

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.

Effects of Stroke: Physical Changes

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 problems with the right side of your body. If your stroke affected the right side of your brain, you will have problems 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 nerve 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). You might also have a bladder infection.

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.

It is caused by weakness, lack of coordination, or loss of feeling in your lips, tongue and mouth muscles. You know the right words, but you have problems saying them. Dysarthria may affect your:

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

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 42 for more information.)

A member of your health care team will recommend the correct diet for you. He or she may recommend some ways to help your swallowing. These 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 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.
- Do not try to stop a cough. A cough is your body's natural protection against choking.
- Stop eating if you cannot stop coughing or if you cannot clear your airway. **Call 911 right away.**
- Drink thickened liquids to slow down coughing or choking. Gelatin, pudding powder or potato flakes can thicken liquids. The texture of food and the utensils you use will affect your ability to swallow.

Emotional changes

Please see the section on emotional effects on pages 78-80.

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.

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 “abstract” 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
- 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

You may ignore or not be able to see anything toward your right. You may only eat from the left side of your plate or read from the left side of a page.

Some problems that happen after stroke are more common with stroke on one side of the brain than the other. In most people, the left side of the brain controls the ability to speak and understand language. The right side of the brain controls the ability to pay attention, recognize things you see, hear or touch, and be aware of your own body.

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

The following information is for the most common situation of language control on the left side of the brain.

□ **Effects of Left-sided 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 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.” Not all strokes cause aphasia.

To know why a stroke can cause so many different problems, it is helpful to understand how speech works. Communicating a message means you think about what you want to say, put your thoughts into words and say the words aloud. Understanding a message means you know someone wants to say something, you keep the words in mind and put the words together.

Your brain controls the complex steps needed to speak and understand language. That's why injury to the brain — such as lack of blood flow during a stroke — can get in the way of your ability to do these steps. Different problems result depending on the location and severity of the stroke.

If you have aphasia, you should have your speech and language checked. A speech-language pathologist (or speech therapist) must see how well you can speak and understand. The exam includes:

- speaking aloud
- writing
- listening comprehension
- reading comprehension.

You may have problems in some or all four areas. For example, you may have problems reading and writing but not in talking. This exam can also show which areas of speech and language have been least affected.

See pages 92-95 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.”

Effects of Right-sided 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.

❑ Changes to Mental Health, Emotional Health or Both

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 your health care provider or the national Suicide Prevention Hotline at 1-800-273-8255 if you are having thoughts of death or suicide.

□ 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.

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 72-73 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.