice
- breathing you can hear
- struggling when breathing or swallowing
- shortness of breath
- rattling sound in your lungs
- higher body temperature.

□ Dysphagia (dis-FAY-ja)

Dysphagia is a swallowing problem usually caused by weakness or loss of feeling in your tongue, lips, throat or palate (roof of your mouth).

It may cause problems with:

- moving food around your mouth
- having food stick in your throat
- coughing or choking on liquids or solids (aspiration).

If you have swallowing problems, you may need to have a video swallow study. (See page 44 for more information.)

A member of your health care team will recommend the correct diet for you. They may recommend some ways to help your swallowing. These may include:

- correct body and head positions
 - Stay as upright as you can.
 - If you are in bed, make sure the head of the bed is as high as it can go.
 - Bend your knees so you will not slide.
 - Put pillows behind your back.
 - Keep your head slightly bent downward. This will keep food and liquid from going into your lungs (aspiration).
- correct food texture
- correct food quantity
- correct feeding utensils and containers.

If you cannot eat or drink by mouth, you will need to get your nutrients by a tube. This will keep food and liquids from getting into your lungs.

- A nasogastric feeding tube is passed through your nose and esophagus to your stomach. This will be used for short-term tube feedings.
- A gastrostomy tube is put through your abdominal wall into your stomach. This will be used for long-term tube feedings when your recovery is slow.

The dietitian will suggest which tube feeding product will fit your recovery schedule. Members of your health care team will closely watch your tube feeding for any problems or adjustments.

Your ability to swallow may return during recovery. You will receive updates on your progress.

To reduce your risk of choking during your recovery:

- Check with your doctor if you cough when you swallow.
- A cough is your body's natural protection against choking. Do not try to stop this cough.
- **Call 911 right away** if you cannot clear your airway.
- You may be prescribed thickened liquids by your health care team. This will help you swallow safely.

Emotional changes

Emotional changes should not be taken lightly. Emotional well-being can affect your recovery. See the section on emotional effects on pages 84-86.

Endurance problem

You may find you are unable to do a task or activity for a long period of time. This should get better as you get stronger.

Fatigue

Fatigue is a feeling of tiredness that can keep you from doing the things you normally do or want to do. It is common to feel tired more quickly after a brain injury. You may need more sleep or rest.

You may notice your symptoms are worse when you are tired. This should improve with rest and time.

Fatigue may cause you to:

- be unable to do a task or activity for a long period of time
- need more concentration or effort to do things
- feel more tired when you are stressed or anxious.

You may also have more trouble with coordination, vision, speech, movement, controlling your emotions or other problems when you are tired.



Hemiparesis (hem-ee-par-Ee-sis) or Hemiplegia (hem-ee-PL EE-ja)

You may have weakness, partial or complete paralysis of one side of your body or just one arm or one leg.

- If the stroke was on the left side of your brain, the right side of your body will be affected.
- If the stroke was on the right side of your brain, the left side of your body will be affected.

Impulsivity

You may act without planning ahead.

Judgment

You may not know your own limits. You may act without thinking about the consequences of your actions. You may misinterpret situations. You may be unable to judge, problem-solve, organize, use higher-reasoning skills or all of these.

Memory problems

You may have poor memory. This may lead to problems retaining, blending and recalling information.

Sensation changes

You may have numbness or loss of feeling in different parts of your body. This may cause you to have trouble knowing where you place or how you position a part of your body (such as your hand or foot).

Sexuality concerns

It is rare that a medical concern would keep you from sexual activity. Fear may keep you from being intimate with your partner. You may feel anxiety about how you look, changes in your relationship or rejection.

Talk with your partner about how you feel. Talk about how the two of you can become close and tender again. Talk with your doctor if you are having intimacy concerns.

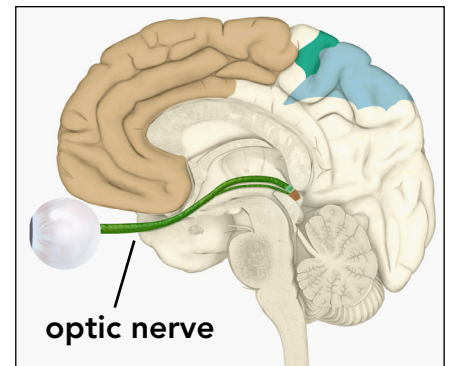


❑ Vision changes

Problems with vision are common after a stroke or brain injury. Most problems happen between the brain and the optic nerve.

When brain signals are interrupted, your brain can't understand what it is "seeing." This means you may have problems with your vision that can affect all areas of your life.

During the first few months of your recovery, your eyes are going through rapid changes while working toward normal vision. Managing your symptoms can help your vision recover.



Vision is more than just seeing clearly. Your visual system is a complex network of brain cells that process and interpret your visual experience. Damage to anything in the visual network can cause issues with your vision.

Common issues

- ❑ vision loss
- ❑ blurred vision
- ❑ double vision
- ❑ weakness with the muscles around your eyes
- ❑ problems with your side (peripheral) vision
- ❑ problems quickly focusing after doing a close activity or hobby such as reading or knitting
- ❑ problems looking at a computer, TV or phone screen
- ❑ problems looking at moving objects
- ❑ problems focusing in a busy environment
- ❑ problems judging the distance of objects
- ❑ feeling like the floor is tilted (causing you to lean)
- ❑ having other issues such as:
 - thinking words are blurry or moving on a page or screen
 - having issues understanding what you are seeing
 - being unaware of one side of your visual field.





How you may feel

You may have some or all of the following:

- eye strain
- dizziness
- nausea (feel like throwing up)
- vomiting (throwing up)
- headaches
- sensitivity to light
- feeling more tired than usual
- feeling overwhelmed in busy spaces such as a grocery store or while driving
- feeling anxious
- trouble tolerating noises, smells or visual details
- trouble with visual movements such as video games or reading.

The good news is managing your visual deficits can help reduce these issues.

How to manage vision issues

Take breaks

- Take breaks before you have symptoms.
- Rest your eyes every 10 minutes by looking 20 feet away for 20 seconds.
- Do something else that has fewer vision demands.
- Use palming.
 - Cover your eyes with your hands.
 - Take slow or deep breaths.



Adjust lighting

- Try different tinted glasses for outdoor use and screen time.
- Turn off overhead lights and use task lighting (such as a desk lamp).



Manage screen time

- Limit screen time.
- Take breaks.
- Try different backgrounds and screen lighting.

Doing near tasks

- Use rulers, index cards or guides to improve your visual focus.
- Change the size of text on your computer.

Reduce visual clutter

- Create clean places you can work in.
- Use a basket for items you use most often.
- Put away clutter for 5 minutes each day in rooms you use often.
- Keep items where they belong.
- Keep items you use the most handy.



Avoid overstimulation

- Plan ahead when you have to go somewhere that could lead to overstimulation.
- Try to rest in a quiet room or listen to soothing music or a meditation.
- Wear an eye mask while you rest.

When to talk with your health care provider

Talk with your health care provider if:

- your vision does not get better
- you have any new symptoms
- you need adaptive or community resources
- you have questions or concerns.

Know what triggers your symptoms

Processing visual information can take a lot of energy and may cause you to have symptoms.

Changing your environment or task can help your vision and lower the energy you need.

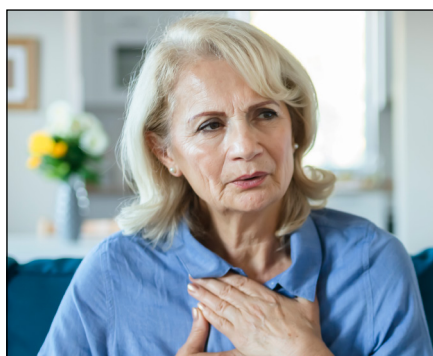
Mark the things that trigger your symptoms.

- lighting
- screen time (computer, phone, TV, video games or movies)
- near tasks (reading, or moving from 1 document to another or 1 line to the next)
- visual distractors (such as clutter)
- busy environments (such as grocery stores, malls, stadiums and other public places)
- other _____
- other _____

How Stroke May Affect Your Mental and Emotional Health

You may have emotional, behavioral or other mental health changes. Talk with your health care provider if your emotional changes become severe or if they do not go away. You may find help by talking with a social worker or psychologist.

You may have one or more of the following changes.



Anxiety

Anxiety is a strong feeling of fear and may involve constant worry. Intense anxiety is a temporary reaction to the stresses of everyday life. Some anxiety is normal.

You need to get help when you have physical symptoms that keep you from feeling healthy and affect your work or social life. Severe and chronic (long-lasting) anxiety needs treatment.

Common symptoms of anxiety include:

- dizziness or feeling lightheaded
- racing or pounding heartbeat
- trouble breathing (too rapid, short of breath or unable to breathe)
- feeling like you will throw up
- tense muscles or shaking
- worrying a lot
- irritability or restlessness
- trouble concentrating
- problems sleeping due to worrying
- avoiding situations that make you uncomfortable.

Thoughts of Death or Suicide

Depression can include feelings of hopelessness or worthlessness and even thoughts of suicide.

Call the National Suicide Prevention Lifeline at 988 if you are having thoughts of death or suicide.

Contact your primary care provider to let them know.



□ Depression

Clinical depression is a serious medical illness. It is not something you have made up in your head. It is more than just feeling “down” or “blue” for a few days. It is normal for you to feel sad after a brain injury. But there is a deeper sadness that may show up right after a brain injury or many weeks later.

You may have feelings of helplessness, hopelessness and poor self-esteem. These feelings can go on for weeks or months. Depression can even affect how often you become ill or how well you heal after your stroke.

You need to call your doctor right away if you have any of the following symptoms:

- feeling sad, blue or down in the dumps
- losing interest in things you used to enjoy
- feeling sluggish, restless or unable to sit still
- feeling worthless or guilty
- having an increase or decrease in appetite or weight
- having problems concentrating, thinking, remembering or making decisions
- having trouble sleeping or sleeping too much
- losing energy or feeling tired all the time
- having headaches
- having aches and pains
- having digestive problems
- having sexuality problems
- feeling pessimistic or hopeless
- being anxious or worried
- having relationship problems with members of your care circle
- having thoughts of death or suicide.



Emotional lability (limited control over your feelings and reactions)

You may have limited control over your feelings and reactions. You may laugh, cry or get upset more easily or at the wrong times.

Loss of inhibition

You may have changes in how you interact with other people. You may have these types of behaviors:

- aggression or violence
- impulsiveness or no self-control
- temper outbursts (verbal or physical)
- inappropriate social behavior
- inappropriate sexual behavior
- inappropriate use of alcohol, street drugs (heroin, marijuana, methamphetamine) or both.

Mood swings

You can go from being happy to being sad or angry without warning. Your mood swings may vary.

Self-centeredness

You may be focused on your needs and not be paying attention to members of your care circle.



How Location of Stroke May Affect You

□ Left Brain Stroke

Tip

In some left-handed people, language is controlled by the right side of the brain and awareness by the left side of the brain.

In most people, the left side of the brain controls the ability to speak and understand language. These are the most common language symptoms of a left brain stroke.

□ Anomia

You may not recall the names of everyday objects.

□ Aphasia (a-FAY-zha)

Aphasia is a language problem that affects your ability to:

- speak
- read
- write
- listen
- deal with numbers
- understand speech or written words
- think of words when talking or writing.

How much trouble you have with aphasia depends on the type, location and severity of your brain injury.

Aphasia means you have problems speaking and understanding language. You may be unable to find the words you need or put sentences together. This is like having a word “on the tip of your tongue.”

To know why a stroke can cause so many different problems, it is helpful to understand how speech works.

- Expressive speech: you can say in words what you are thinking.
- Receptive speech: you understand what someone is saying to you.

A speech-language pathologist (or speech therapist) can help with these problems. They will do an exam that includes your ability to:

- speak aloud
- listen and understand
- write
- read and understand.



This exam can also which areas of speech and language have been affected. See pages 102-105 for information about how to communicate with someone who has aphasia.

❑ **Apraxia (motor apraxia)**

You may not be able to do purposeful movements even though your muscles and senses are working normally.

❑ **Verbal apraxia (a-PRAX-ee-a)**

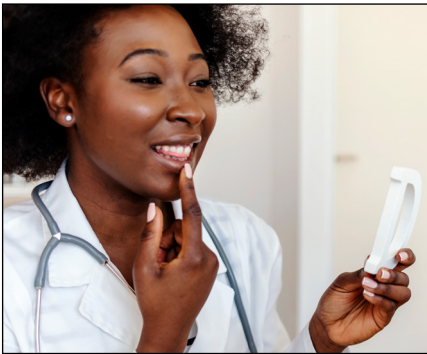
Verbal apraxia is a motor speech problem. This means you are not able to coordinate the movement of your mouth to form words or sounds.

It is not caused by loss of feeling or muscle weakness.

You know the right words, but you have problems forming words or putting sounds together.

You may have problems with word pronunciation:

- saying words clearly
You may substitute (or replace) a correct sound with an incorrect sound. For example, a “cup of coffee” may come out as “a puck of pappy” or a “bup of foppe.”
- saying sentences clearly
You may repeat a single syllable or phrase. For example, “I dunno” may come out as “do-do-do.”



❑ Right Brain Stroke

In most people, the right side of the brain controls thinking skills such as attention, memory and reasoning. These are the most common symptoms of a right brain stroke.

❑ Agnosia

You may not be able to recognize objects, faces, voices or places.

❑ Anomia

You may not recall the names of everyday objects.

❑ Attention span

You may be unable to focus attention on a conversation or tasks for long periods of time.

❑ Denial

You may deny that you had a stroke. Some people even deny that their paralyzed arm or leg belongs to them. They look at the paralyzed arm or leg and believe it belongs to someone else.

❑ Neglect

You may ignore the left side of your body or your environment. This means you may not turn to look toward your left side or you may not recognize things that are on your left.

❑ Perseveration

You may have difficulty following instructions or answering many questions asked one right after the other. You may repeat answers or movement even though a new instruction was given or a new question asked.

❑ Visual/spatial problems

You may have problems judging distance, size, position and rate of movement and how parts relate to a whole.



❑ Posterior Stroke

A posterior circulation stroke means the stroke affects the back area of your brain. This includes your brain stem, cerebellum (the area responsible for balance and coordination) and occipital lobes (the area responsible for vision).

Changes that may occur include the following.

❑ Ataxia

You have a loss of coordinated arm or leg movements.

❑ Double vision

You may have problems with your vision because your eye movement is limited in one or both eyes.

❑ Vertigo

You have dizziness that makes you feel like you are spinning.

❑ Visual field loss

You may not be able to see anything toward your left or right.



Brainstem Stroke

The brainstem connects the brain and the spinal cord. It controls many important functions, such as breathing, blood pressure and heart rhythm. Changes that may occur after a stroke in the brainstem include the following.

Breathing problems

Coma

You are unable to wake up or move.

Dysphagia

You have a swallowing problem caused by weakness or loss of feeling in your tongue, lips, palate, throat or all. See pages 78-79 for more information on dysphagia.

Heart problems

Hearing loss

Hemiparesis or hemiplegia

You have weakness, partial or complete paralysis on your left side or right side or both.

“Locked in” state

You appear to be aware of your surroundings, but are unable to speak or respond in a meaningful way.

Sensation changes

You have numbness or loss of feeling on your left side or right side or both.

Multiple Stroke (Pseudobulbar State)

A multiple stroke means several small (lacunar) strokes happen in a short time on both sides of your brain. You may feel weakness or loss of feeling on either side of your body.

In addition to changes that occur in the left and right sides, you may also have confusion, dementia or both.

